

**CSMRI Site  
Remedial Action Implementation Report**

**Prepared for:**

Colorado School of Mines  
Golden, Colorado

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### List of Acronyms

ALARA	as low as reasonably achievable
ARAR	applicable or relevant and appropriate requirement
bgs	below ground surface
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
COPC	constituent of potential concern
CSMRI	Colorado School of Mines Research Institute
DCGL	derived concentration guideline
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
GPS	global positioning system
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
meq/L	milliequivalents per liter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NRC	U.S. Nuclear Regulatory Commission
ORP	oxidation-reduction potential
pCi/g	picoCuries per gram
pCi/L	picoCuries per liter
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
TEDE	Total Effective Dose Equivalent
TOC	top-of-casing
µg/L	micrograms per liter
UMTRA	Uranium Mill Tailings Remedial Action
WL	Working Level

## 1. Introduction

The S.M. Stoller Corporation (Stoller) on behalf of the Colorado School of Mines (School) has characterized the Colorado School of Mines Research Institute (CSMRI) Site (the Site), evaluated remedial alternatives, and implemented the selected remedial alternative. This report summarizes the implementation of the selected remedial alternative and provides background information for the Site. The Site is located in Jefferson County, Colorado, on the south side of Clear Creek, east of U.S. Highway 6, in the northeast quarter of the northwest quarter of Section 33, Township 3 South, Range 70 West as shown in Figure 1.

The main entrance to the Site is located about 475 feet northwest of the intersection of Birch and 12th Streets in Golden, Colorado. A chain-link fence restricted access to the Site, except for a small area located south of 12th Street known as the Clay Pits Area where some CSMRI pond dredgings were deposited. A settling pond was previously located within the perimeter fence, but the pond was cleaned up and closed by the U.S. Environmental Protection Agency (EPA) in 1997 as part of an Emergency Removal Action under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) and is not part of the School's remedial action.

The Site is a former metallurgical and mining research facility. Numerous mineral research projects (some of which involved the mineral extraction and beneficiation of materials that contained levels of radionuclides and/or metals above local background) were conducted at the Site from 1912 until approximately 1987. The research projects were conducted in 17 buildings on the Site that were subsequently razed in the mid-1990s.

A City of Golden water main broke on January 25, 1992, and began discharging a large volume of water into the Site's settling pond. The EPA's Emergency Response Branch responded in February 1992 and performed a number of activities to stabilize conditions at the Site. The EPA removal action was completed in 1997.

The Site includes the Main Site (i.e., the upper portion of the fenced area not within the 100-year flood plain), the Clay Pits Area, and the Flood Plain Area (within the fenced area and east of the former pond area). The Site does not include the area of the former settling pond that was previously closed by the EPA.

The CSMRI Site had historically included the soil stockpile (material removed from the settling pond) formerly located near the School's softball field, the Fenced Area (including the settling pond), and the Clay Pits Area located south of the intersection of Birch and 12th Streets. For use in this document, the Site is defined as the Main Site, the Flood Plain Area (excluding the settling pond), and the Clay Pits Area.

This report includes summaries of additional pertinent details about the remedial action plan process followed by appendices containing shipping and disposal records of impacted material.

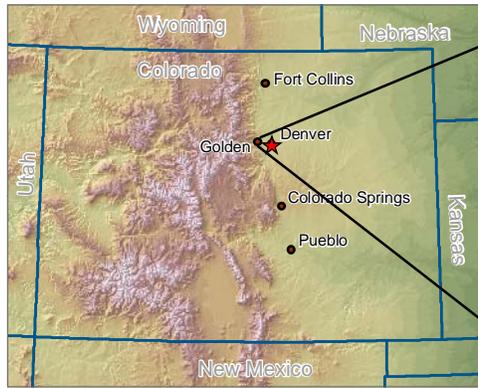


Figure 1  
CSMRI  
Site Location Map

Explanation	
CSMRI Site	Site Areas
Fences	Former Settling Pond
Roads	CP Area Surveyed - 1977
Topography (5 ft Intervals)	
Topography (1 ft Intervals)	

CSMRI  
July 2009  
Remedial Implementation  
Report



This report reviews the selected remedial action, the confirmation of its successful completion, verification sampling, and a Legacy Management Plan for the Site. The selected remedy involved the excavation and transportation of the impacted soil material to two off-site, approved landfills and the implementation of environmental covenants for risks associated with Site soil and groundwater. The selected remedy is protective of human health and the environment, complies with federal and state requirements that are applicable or relevant and appropriate to the remedial action, is cost-effective, and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable.

Two documents support the implementation of the remedial alternative: the *Remedial Investigation/Feasibility Study* (RI/FS) (Stoller, 2007b) and a Record of Decision (Stoller, 2007d). The RI/FS, along with its proposed plan, implements the processes involved in arriving at the proposed selection of the off-site disposal remedial action for the Site with environmental covenants. The Record of Decision's purpose is to select the remedy after public comment on the proposed plan.

This document describes the following items:

- Chronology of Events
- Performance Standards and Clean-up Goals
- Quality Assurance/Quality Control
- Construction Activities
- Final Inspection/Site Closure
- Operations and Maintenance
- Project Costs
- Covenants/Legacy Management
- Certification

The status of the entire Site is herein presented, including all restrictive environmental covenants being placed on the Site.

## **2. Site History/Chronology of Events**

The Site is divided into three investigative areas, each related to possible impacts resulting from the former activities on the Main Site. These areas, described above, are known as the Main Site, the Clay Pits Area, and the Flood Plain Area. Each is detailed in the following subsections. Ongoing impacts to groundwater are also discussed herein, and a plan to track the success of off-site source disposal is presented. The Clay Pits Area was investigated to the extent that radiological and metals contamination, if any, originated from the CSMRI settling pond dredgings that were deposited in the Clay Pits Area and no further action was determined after the investigation was unable to locate elevated activity or metals concentrations indicative of CSMRI activities. The Flood Plain Area was investigated and underwent soil excavation, and final disposition includes a restrictive covenant. The Main Site was characterized, the remedial alternative implemented, and restrictive covenants are being applied to this property to require radon mitigation in the event of future development as well as restricting groundwater use. The former settling pond area was remediated by EPA in the 1990s.

The remedial alternative selection and implementation meets the requirements of CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

## 2.1 Main Site Description and Chronology

New Horizons performed remediation work in 2004 that included containerizing approximately 1,870 cubic yards of soil that was stored on the Site. New Horizons underestimated the nature and extent of contaminated soil, and the School halted the work. In October 2005, Stoller obtained approval and a permit to transport the containerized soil off-site via an access lane on Colorado Highway 6 to Foothills Landfill. Following the disposal of the containerized soil, Stoller was requested by the School to perform further Site characterization.

Stoller performed additional investigative work in 2005-2007. Stoller prepared a Revised RI/FS in May 2007, which revised the 2004 RI/FS. It provided the nature and extent of contamination, re-evaluated alternative remedies, and proposed an off-site disposal remedy that differed from the remedy selected in 2004. The Revised RI/FS incorporated portions of the 2004 RI/FS, replaced some portions, and supplemented other portions. With respect to the nature and extent of contamination, the 2004 RI/FS estimated 500 cubic yards of soil averaging greater than 3 pCi/g of Radium 226 (Ra-226) above background would be excavated. This soil was designated to go to the U.S. Ecology Resource Conservation and Recovery Act (RCRA) landfill in Idaho. In addition, the 2004 RI/FS estimated 9,500 cubic yards of soil averaging above background, but no more than 3 pCi/g Ra-226 above background, would also be excavated. This greater volume of soil was designated to be disposed of at the Foothills solid waste landfill in Jefferson County, Colorado. The cost of shipping and disposing of the contaminated soils in Idaho was much greater than the cost of shipping and disposing of the soils at the Foothills Landfill. The 3 pCi/g Ra-226 threshold that distinguished between the two types of soil was determined by a regulatory requirement.

Site characterization activities were completed following the procedures set forth in the *CSMRI Creekside Site Final Site Characterization Work Plan*, dated May 12, 2006 (Stoller, 2006a). The investigation entailed excavating the impacted soil and stockpiling it on-site to determine the nature and extent of contamination. This excavation method was analogous to the method used by the EPA to address the former settling pond at the Site.

The results of Stoller's soil excavation and segregation investigation further demonstrated the reasonableness and necessity of halting the 2004 remedial work and performing further investigation of the Site.

The tentative soil clean-up goals that were in place at that time are presented in Table 2-1.

**Table 2-1  
COPCs and Site Action Levels**

Constituent	Action Level
<b>Metals</b>	<b>mg/kg</b>
Arsenic	39
Lead	400
Mercury (total)	23
Molybdenum	390
Vanadium	550
<b>Radioisotopes</b>	<b>picoCuries/gram</b>
Radium 226	4.14
Radium 228	4.6
Thorium 228	6.47
Thorium 230	11.53
Thorium 232	3.88
Uranium 234	254.9
Uranium 235	4.97
Uranium 238	21.8

Site characterization was successfully completed for the Main Site by performing the following tasks:

- *Initial soil segregation:* Based on data from the 2004 remedial investigation, soil was segregated by metals content and radiological activity. Soil with concentrations of Site constituents of potential concern (COPCs) above the Action Levels was placed in one of the two lined soil stockpiles as follows:
  - Segregation of soil above 100 pCi/g: Soil identified as containing total activity above 100 pCi/g was segregated and placed into a separate soil stockpile (Stockpile A).
  - Segregation of soil below 100 pCi/g total activity and above 4.14 pCi/g Ra-226: Soil identified as containing Ra-226 activity in excess of 4.14 pCi/g but having total activity less than 100 pCi/g was segregated and placed into a separate soil stockpile (Stockpile B).
  - Segregation of soil above metals Action Levels: Soil identified as containing metals above the metals Action Levels was segregated and placed into Stockpile B.
- *Land gamma scan:* Following initial soil excavation based on the 2004 data, a land gamma scan was completed to identify areas of the main Site with remaining elevated activity.
- *Continuing soil segregation:* Using a series of field and on-site laboratory instruments, soil was assessed for metals and Ra-226 content. All soil exceeding the Action Levels was segregated to one of the two soil stockpiles using the same criteria as stated above.
- *Final land gamma scan:* Upon completion of the soil segregation activity, a final land gamma scan of the Main Site was completed to assess the effectiveness of the characterization.

- *Confirmatory sampling:* Finally, to confirm the land gamma scan, soil samples were collected and submitted to both the on-site and an off-site laboratory for final confirmatory analysis.

## 2.2 Clay Pits Description and Chronology

In the late 1800s, clay was mined from the Clay Pits Area located west of South Table Mountain, immediately south of Clear Creek in Golden, Colorado. By the mid-1900s, the pits were depleted of clay and remained as opened trenches. The pits were soon backfilled with soil, trash and debris, including flood material debris from the 1965 flood of the South Platte River. The Clay Pits Area was investigated twice; the first time the location suspected of containing the CSMRI waste was incorrectly located, prompting the second investigation. Debris placed in these trenches was thought to have included ore and sludges from the CSMRI Site; however, the Site investigation detailed in the *Clay Pits Area Remedial Site Investigation Report* (Stoller, 2007a) and summarized herein was not able to confirm the presence of ore and sludges from the CSMRI Site. On September 14, 2007, the Colorado Department of Public Health and Environment's (CDPHE) radiation unit agreed that no further action is required in this area (Appendix A). This location was removed from the CSMRI license (Appendix B).

Two separate efforts were conducted to locate buried ore and sludges from the CSMRI Site in the Clay Pits Area. The first investigation was unsuccessful due to the lack of survey information exactly identifying the location of the suspected material within the pits. The suspected location of the material was surveyed in 1977 and is known as the Bolis survey. This survey was identified only after the original Clay Pits investigation.

At the request of the Colorado School of Mines, a second subsurface investigation was conducted of the former Clay Pits Area during April 2007. The Clay Pits Area has the same performance Standards as the Main Site and followed the same procedures except as detailed in the letter work plan dated November 6, 2006. The goal of the investigation was to locate the area suspected to contain former pond sediments, as identified in the Bolis survey, and to determine the nature and extent of the contamination if identified. The contaminated sediments in question were thought to have originated from a former settling pond previously located on the CSMRI Site.

To locate this area, Flatirons Surveying, Inc. of Boulder, Colorado created a plan view model based on the Bolis survey. The model was then projected on City of Golden plats to re-establish the point of origin, as defined by Bolis, and the corners of the rectangle that defines the 1977 surveyed locations of where the dredged material was reportedly placed. The model was then implemented in the field beginning at the point of origin and the corners of the rectangle were staked. A plat of this was filed with the County Surveyor making it an official part of the area's survey record.

After the suspected location of the buried sediment was staked in the field, six borings were advanced through the suspected area, encountering fill and debris. Each of the boreholes extended to native material underlying the debris – 40 to 56 feet below ground surface (bgs). Each boring was continuously cored with each core subjected to a continuous scan for radioactivity using a handheld sodium iodide gamma scintillator. Field observations (scanning

results and sample collection locations) were recorded onto borehole log field forms. The activity scanning indicated background conditions for all soil in each core.

Soil samples were collected every 5 feet from each boring. Samples selected for laboratory analysis consisted of samples identified in the field as being the most likely to contain elevated activity and metals concentrations. These soil samples were submitted to Paragon Analytics of Fort Collins, Colorado. The analyte suite included the identical compounds that have been identified as COPCs at the CSMRI Site.

The investigation concluded that no further action was necessary at the Clay Pits Area with respect to CSMRI Site operations responsibility. Further information about the Clay Pits investigation is detailed in the *Clay Pits Area Remedial Site Investigation Report* (Stoller, 2007a).

### 2.3 Flood Plain Description and Chronology

The Clear Creek Flood Plain Area of the Site consists of the area immediately adjacent to Clear Creek within the limits of the 100-year flood plain, immediately adjacent to the east of the former settling pond. This pond was remediated by the EPA, and CDPHE granted closure of the pond area. Residual impacts likely associated with the settling pond were identified in the area known herein as the Flood Plain Area during the RI/FS completed by New Horizons. Data collected during the original RI/FS in 2004 indicated elevated concentrations of Ra-226 on the flood plain east of the former settling pond. All other Site COPCs were below the regulatory limits. The sample numbers are CSM155 through CSM161 as shown in Table 2-2.

**Table 2-2  
Flood Plain Characterization Sample Results**

Sample Location	Depth (Inches)	Sample Number	Ra-226 (pCi/g)
1	0	1207	3.81
2	0	1208	4.00
3	0	1211	5.70
4	0	1212	2.29
4	6	1213	2.50
4	12	1214	2.60
4	18	1229	4.65
4	24	1230	3.69
4	36	1231	2.18
5	0	1216	3.05
5	6	1217	3.04
5	12	1218	2.99
5	18	1219	3.23
6	0	1215	2.93
7	0	1209	4.19
8	0	1225	3.68
9	0	1202	8.23
10	0	1203	5.15
10	6	1204	6.27
10	12	1205	6.60
10	18	1206	7.18

**Table 2-2  
Flood Plain Characterization Sample Results**

Sample Location	Depth (Inches)	Sample Number	Ra-226 (pCi/g)
10	24	1226	3.14
10	36	1227	3.90
10	48	1228	2.61
11	0	1201	4.81
12	0	1197	9.71
12	6	1198	8.60
12	12	1199	6.32
12	18	1200	5.07
13	0	1210	4.72
14	0	1224	2.36
15	0	1220	1.11
15	6	1221	3.73
15	12	1222	2.67
15	18	1223	3.07
CSM155			4.90
CSM156			20.00
CSM157			4.70
CSM158			9.30
CSM159			28.00
CSM160			5.00
CSM161			8.60

Stoller conducted a Wetlands Delineation Study in July 2006. The report from that study was included in the *CSMRI Site Flood Plain Characterization Work Plan* (Stoller, 2006b). The study was conducted to determine if the area qualifies for wetland status and would therefore need additional controls, possibly including a U.S. Army Corps of Engineers' Section 404 permit, to conduct soil segregation. The results indicated that based on soil, vegetation, and hydrology, some of the flood plain is categorized as a wetland. However, based on Section 404 Permit guidance, provided in the above-referenced work plan, no permit was required, because the following guidelines would be followed:

- No fill material would be placed within the wetlands.
- Soil excavated would be scooped out rather than pushed or bulldozed.
- The temporary access road would not be constructed in the wetlands.

Following the Wetlands Delineation Study, additional investigative work was performed by Stoller in September 2006 in accordance with the Site Characterization Work Plan. This included a collection of samples at 15 locations within the Flood Plain Area. At 10 of these locations, surface samples were collected, and at five locations, samples were collected at the surface and at 6-inch intervals until rock, roots, or water was encountered. Samples were analyzed by a shielded-sodium iodide detector, identical to that used for Main Site characterization activities in June through August 2006. These sample locations are shown in Figure 2, and the sample results are shown in Table 2-2.



The characterization effort determined the extent of Ra-226 impacts to the eastern Flood Plain Area. The plan was to relocate impacted soil to the existing soil stockpiles located on the upper terrace to the south. However, remediation of this impacted area was delayed due to several weather events in the fall and winter. It was decided that remediation would occur during the stockpiled soil disposal activities. This decision was based on the cost savings associated with mobilizing/demobilizing heavy equipment and work crews to the Site.

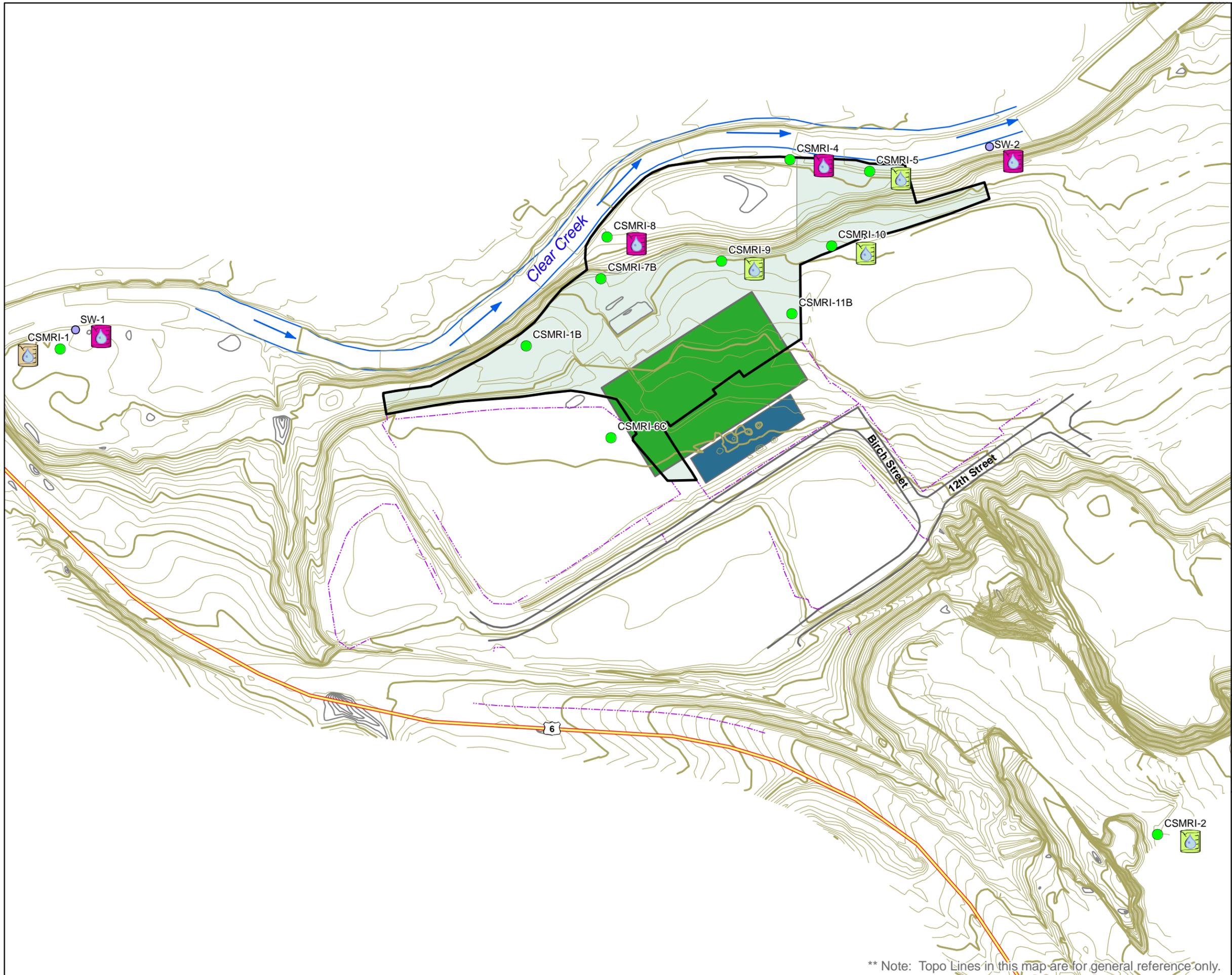
On August 17, 2007, approximately 54 cubic yards of the flood plains' contaminated soil was relocated to Stockpile B. At the end of August, a rainstorm caused problems with the Flood Plain Area. A storm water inspection found that the Flood Plain Area seepage was flowing under the silt fence toward Clear Creek. Two bales of straw were placed in the water flow to settle silt for temporary prevention of seepage. The following week, a straw wattle was placed in the area. On August 28, 2007, approximately 55 cubic yards of flood plain soil were added to Stockpile B. On August 30, 2007, 22 flood plain samples were collected and sent to a laboratory. The first week of September 2007, approximately 100 cubic yards of flood plain soil was excavated, which finished the flood plains' remediation work. Samples were collected to provide data about the final stage of the flood plain work.

The former pond area was closed by the CDPHE after the EPA performed an emergency removal action, remediating the former pond area to the Uranium Mill Tailings Remedial Action (UMTRA) Standards of 5 pCi/g in the upper 6 inches of soil and 15 pCi/g below that in each 6-inch layer. The former pond area was not investigated during the investigation phase of this project but the former pond area is addressed further in Section 9 of this report for purposes of an environmental covenant.

#### **2.4 Groundwater Description and Chronology**

Groundwater at the Site occurs under unconfined conditions in the alluvium/colluvium and generally follows the bedrock surface. Depth to the water table ranges from about 3 to 30 feet bgs, depending on distance from Clear Creek and depth to bedrock. Based on surface and bedrock topography, groundwater generally flows to the north-northeast toward Clear Creek. The alluvial/colluvial deposits are mainly recharged by infiltration of precipitation and to a limited extent by Clear Creek within the Flood Plain Area during periods of high flow. The alluvial/colluvial system naturally discharges to Clear Creek. Elevation of the potentiometric surface values relative to the surveyed top-of-casing (TOC) elevations are posted adjacent to each monitor well. The locations of the Site monitor wells are shown on Figure 3.

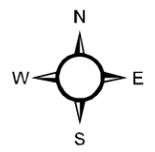
Groundwater in the shallow alluvium/colluvium has been shown to contain elevated concentrations of uranium, a Site contaminant of concern that also occurs naturally in the bedrock formations and in the surficial deposits that comprise the Site. The groundwater uranium concentrations have been attributed to infiltrating water resulting in migration of radionuclides from source materials located on the Site. The majority of these source materials have been taken off-site.



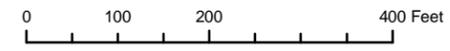
**Explanation**

- Monitor Well
- SW Sample Location
- CSMRI Site
- Fences
- Roads
- US Highway 6
- Topography (Depressions)
- Topography (10 Ft Intervals)
- Topography (2 Ft Intervals)
- Soccer Field
- Stands
- Site Area

- WaterType**
- Ca-Cl
  - Ca-HCO<sub>3</sub>
  - Ca-SO<sub>4</sub>



Scale: 1" = 200'



**Figure 3**

**Monitoring Well Location Map**

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\*\* Note: Topo Lines in this map are for general reference only.

A two-year monitoring period is currently being conducted to confirm the effectiveness of the Selected Remedy and to review the Legacy Management Plan. The current groundwater monitoring program consisting of quarterly sampling and analysis will be continued until such a time as levels drop to either below the Colorado groundwater Standard or demonstrate a trend sufficient to confirm success of the remedy at addressing the uranium contamination in the groundwater.

Groundwater well sampling activity was sporadic prior to February 2005 at which time Stoller assumed this responsibility. Since then, regular quarterly sampling and reporting has been completed. Reports summarize sampling procedures, present and evaluate analytical data, and discuss observed trends. At the request of the CDPHE radiation unit, seven additional groundwater wells were installed at the Site in February 2007 to track the effectiveness of source excavation to Action Levels. Groundwater monitoring wells CSMRI-1B, CSMRI-6B, CSMRI-7B, CSMRI-8, CSMRI-9, CSMRI-10, and CSMRI-11 were installed at the CSMRI Site during February 2007. The “B” designation in the monitor well label denotes a replacement monitor well. Currently, a total of 11 monitoring wells, (the aforementioned seven plus CSMRI-1, CSMRI-2, CSMRI-4, and CSMRI-5 from previous groundwater programs) are included in the Site monitoring program.

Further details about the groundwater monitoring are located in the quarterly monitoring reports for CSMRI. Additional information about installation of the wells is located in the *Groundwater Monitoring Well Installation Work Plan* (Stoller, 2006c) and *Draft Implementation Report, Groundwater Monitoring Well Installation* (Stoller, 2007c).

### **3. Performance Standards and Clean-up Goals**

Site performance Standards and clean-up goals along with applicable or relevant and appropriate requirements (ARARs) are presented below.

Both of the RI/FSs that were performed at the Site identified elevated concentrations of radionuclides and metals. Based on existing information, site-specific remedial action objectives to protect human health and the environment were developed. The objectives specify the materials and media of concern, the exposure routes and receptors, and an acceptable contaminant (material) level or range of levels for each exposure route (i.e., preliminary remediation goals).

Remedial action objectives for the Site were designed to prevent or mitigate further release of affected materials to the surrounding environment and to eliminate or minimize risk to human health and the environment. The affected material was the surface and subsurface soil located in the vicinity of the former buildings prior to soil segregation activities. After soil segregation, most of the affected material was located in either Stockpile A or Stockpile B. Potential receptor pathways included direct radiation, inhalation, and ingestion of plants and soil. Another potential exposure pathway is the migration of the affected material to groundwater and subsequent ingestion. The following are the originally established objectives for the Site prior to soil segregation activities:

- Eliminate or minimize the pathway for dermal contact, inhalation, and ingestion of site-specific radionuclides to human receptors to achieve a level of protection in compliance with the NCP levels of acceptable cancer risk ( $10^{-4}$  to  $10^{-6}$ ).
- Develop receptor-specific Derived Concentration Guidelines (DCGLs) to limit unacceptable radiation doses (total effective dose equivalent [TEDE] to less than 25 mrem/yr and 15 mrem/yr, distinguishable from background; and less than 100 mrem/yr above background if institutional controls fail for on-site restricted-use remedies) for the radionuclides found in the affected material (i.e., soil). Radium-226, thorium-228, thorium-230, thorium-232, and uranium-238 are present on Site at activities above tentative DCGLs. Additional radionuclides were identified during the characterization (radium-228, uranium-234, and uranium-235) but at activities consistent with background.
- Prevent exposure to indoor air concentrations of radon gas and radon decay products greater than 4 picocuries per liter (pCi/L) and 0.02 working level (WL), respectively. Exposure to 4 pCi/L of air for radon corresponds to an approximate annual average exposure of 0.02 WL for radon decay products, when assuming residential land use.
- Prevent long-term dermal, inhalation, and ingestion exposures to trace metal-affected materials with concentrations greater than the CDPHE proposed Residential/Unrestricted Land-Use Standards or that generate hazard indices greater than 1. The trace metals of concern are arsenic, lead, mercury, molybdenum, and vanadium.
- Address hazards associated with soil containing elevated concentrations of lead (possible access issues with neighborhood children).
- Implement remedial measures that limit groundwater and surface-water concentrations to the maximum contaminant levels (MCLs) at the points of compliance and to non-zero maximum contaminant level goals (MCLGs), established under the Safe Drinking Water Act and under Colorado law. Although the affected groundwater is not a current drinking water supply, it eventually enters Clear Creek, which is used by downstream users for drinking water. Uranium and arsenic are the primary groundwater contaminants of concern.
- Prevent off-site migration of affected material that could result in the exposures described above. This includes the groundwater pathway.
- Implement remedial actions that reduce exposures from ionizing radiation to levels that are as low as reasonably achievable (ALARA).
- Comply with soil-, location- and action-specific ARARs (presented below).

The remedial action objectives were used to identify specific soil Action Levels and groundwater Standards, as listed in Tables 3-1 and 3-2. Table 3-1 presents the soil Action Levels agreed to in the approved 2006 Site Characterization Work Plan. Table 3-2 identifies ARARs for soils,

groundwater, and surface water. These final DCGLs, in combination with the environmental covenant, allow the School to comply with all ARARs and allow for future beneficial use of the Site.

**Table 3-1  
Site DCGLs and Soil Clean-up Levels**

Metal	DCGL (mg/kg)	Site Action Level (inclusive of background) (mg/kg)
Arsenic	1.0	39
Lead	NA	400*
Mercury (elemental)	1.1	1.1
Mercury (compounds)	NA	23
Molybdenum	NA	390
Vanadium	NA	550
Radioisotope	DCGL (pCi/g)	Site Action Level (pCi/g)
Radium 226	1.44	4.14
Radium 228	2.20	4.6
Thorium 228	3.77	6.47
Thorium 230	9.83	11.53
Thorium 232	1.48	3.88
Uranium 234	253	254.9
Uranium 235	4.88	4.97
Uranium 238	20.2	21.8

NA – Not applicable

\* DCGLs not calculated for some metals. Site Action Levels use ARARs for clean-up goals.

Receptor definition is important for the determination of risks and hazards. Exposure times and multiple pathways place the urban resident at greater risk than an occasional recreational user. The persistence of the affected material would place receptors at risk for over 1,000 years, and land use could change significantly in that amount of time. Both the urban resident and the recreational user have been evaluated for each scenario because of the future land use uncertainty and because it is reasonably foreseeable that the Site would be used for urban residents by the School or other future owners of the Site. Additionally, exposures resulting from each alternative must comply with a 1997 U.S. Nuclear Regulatory Commission (NRC) rule (10 CFR Part 20, Subpart E), which has been adopted by Colorado (6 CCR 1007-1 4.61.3) and establishes a dose criterion for decommissioning a site. This rule includes a provision that permits decommissioning under restricted release conditions, such as those proposed herein. Under a restricted release (a release including an environmental covenant), the dose to the average member of the critical group must not exceed 25 mrem/yr with the restrictions in place, and, if the restrictions were to fail, the dose due to residual radioactivity must not exceed 100 mrem/yr.

**Table 3-2  
ARARs for Soils, Groundwater, and Surface Water**

Media	Site-Specific Applicable or Relevant and Appropriate Requirements Considered
Soil	10 CFR §20.1402 and 1403, NRC Standards for Protection Against Radiation, Radiological Criteria for Unrestricted and Restricted Use – Requires that exposures to onsite receptors do not result in a dose in excess of 25 mrem/yr plus ALARA, and 100 mrem/yr if institutional controls fail for restricted use cleanups.
	6 CCR 1007-1, §4.61.2 – 4.61.3, Colorado Radiation Control regulations, Radiological Criteria for Unrestricted and Restricted Use - Requires that exposures to onsite receptors do not result in a dose in excess of 25 mrem/yr plus ALARA, and 100 mrem/yr if institutional controls fail for restricted use cleanups.
	EPA Memorandum, Establishment of Cleanup Levels for CERCLA Sites with Radioactive Contamination, OSWER No. 9200.4-18, August 1997 – Uses a risk-based approach to recommend limiting exposures to less than 15 mrem/yr for NCP compliance.
	EPA Memorandum, Reassessment of Radium and Thorium Soil Concentrations and Annual Dose Rates, July 22, 1996 – Initial discussion that resulted in the recommended 15 mrem/yr dose.
	EPA Memorandum, Use of Soil Cleanup Criteria in 40 CFR 192 as Remediation Goals for CERCLA Sites, Directive No. 9200.4-25, February 1998 – Clarification of the use of 40 CFR 192 for the development of radionuclide soil Standards.
	40 CFR §192.12, Subpart B; 6 CCR 1007-1, Part 18 Appendix A —Standards for Cleanup of Land and Buildings Contaminated with Residual Radioactive Materials from Inactive Uranium Processing Sites, Standards – Limits radium-226 surface activities (up to 15 cm) to 5 pCi/g and subsurface activities (greater than 15 cm) to 15 pCi/g. For occupied or habitable structures it requires that remedial efforts result in an annual radon decay product concentration (including background) of less than 0.02 WL (in any case the concentration should not exceed 0.03 WL). And interior gamma shall not exceed background by more than 20 microrentgens per hour.
	40 CFR §192.02, Subpart A; 6 CCR 1007-1, Part 18 Appendix A —Standards for the Control of Residual Radioactive Materials from Inactive Uranium Processing Sites, Standards – Specifies that the control of residual radioactive materials and their listed constituents shall be designed to be effective for up to 1,000 years, and in any case for at least 200 years. Also imposes limits on acceptable radon air concentrations and requires groundwater monitoring when necessary.
	CDPHE, Proposed Soil Remediation Objectives Policy Document, December 1997, as updated
	CDPHE, Revised Proposed Residential/Unrestricted Land-Use Standards, 2003, as updated
	EPA Region 9 Memorandum, Region 9 PRGs Table 2002 Update, October 2002 – Describes risk-based approach to soil cleanup and provides table of preliminary remediation goals for soils. CDPHE recommends the use of these PRGs for materials not covered by their proposed soil Standards.
Colorado Environmental Covenant Law: 25-15-317 thru 327, CRS	
Groundwater and Surface Water	40 CFR §192.02 Standards, §192.03 Monitoring, §192.04 Corrective Action, Subpart A—Standards for the Control of Residual Radioactive Materials from Inactive Uranium Processing Sites – Details the requirements specific to groundwater.
	40 CFR §192.20 Guidance for implementation, §192.20 Criteria for applying supplemental Standards, Subpart C – Implementation – Additional groundwater requirements.
	40 CFR 141.11, National Primary Drinking Water Regulations, Maximum contaminant levels for inorganic chemicals.
	40 CFR 141.15, National Primary Drinking Water Regulations, Maximum contaminant levels for uranium, radium-226, radium-228, and gross alpha particle radioactivity in community water systems.
	40 CFR 141.51, National Primary Drinking Water Regulations, Maximum contaminant level goals for inorganic contaminants.
	40 CFR 141.55, National Primary Drinking Water Regulations, Maximum contaminant level goals for radionuclides.
	5 CCR 1003-1, Colorado Primary Drinking Water Regulations, Maximum contaminant levels for uranium and arsenic, among other substances.
	5 CCR 1002-41, Colorado Department Of Health, Water Quality Control Commission Regulation No. 41, Basic Standards for Groundwater.

**Table 3-2**  
**ARARs for Soils, Groundwater, and Surface Water**

Media	Site-Specific Applicable or Relevant and Appropriate Requirements Considered
	5 CCR 1002-8, §3.1.1, Colorado Department Of Health, Water Quality Control Commission Regulation No. 8, Establishes Basic Standards, Anti-degradation Standard, and system for classifying State water.
	5 CCR 1002-38, Colorado Department Of Health, Water Quality Control Commission Regulation No. 38, Classifications And Numeric Standards South Platte River Basin (including Clear Creek as a tributary), Laramie River Basin, Republican River Basin, Smoky Hill River Basin.
	5 CCR 1002-31, Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 31, The Basic Standards And Methodologies For Surface Water, Section 31.8 Antidegradation Rule.
	Colorado Environmental Covenant Law: 25-15-317 thru 327, CRS

Attainment of Site performance Standards and clean-up goals is summarized in the following subsections for the three soil areas of this project as well as for the groundwater. These performance Standards and clean-up goals were identical for each soil area due to the common origin of possible impacts. Attainment issues are also discussed in more detail in subsequent sections in this report.

### 3.1 Main Site

Two soil stockpiles were established for excavated impacted materials: Stockpile A consisted of approximately 200 cubic yards with a mean concentration of Ra-226 of 71.83 pCi/g. Stockpile B consisted of approximately 12,500 cubic yards with a mean concentration of Ra-226 of 13.55 pCi/g. The soil in both piles was solid waste, not hazardous waste.

The two stockpiles were sampled and analyzed to characterize the soil, as well as document compliance with disposal sites' waste acceptance criteria. Table 3-3 shows the average radionuclide and metals sample results for Stockpiles A and B.

**Table 3-3**  
**Stockpile Soil Characterization**

Analyte	Stockpile A Average*	Stockpile B Average*
Radium 226 (pCi/g)	71.83	13.55
Radium 228 (pCi/g)	2.64	2.21
Thorium 228 (pCi/g)	2.23	2.09
Thorium 230 (pCi/g)	37.85	9.14
Thorium 232 (pCi/g)	2.08	1.92
Uranium 234 (pCi/g)	41.05	8.27
Uranium 235 (pCi/g)	3.24	0.72
Uranium 238 (pCi/g)	41.25	8.51
Arsenic (mg/kg)	38.55	33.30
Lead (mg/kg)	850.00	494.70
Mercury (mg/kg)	3.20	4.30
Molybdenum (mg/kg)	36.00	137.00
Vanadium (mg/kg)	86.50	38.00

\* Arithmetic mean

The Main Site was divided into four survey units in accordance with Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) criteria. At the end of the excavation activities, all Class 1 material was moved to either Stockpile A or B, and the remainder of the Site was classified as a Class 2 area. The maximum size of a Class 2 area is 10,000 square meters. Therefore, the Site required a minimum of three survey units; four survey units were used based on Site topography. A combination of data from samples analyzed by the on-site and off-site laboratories was used to evaluate the success of the clean up. These samples were evaluated using EPA's *Methods for Evaluating the Attainment of Cleanup Standards, Volume 1: Soils and Solid Media* (EPA, 1989). Statistical tests were applied in accordance with Chapter 6, *Determining Whether the Mean Concentration of the Site is Less Than a Cleanup Standard*. All four survey units met final Site Action Levels for all metal and radionuclide constituents of concern at the 95 percent confidence level. Final survey results are presented in the 2007 RI/FS. The Site soils in the Main Site area met the soil Action Levels.

### **3.2 Clay Pits Area**

Two separate efforts were conducted to locate buried CSMRI-related material in the Clay Pits Area. The first investigation was unsuccessful due to the lack of survey information identifying the exact location of the suspected material within the pits. The suspected location of the material was surveyed in 1977 and is known as the Bolis survey. This survey was identified only after the original Clay Pits investigation.

At the request of the Colorado School of Mines, a second subsurface investigation was conducted of the former Clay Pits Area during April 2007. The Clay Pits Area had the same performance Standards as the Main Site and followed the same procedures except as detailed in the work plan letter to the CDPHE dated November 6, 2006. The goal of the investigation was to locate the area suspected to contain former pond sediments, as identified in the Bolis survey, and to determine the nature and extent of the contamination if identified.

The Clay Pits investigation was unable to identify impacts resulting from CSMRI operations; therefore, no further action is required in this area for CSMRI materials. Appendix A contains a letter from the CDPHE radiation unit agreeing that this area does not require further action under this project. The Clay Pits area meets the objectives for this remedial action.

### **3.3 Flood Plain**

The excavation of soil from the Flood Plain Area east of the former pond was completed following guidelines established for the Main Site and presented in the work plan. Not all impacted soil above Action Levels, however, could be excavated from this area. During soil segregation activities, excavation of soil above Action Levels was limited by groundwater, surface water, and large old-growth trees. Additional soil excavation from this area was not practical. After discussions with the CDPHE radiation unit, it was agreed between the School and the CDPHE radiation unit that soil above Action Levels in this area would be left in place provided an environmental covenant placed the necessary restrictions to prevent unacceptable doses. The final condition of the Flood Plain Area, using laboratory data from all remaining non-excavated sample locations, indicates a mean Ra-226 concentration of 4.77 pCi/g, with a 95 percent upper confidence level of 5.5 pCi/g.

The soil remaining above Action Levels was left in place. Clean fill was placed into the excavated areas to re-establish drainage and prevent mosquito breeding sites. The fill soil was taken from uncontaminated piles located on the upper, previously remediated terrace. This action eliminated the safety concerns of leaving open shallow excavations filled with water and reduces the exposure potential of any recreational users. This portion of the Site will have a restrictive environmental covenant placed on it prohibiting residential structures and requiring radon mitigation systems for commercial or industrial structures. Covenants and legacy management issues are discussed further in Section 9.

Access to the Flood Plain Area was limited to a single road that went from the upper bench terrace down the slope to the flood plain. The road has since been removed and re-configured with cobbles to allow for drainage. Erosion control best management practices include erosion mats and wattles to provide slope stability between the bench terrace and the Flood Plain Area.

### **3.4 Groundwater**

This section describes the overall groundwater monitoring network at the CSMRI Site, including monitor well locations, sampled and tested analytes, groundwater flow direction, and recent construction activities that are likely to affect the overall hydrogeologic regime at the Site.

#### **Monitoring Details**

Groundwater monitor wells are located in areas likely to detect impacts, if any, to groundwater emanating from the Site as well as at locations that represent background water quality. Figure 3 presents the locations of 11 groundwater monitor wells and the two Clear Creek surface water sample locations. Monitor wells CSMRI-4 and CSMRI-5 are located downgradient from the Site in the Clear Creek flood plain. Well CSMRI-1 is located along Clear Creek upstream from the Site, and well CSMRI-2, as a background water quality monitor well, is located off site on the southeast corner of the freshman parking lot on West Campus Drive. The remaining monitor wells are located within the limits of the Site.

In February 2007, seven new groundwater monitor wells were installed to confirm the effectiveness of the source excavation remedy that was conducted in 2006. Monitor well CSMRI-8 is located along Clear Creek within the Flood Plain Area, and monitor wells CSMRI-1B, CSMRI-6B, CSMRI-7B, CSMRI-9, CSMRI-10, and CSMRI-11 are located on the upland areas and essentially encircle the CSMRI Site source removal area.

In July 2008, two monitor wells (CSMRI-6B and CSMRI-11) were abandoned due to construction activities. These two wells were replaced in December 2008 with CSMRI-6C and CSMRI-11B, respectively.

Clear Creek surface water sample location SW-1 is located approximately 420 feet upstream of the CSMRI Site, and surface water sample location SW-2 is located approximately 150 feet downstream of the Site.

Site groundwater data are discontinuous from 1990 through 2007; however, since March 2007 sampling has been conducted consistently on a quarterly basis. Aqueous samples are tested for the presence of select radioisotopes (radium 226 and radium 228); anions (bicarbonate,

carbonate, chloride, nitrate/nitrite, and sulfate); cations (calcium, manganese, potassium, and sodium); and dissolved uranium. Monitor wells located in the Flood Plain Area are tested for general chemistry analytes (total alkalinity, dissolved organic carbon, ferrous/ferric iron, and dissolved phosphorous). Dissolved metals (arsenic, barium, cadmium, chromium, mercury, silver, and vanadium) are sampled and tested only during the June quarterly sampling event.

Summary tables in Appendix C present historical analytical data for the groundwater monitor well, including radioisotopes and metals. Table C-1 presents data from 1991 to 2003 for a limited set of groundwater wells. Tables C-2 and C-3 present recent (September 2007 through March 2009) groundwater analytical data for dissolved radioisotopes and metals, respectively. Surface water analytical data are presented in Tables C-4 and C-5.

### **Groundwater Flow Regime**

Groundwater flow direction on the bench terrace area, as measured by the existing network of monitor wells, is typically to the northeast from the baseball field and then arcing to the north toward the Flood Plain Area. Groundwater flow direction and gradient are updated quarterly and reported in each quarterly monitoring report.

Recent construction activities at the CSMRI Site may have an effect on the overall hydrogeologic regime, including groundwater flow direction, saturated aquifer thickness, and groundwater quality. During the latter part of 2007 and through 2008, an artificial-turf soccer field was built over a portion of the former CSMRI Site, and a practice football field with artificial turf was built to the south of the CSMRI Site. Both fields have underlying drainage beds with perimeter drains conveying collected precipitation to the north and discharging to the Flood Plain Area.

A portion of the Welch Ditch located near background monitor well CSMRI-2 was closed in late 2007 with flow now piped to Washington Avenue in Golden and then to down-ditch users. The effects of the artificial turf fields and their associated drains and the closure of a portion of the Welch Ditch as a source of recharge to groundwater due to leakage are likely to result in lower potentiometric surface elevations.

The levels of uranium in groundwater, which have not attained the Colorado groundwater standard for uranium for some of the monitoring wells on the Site, are expected to continue to fluctuate resulting from the excavation and off-site disposal of source materials. However, it is anticipated that legacy management of groundwater, including monitoring of the elevated concentrations above the Colorado groundwater standard for uranium may be required until the Standard is met. The groundwater will have an environmental covenant placed on it that prohibits use of the water.

Groundwater in the shallow alluvium/colluvium has been shown to contain elevated concentrations of uranium, a Site contaminant of concern that also occurs naturally in the bedrock formations and in the surficial deposits that comprise the Site. The groundwater uranium concentrations have been attributed to infiltrating water resulting in migration of radionuclides from source materials located on the Site.

The majority of the source material was excavated and disposed in an off-site landfill. However, a two-year monitoring period is currently being conducted to confirm the effectiveness of the Selected Remedy and to review the Legacy Management Plan. The current groundwater monitoring program consisting of quarterly sampling and analysis will continue until concentration levels drop to either below the Colorado groundwater standard or indicate a trend sufficient to demonstrate success of the remedy at addressing the uranium contamination in the groundwater.

### 3.4.1 Groundwater Analytical Discussion

As discussed previously, performance Standards, goals, and ARARs are associated with the groundwater. A discussion concerning groundwater chemistry as it relates to the ARARs is presented below and in detail in the document *Draft Implementation Report, Groundwater Monitoring Well Installation*, dated June 2007 (Stoller, 2007c).

#### Ions and General Chemistry

Beginning in March 2007, groundwater samples have been collected quarterly from Site monitor wells and from two Clear Creek surface water sample locations. As groundwater flows through either saturated bedrock or sediments, it assumes a unique geochemical ionic composition as a result of the chemical interaction of the host media.

Analyses of the anions and cations were initially conducted during the first quarter of 2007, and since the third quarter of 2008 (September), are conducted routinely as part of the overall sampling program. Results of the ionic analyses indicate three distinct types of groundwater within the monitored area of the former CSMRI Site. Some monitor wells are consistently the same water type between each sampling event while others vary in water types.

The March 2009 sampling event indicates groundwater from monitor wells CSMRI-2, CSMRI-5, CSMRI-9, and CSMRI-10 is identified as calcium-bicarbonate ( $\text{Ca-HCO}_3$ ) type water; monitor wells CSMRI-2 and CSMRI-10 have consistently remained a  $\text{Ca-HCO}_3$  water type through most of the past sampling events while CSMRI-5 and CSMRI-9 have previously been a calcium-chloride ( $\text{Ca-Cl}$ ) type water. Monitor wells CSMRI-4 and CSMRI-8 and the two Clear Creek sample locations SW-1 and SW-2 have consistently been characterized as calcium-sulfate ( $\text{Ca-SO}_4$ ) type water throughout the sampling events. The influence of Clear Creek on the two flood plain monitor wells becomes apparent in that the water types are identical; however, monitor well CSMRI-5 is also located in the Flood Plain Area yet is of a different water type ( $\text{Ca-HCO}_3$ ) as described above. Monitor well CSMRI-1 in the March 2009 sampling event is characterized as a  $\text{Ca-Cl}$  water type and has remained unchanged in the past three of four ionic sampling events.

Results of the ionic analyses for the March 2009 quarterly sampling event using the geochemical analysis software AqQA® are presented in Appendix D. Appendix D also presents a Piper trilinear diagram of the CSMRI groundwater. Ionic balances between the sum of the tested anions and cations as milliequivalents per liter (meq/L) range between 1 percent to 4.8 percent.

The Piper diagram shows the similarity of the groundwater for the monitor wells where the symbols representing each of the monitor well ionic sample results are plotted on the same graphs.

The diamond-shaped graph between the cation triangle on the left and the anion triangle on the right is used to represent the composition of the groundwater with respect to both the anions and cations. The diamond-shaped graph shows that most of the groundwater samples are similar at CSMRI in that they are grouped relatively close to each other, except for the pale green triangle of CSMRI-2, which appears to be geochemically different from the other groundwater samples.

Low dissolved oxygen (DO) values are associated with the three groundwater monitor wells located in the Flood Plain Area. The June 2009 sampling event field parameters indicate low values ranging from 2.82 milligrams per liter (mg/L) at CSMRI-8 to 4.99 mg/L at CSMRI-5, while DO values at other monitor wells on the CSMRI Site range from 5.6 mg/L to 14.3 mg/L. Field derived oxidation-reduction potential (ORP) values are measured and recorded during the monitor well purging and sampling process, and negative values are noted in monitor wells locations CSMRI-1B, CSMRI-4, and CSMRI-5. The low DO values and negative ORP values associated with monitor wells CSMRI-4 and CSMRI-5 in the Flood Plain Area indicate chemically reducing conditions. Oxygenated water from Clear Creek appears to be entering the Flood Plain Area near CSMRI-8 and mobilizing uranium from a nearby source. As the creek water mixes with the hyporheic zone associated with upwelling from bedrock and from groundwater migrating from the CSMRI Site down the bench terrace slope into the Flood Plain Area, the groundwater in the flood plain becomes reduced and lowers the concentration of uranium in the groundwater as measured at monitor well locations CSMRI-4 and CSMRI-5. Oxygenated water from Clear Creek appears to be entering the Flood Plain Area near CSMRI-8 and mobilizing uranium from a nearby source. As the creek water mixes with upwelling groundwater associated with bedrock and from groundwater migrating from the CSMRI Site, the groundwater in the flood plain becomes geochemically reduced (lower oxygen content). The uranium precipitates out in the reduced groundwater with the net effect of lowering the concentration of uranium in the groundwater as measured at monitor well locations CSMRI-4 and CSMRI-5.

Water temperature provides a line of physical evidence that surface water and groundwater are mixing in the Flood Plain Area. With such mixing, the temperature of the flood plain groundwater would be expected to vary during the course of each year due to its interaction with surface water from Clear Creek. Available field-derived water sample temperature data from two sampling events in 2009 indicate groundwater from the monitor wells on the bench terrace is relatively stable and ranges from 11+ to 14° C during the spring and summer months. In the Flood Plain Area, the water temperature at CSMRI-8 is closely aligned with the temperature of Clear Creek at about 12° C but with groundwater that is somewhat cooler at monitor well locations CSMRI-4 and CSMRI-5 at 7.0 and 6.8°C, respectively. The water temperature difference associated with these two wells may be associated with nearby springs emanating from the bench terrace. Additional evidence for a unique groundwater source in the area of CSMRI-8 is the sulfate concentration of 530 mg/L measured in March 2009, whereas comparable concentrations at most other Site wells at this time fell in the range of 62 to 190 mg/L.

### **Radioisotopes**

Aqueous sampling and testing for radioisotopes includes the analytes radium 226 and radium 228. Thorium isotopes 228, 230, and 232 were initially part of the analyte list but were dropped

after several sampling events indicated low detected activity. The CDPHE radiation unit concurred with the decision to eliminate sampling for the thorium isotopes.

The results of the March 2009 sampling event indicate the sum of the activity of radium isotopes 226 and 228 at background monitoring well CSMRI-2 was detected at 5.05 pCi/L, barely exceeding the MCL of 5 pCi/L. This well is the site's background, up-gradient monitoring well. This data may indicate naturally occurring radium isotopes within the formations underlying this area. At a minimum, this data is not indicative of site issues. Radium exceedances at this location occurred in 1995 and then again in two of four quarterly sampling events in 2003. Monitoring will continue at this location to assess the sporadic nature of these isotopes. No other monitor wells have indicated exceedances of radium isotopes.

### **Metals**

Aqueous sampling and testing for dissolved metals includes dissolved uranium for all quarterly sampling events; and the metals arsenic, barium, cadmium, chromium, mercury, silver, and vanadium for the June quarterly sampling event. The sampling and analytical testing of the dissolved metals only during the June quarterly sampling event are with the concurrence of the CDPHE radiation unit. Except for uranium, previous sample results have indicated no exceedances of any of the tested metals.

The results of the groundwater monitoring indicate exceedances of uranium above the groundwater standard at three monitor wells. Two of the monitor wells, CSMRI-4 and CSMRI-8, are located in the Flood Plain Area and one monitor well, CSMRI-9, is located at the edge of the bench terrace immediately south of the Flood Plain Area.

The exceedances of uranium at CSMRI-4 have been persistent since at least the early 1990s. Sampling of this monitor well was initially sporadic, but the sampling is now conducted quarterly. This monitor well is in the vicinity of the former tailings pond area, which was excavated by an EPA contractor under a removal action in 1992. The June 2009 quarterly sampling results indicate a concentration of uranium at 110 micrograms per liter ( $\mu\text{g/L}$ ), above the State of Colorado Groundwater Quality Standard of 30  $\mu\text{g/L}$ .

The exceedances of uranium at CSMRI-8 have been persistent from when the monitor well was initially installed in February 2007. This monitor well is located west and upstream of the former tailings pond area. The initial sample results indicated a concentration of uranium at 1,100  $\mu\text{g/L}$ . The June 2009 quarterly sampling results indicate a concentration of uranium at 700  $\mu\text{g/L}$ . This value is significantly reduced from previous sampling events. The observed elevated concentrations detected at monitoring well CSMRI-8 may be the result of one or several of the following:

- Soil surrounding the well contains residual uranium from the former tailings pond.
- The well contains residual uranium from the former Building 101 area at the top of the bench terrace above the flood plain.
- The well is located in a zone where strong mixing between creek water and groundwater occurs, and the oxidizing conditions associated with creek water causes uranium to

dissolve more readily. Seasonal changes in mixing proportions may be causing fluctuations in uranium concentrations.

Given the apparent likelihood that surface water from Clear Creek is infiltrating the subsurface near CSMRI-8, additional continuing data collection will further the understanding of whether uranium concentrations at CSMRI-8 and CSMRI-4 remain elevated throughout the year or tend to fluctuate in response to temporally variable inflow of surface water into the groundwater system. The flows through and chemistry of hyporheic zones associated with most rivers and streams change over time in response to multiple factors, including stream stage, stream bed sedimentation, locations of stream bends with respect to flood plain alluvium, and the relative locations of pools and riffles within a stream. If the mixing is a seasonal phenomenon, low-flow periods on the creek might provide a time window for uranium levels to build up in nearby bedrock such that subsequent hyporheic flows during periods of high runoff remobilize uranium in groundwater.

The recent exceedance of uranium at CSMRI-9 may be associated with the rise in the water table due to the wetter-than-average May and June 2009 months. Since March 2007, the concentration of dissolved uranium has fluctuated slightly above to slightly below the groundwater standard of 30 µg/L. During the most recent sampling event in late June 2009, uranium was detected at a concentration of 99 µg/L. The recent elevated presence of uranium at this location may be attributed to the completion of the recently constructed soccer field immediately to the south of CSMRI-9 and the unknown effect the artificial turf field with perimeter drains will have on the overall hydrologic regime of the CSMRI Site. Quarterly sampling will continue at this location and the analytical data will be used to assess the concentration trends of uranium at this location.

### **3.4.2 Groundwater Analytical Conclusions**

The results of seven quarterly sampling events of the existing network of monitor wells indicate exceedances of uranium at two groundwater monitor wells located within the Flood Plain Area and at one monitor well located on the bench terrace immediately south of the flood plain. Oxygenated water from Clear Creek appears to be entering the Flood Plain Area in the vicinity of CSMRI-8 and mobilizing uranium from a nearby source. The concentration of uranium then becomes reduced as the groundwater interacts in the hyporheic zone as it migrates through the flood plain. The recent exceedance of uranium at CSMRI-9 above the flood plain will be monitored during future sampling events.

Geochemical analyses indicate three different types of water have been identified at the CSMRI Site: Ca-Cl, Ca-HCO<sub>3</sub>, and Ca-SO<sub>4</sub> waters. Most monitor wells change seasonally between Ca-Cl and Ca-HCO<sub>3</sub>-type waters. However, monitor wells CSMRI-4 and CSMRI-8, and surface water locations SW-1 and SW-2 have consistently remained Ca-SO<sub>4</sub>-type water through the sampling events.

The radioisotopic data for radium above water quality standards at the CSMRI-2, the upgradient, background well is not related to any possible contamination from CSMRI activities. The dissolved metals data indicate no exceedances of any standards for monitored metals.

#### 4. Quality Assurance/Quality Control Procedures

The QA/QC procedure and requirements for areas of discussion in this report can be referenced in Section 7 of the *CSMRI Creekside Site Final Site Characterization Work Plan* dated May 12, 2006.

In summary, the purpose of the Quality Assurance Project Plan (QAPP) was to document the procedures required for QA, QC, data verification and validation, and data quality assessment for sampling and analysis activities related to the CSMRI Site project. The goal of the QAPP was to identify and implement the QA/QC practices associated with sampling and analytical methodologies that limit the introduction of error into analytical data. The QAPP provided the methodology to ensure that project data were of adequate quantity, quality, and usability for their intended purpose, and further ensured that such data were authentic, appropriately documented, and technically defensible.

Quality assurance elements are the procedures used to control those immeasurable components of a project such as using the proper sampling techniques, collecting a representative sample, specifying the proper analysis, etc. Although not measurable, quality assurance procedures are essential to produce quality information.

Quality control data are the data generated to estimate the magnitude of bias and variability in the processes for obtaining the environmental data. These processes include both the field processes for obtaining the data and the laboratory analyses.

Data quality assessment is the overall process of assessing the quality of the environmental data by reviewing the application of the QA elements, the analysis of the QC data, and results of the data verification and validation. Quality assessment encompasses both the measurable and immeasurable factors affecting the quality of the environmental data. Assessment of these factors may identify limitations that require modifications to procedures or protocols for sample collection and analysis or affect the desired interpretation and use of the data.

The QAPP was developed in accordance with the requirements in *Guidance for Quality Assurance Project Plans* (EPA, 2002).

#### 5. Construction Activities

Complete details of the stockpiled soil disposal procedures and justification for techniques used are provided in the *Colorado School of Mines Research Institute Stockpiled Soil Disposal Work Plan* (Stoller, 2007e). The soil was stockpiled as detailed in the *CSMRI Creekside Site Final Site Characterization Work Plan* (Stoller, 2006a).

Stoller excavated the contaminated soils and made two stockpiles at the Site. Stockpile A contained 175 cubic yards with an average of 71.83 pCi/g Ra-226, and Stockpile B consisted of approximately 12,500 cubic yards with an average of 13.55 pCi/g Ra-226.

A public meeting was held on May 30, 2007, and public comment was received on the RI/FS and the Proposed Plan. A Record of Decision was published on July 10, 2007. The Record of

Decision responded to public comment and selected off-site disposal and environmental covenants as the remedy.

Construction activities took place between August 20, 2007 and September 7, 2007. During this time, the two soil stockpiles were loaded out and transported by truck to the Foothills Landfill and the Clean Harbors Deer Trail Landfill.

Soil from Stockpile A was shipped to the Clean Harbors Deer Trail facility in eastern Colorado on August 20, 2007. Eleven lined trucks containing Stockpile A soil were shipped.

Soil from Stockpile B, including soil from the Main Site as well as the Flood Plain Area, was shipped to the Allied Waste BFI Foothills Landfill between August 21, 2007 through September 7, 2007. A total of 615 trucks containing Stockpile B soil plus nine trucks containing other debris from the Site were shipped.

Briefly, the procedure for stockpiled soil shipment was as follows:

- All truckers and Site personnel were assembled for a briefing and safety meeting prior to starting any work on the Site.
- Calibrated radiological survey equipment was performance tested each day prior to use.
- An initial baseline survey for contamination was performed on the trucks and heavy equipment when they first arrived at the Site.
- Truckers were provided with a waste manifest, and if they were returning from a previous load, they submitted their weigh tickets.
- A plastic liner was placed and secured in each truck used to ship soil from Stockpile A.
- The trucks entered the Site, were staged adjacent to the stockpile, and were loaded with contaminated soil.
- The trucks exited the loadout area and were surveyed for contamination and dose rate. The readings were recorded on a survey form.
- The trucks were inspected for any loose spillage and the load covered prior to departure from the Site.
- Each outgoing shipment was recorded on a Truck Departure Record Form.
- After their final load, trucks returned to the Site to deliver their final weigh ticket and to obtain a final radiological survey for “free release.”

A photo log of the waste loadout and disposal is included as Appendix E.

Personnel records were maintained for all people on Site. Signature sheets for morning safety meetings, visitor sign-in logs, and worker sign-in logs are included in Appendix F. Sign-in logs were maintained to provide data to allow the calculation of exposure dose for each person involved in the project.

Each instrument was performance tested and source checked daily with respect to local background. Performance test record sheets are shown in Appendix G.

Appendix H, on CD, contains copies of the daily Truck Departure Record Forms, truck radiation survey form, weigh ticket, and non-hazardous waste manifest for each truck.

Appendix I contains final radiological release surveys for the trucks and heavy equipment.

Each day, the global positioning system (GPS) coordinates of the disposal location at the Allied Waste Foothills Landfill were recorded. All soil was deposited in the same area of the landfills; variation in the GPS readings is due to precision limitations in the GPS equipment. Allied Waste indicated the GPS elevation readings were incorrect based on a survey marker located adjacent to the soil disposal area. Although we are providing the GPS readings, the location and elevation of the soil was the responsibility of Allied Waste. Nonetheless the disposal locations were consistent with the risk assessment that was performed and the soils were placed at the required location within the landfill. Appendix J contains the GPS coordinates.

Two particulate air samplers were operational during soil stockpile load out activities as part of the monthly air monitoring of the CSMRI Site. The samplers were moved closer to the stockpiled soil while maintaining their relative location (i.e., upwind and downwind). The air sampler filters were replaced weekly during the soil load out activities and counted on Site for gross alpha and gross beta. The filters were also submitted to Paragon Analytics for radioisotopic activity counting. Isotopic parameters selected for analysis included gross alpha, gross beta, radium-226, thorium-228, thorium-230, uranium-234, uranium-235, uranium-238, and total uranium. These analytes are for the same analytes that have been monitored at the CSMRI Site since February 2005. The results of the weekly filter screening and off-site laboratory filter analyses indicate no exceedances above the Colorado air effluent Standards. Raw data and results are provided in Appendix K.

Routine dose rate surveys were conducted in the exclusion area near the exposed front of the stockpile at the time. The purpose of these surveys was to document that personnel dosimetry was not required for this job. Measured dose rates in the general work area near the soil ranged from 22 to 28 microrem per hour. Background readings ranged from 20 to 21 microrem per hour. Dose rate surveys are provided in Appendix L.

## **6. Final Inspection/Site Closure**

After all stockpiled soil and the stockpile liners were transported off site, surveys of the stockpile footprints were completed and samples taken. The results of final confirmatory samples are presented in Tables 6-1, 6-2, and 6-3, including summary statistics. Table 6-1 shows results for metals samples that were submitted to the analytical laboratory. Table 6-2 shows results for radionuclide samples (with the exception of Ra-226) that were submitted to the analytical laboratory. Table 6-3 shows Ra-226 results for samples that were analyzed by the shielded sodium iodide counting system used during the soil segregation work along with the samples that were submitted to the analytical laboratory for final confirmation.

**Table 6-1  
Metals Data Under Stockpile Area (mg/kg)**

Sample #	Arsenic	Lead	Mercury	Molybdenum	Vanadium
20070906-1290	13	110	0.41	3.9	30
20070906-1293	11	120	0.78	3.4	26
20070906-1302	9.7	53	0.52	1.8	26
20070906-1304	14	130	0.83	5.1	30
20070906-1311	12	55	0.4	2	20
20070906-1313	8.3	79	0.49	3.9	25
Mean	11	91	0.6	3.4	26
standard deviation	2.11	33.49	0.19	1.26	3.71
EPA 95% confidence limit*	1.74	27.55	0.15	1.03	3.05
mean + confidence limit	13.1	118.7	0.7	4.4	29.2
Site Action Level	39	400	23	390	550

\*Upper one-sided confidence limit, calculated from Equation 6.8, Computing the Upper One-sided Confidence Limit, From Chapter 6 of EPA's *Methods for Evaluating the Attainment of Clean up Standards, Volume 1: Soils and Solid Media* (EPA 1989).

**Table 6-2  
Radionuclide Data Under Stockpile Area (except Ra-226) (pCi/g)**

Sample #	Ra-228	Th-228	Th-230	Th-232	U-234	U-235	U-238
20070906-1290	1.45	1.56	3.13	1.35	2.18	0.065	2.36
20070906-1293	1.55	1.69	4.42	1.72	3.64	0.198	3.89
20070906-1302	1.14	1.79	1.69	1.7	1.1	0.074	1.17
20070906-1304	2.28	1.99	2.97	2.15	2.46	0.117	2.41
20070906-1311	1.8	2.06	1.3	2.1	1.18	0.062	1.17
20070906-1313	1.85	1.65	2.21	1.68	1.84	0.107	2.23
Mean	1.68	1.79	2.62	1.78	2.07	0.10	2.21
standard deviation	0.39	0.20	1.13	0.30	0.94	0.05	1.00
EPA 95% confidence limit*	0.32	0.16	0.93	0.25	0.77	0.04	0.83
mean + confidence limit	2.00	1.95	3.55	2.03	2.84	0.15	3.03
Site Action Level	4.6	6.47	11.53	3.88	254.9	4.97	21.8

\*Upper one-sided confidence limit, calculated from Equation 6.8, Computing the Upper One-sided Confidence Limit, From Chapter 6 of EPA's *Methods for Evaluating the Attainment of Clean up Standards, Volume 1: Soils and Solid Media* (EPA 1989).

**Table 6-3  
Ra-226 Data Under Stockpile Area (pCi/g)**

Sample #	Nal Ra-226 (pCi/g)	Field Nal reading (cpm)	Under Stockpile	Duplicate (not counted in stats)	Paragon Ra-226 (pCi/g)
20070906-1283	3.8	17,595	A		
20070907-1284	3.9	21,138	A		
20070906-1285	4.9	21,138	A	Duplicate	
20070906-1286	3.9	18,447	A		
20070906-1287	3.2	19,071	A		
20070906-1288	3.0	17,201	A		
20070906-1289	4.0	17,330	A		
20070906-1290	7.1	19,263	A		7.50
20070906-1291	2.8	16,177	A		

**Table 6-3  
Ra-226 Data Under Stockpile Area (pCi/g)**

Sample #	Nal Ra-226 (pCi/g)	Field Nal reading (cpm)	Under Stockpile	Duplicate (not counted in stats)	Paragon Ra-226 (pCi/g)
20070906-1292	4.4	16,764	A		
20070906-1293	6.1	23,197	A		9.10
20070906-1294	2.5	16,014	B		
20070906-1295	4.5	18,140	B		
20070906-1296	4.2	16,553	B		
20070906-1297	3.5	14,537	B		
20070906-1298	2.8	14,871	B		
20070906-1299	4.2	17,725	B		
20070906-1300	3.8	17,725	B	duplicate	
20070906-1301	3.0	15,952	B		
20070906-1302	3.3	16,952	B		2.15
20070906-1303	4.1	17,541	B		
20070906-1304	3.9	17,699	B		3.96
20070906-1305	3.8	15,524	B		
20070906-1306	4.6	15,852	B		
20070906-1307	3.6	17,463	B		
20070906-1308	3.9	17,384	B		
20070906-1309	3.9	15,402	B	duplicate	
20070906-1310	3.2	15,402	B		
20070906-1311	3.5	18,882	B		1.77
20070906-1312	3.5	18,607	B		
20070906-1313	3.8	17,830	B		3.07
20070906-1332	3.1	15,406	B		
20070906-1333	3.4	14,498	B		
<b>For all field data</b>			<b>For field plus lab data</b>		
mean	3.81		mean	3.81	
standard deviation	0.93		standard deviation	1.41	
EPA 95% confidence limit*	0.288		EPA 95% confidence limit*	0.438	
mean + confidence limit	4.1		mean + confidence limit	4.2	
For alpha = 0.10 EPA 90% confidence limit = 0.338 mean + confidence limit = 4.1 So the mean is less than the Action Level with 90% confidence					

\*Upper one-sided confidence limit, calculated from Equation 6.8, Computing the Upper One-sided Confidence Limit, From Chapter 6 of EPA's *Methods for Evaluating the Attainment of Clean up Standards, Volume 1: Soils and Solid Media* (EPA 1989).

Nal = Sodium Iodide Counting System

The Site was inspected by Edgar Ethington and Philip Stoffey from the CDPHE radiation unit on September 24, 2007. Mr. Stoffey surveyed the former locations of the soil stockpiles for elevated gamma readings while Mr. Ethington inspected the Flood Plain Area. Mr. Stoffey confirmed that stockpiled soil was completely taken off site and did not identify any elevated gamma readings.

Soil excavation in the Flood Plain Area had been halted due to the excavations reaching groundwater, the proximity of Clear Creek, and the presence of old-growth trees making it impracticable to continue. After discussions with Mr. Ethington, it was agreed between the School and the CDPHE radiation unit that soil above Action Levels in this area would be left in place provided an environmental covenant was placed with the necessary restrictions to prevent unacceptable doses.

## 7. Operations and Maintenance

Since no active systems were installed as part of the remedy, no operations and maintenance requirements are associated with remedy implementation.

## 8. Project Costs

Using the information gathered during the remedial investigation phase, possible remedial technologies were identified. After a screening process, five remedial alternatives (in addition to the no further action alternative) were identified as part of the feasibility study phase. The preferred alternative presented in the 2007 Revised RI/FS was the off-site disposal of the impacted material at two landfills, with ongoing groundwater monitoring and an environmental covenant, or Alternative 5B. After consideration of input and comments by reviewers of the 2007 Revised RI/FS, including CDPHE and the local community, Alternative 5B was chosen as the selected remedy in the Record of Decision. Tables 8-1 and 8-2 present an overview of cost information for each alternative analyzed in the RI/FS.

**Table 8-1**  
**Cost Information for Each Alternative**  
**including Stigma Value (in millions of dollars)**

Alternative	Description	Cost from Spreadsheet	Property Value Loss	Total Cost
1	No further action	\$ 4.07	\$ 0.46	\$ 4.53
4A	On-site solidification and cap Stockpile B, ship Stockpile A off site	\$ 5.18	\$ 0.46	\$ 5.64
4AA	Solidify both stockpiles and cap	\$ 5.13	\$ 0.46	\$ 5.59
4B	On-site engineered disposal cell for Stockpile B, ship Stockpile A off site	\$ 5.21	\$ 0.46	\$ 5.67
4BB	On-site engineered disposal cell for both stockpiles	\$ 5.15	\$ 0.46	\$ 5.61
5A	Off-site disposal at solid waste facility – all to Idaho	\$ 3.29	\$ 0	\$ 3.29
5B	Off-site disposal at two waste facilities – BFI and U.S. Ecology in Idaho	\$ 0.85	\$ 0	\$ 0.85

**Table 8-2**  
**Estimated Cost Information for Each Alternative**

Cost Breakout	Alternative Cost (in thousands of dollars)						
	1	4A	4AA	4B	4BB	5A	5B
Mobilization	\$ 0	\$ 58	\$ 58	\$ 65	\$ 65	\$ 28	\$ 28
Construct Site Facilities Costs	\$ 0	\$ 72	\$ 72	\$ 103	\$ 103	\$ 180	\$ 102
Soil Movement Costs	\$ 0	\$ 175	\$ 175	\$ 149	\$ 149	\$ 147	\$ 77

**Table 8-2**  
**Estimated Cost Information for Each Alternative**

Cost Breakout	Alternative Cost (in thousands of dollars)						
	1	4A	4AA	4B	4BB	5A	5B
Solidification Costs	\$ 0	\$ 321	\$ 324	\$ 0	\$ 0	\$ 0	\$ 0
Construct Cell Costs	\$	\$ 0	\$ 0	\$ 242	\$ 242	\$ 0	\$ 0
Disposal Costs	\$ 0	\$ 54	\$ 0	\$ 54	\$ 0	\$ 2870	\$ 580
Engineering Cap Costs	\$ 0	\$ 321	\$ 321	\$ 446	\$ 446	\$ 0	\$ 0
Stabilize Site and Monitoring Costs	\$ 4070	\$ 4,120	\$ 4,120	\$ 4,101	\$ 4,101	\$ 34	\$ 34
Demobilization	\$ 0	\$ 42	\$ 42	\$ 32	\$ 32	\$ 26	\$ 26
Total	\$ 4070	\$ 5184	\$ 5132	\$ 5206	\$ 5152	\$ 3285	\$ 847
Rank	3	6	4	7	5	2	1
Ratio to Least Expensive	4.8:1	6.1:1	6.1:1	6.1:1	6.1:1	3.8:1	1

The actual cost for the implementation of the selected alternative is presented in Table 8-3.

**Table 8-3**  
**Actual Cost for the Implementation of the Selected Remedy**

Cost Category	Organization	Organization	Total
Management Costs	Stoller = \$136,000	CSM = \$47,000	\$183,000
Disposal Costs	BFI = \$349,000	Clean Harbors = \$37,000	\$386,000
Earthwork and Trucking Costs	\$228,000		\$228,000
Total Costs			\$797,000

## 9. Covenants/Legacy Management

The Site is divided into three soil areas, plus groundwater each having differing closures, environmental covenants, and legacy management. The environmental covenants being placed on the Site are depicted on Figure 4, are described in the following sections, and copies of which are provided in Appendix M. The Clay Pits Area does not require an environmental covenant for CMSRI ores and sludges.

### 9.1 Main Site Soil Area

After excavation and movement of contaminated soil to the stockpiles, the Main Site soil area was divided into four survey units for final survey. All metals and radionuclides in soil were below the Action Levels with a 95 percent confidence level. At the completion of the stockpiled soil disposal, a final survey was conducted under the stockpile footprints, and as shown previously in Tables 6-1 and 6-2, the final confirmatory sample results for metals and radionuclides (except Ra-226) are below the Site Action Levels presented in the approved Site remediation work plan.

Table 6-3, shown previously, gives results for the Ra-226 samples and shows the mean plus confidence limit for all the field sodium iodide results meets the Site Action Level of 4.1 pCi/g. However, when the analytical laboratory data are used to replace the sodium iodide data, the mean plus confidence limit is 4.2 pCi/g, or one tenth of one pCi/g above the Action Level. These are results obtained when using alpha = 0.5, equivalent to the 95 percent confidence limit. By using alpha = .10, it can be seen that the mean plus confidence limit meets the Action Level with a 90 percent confidence limit.

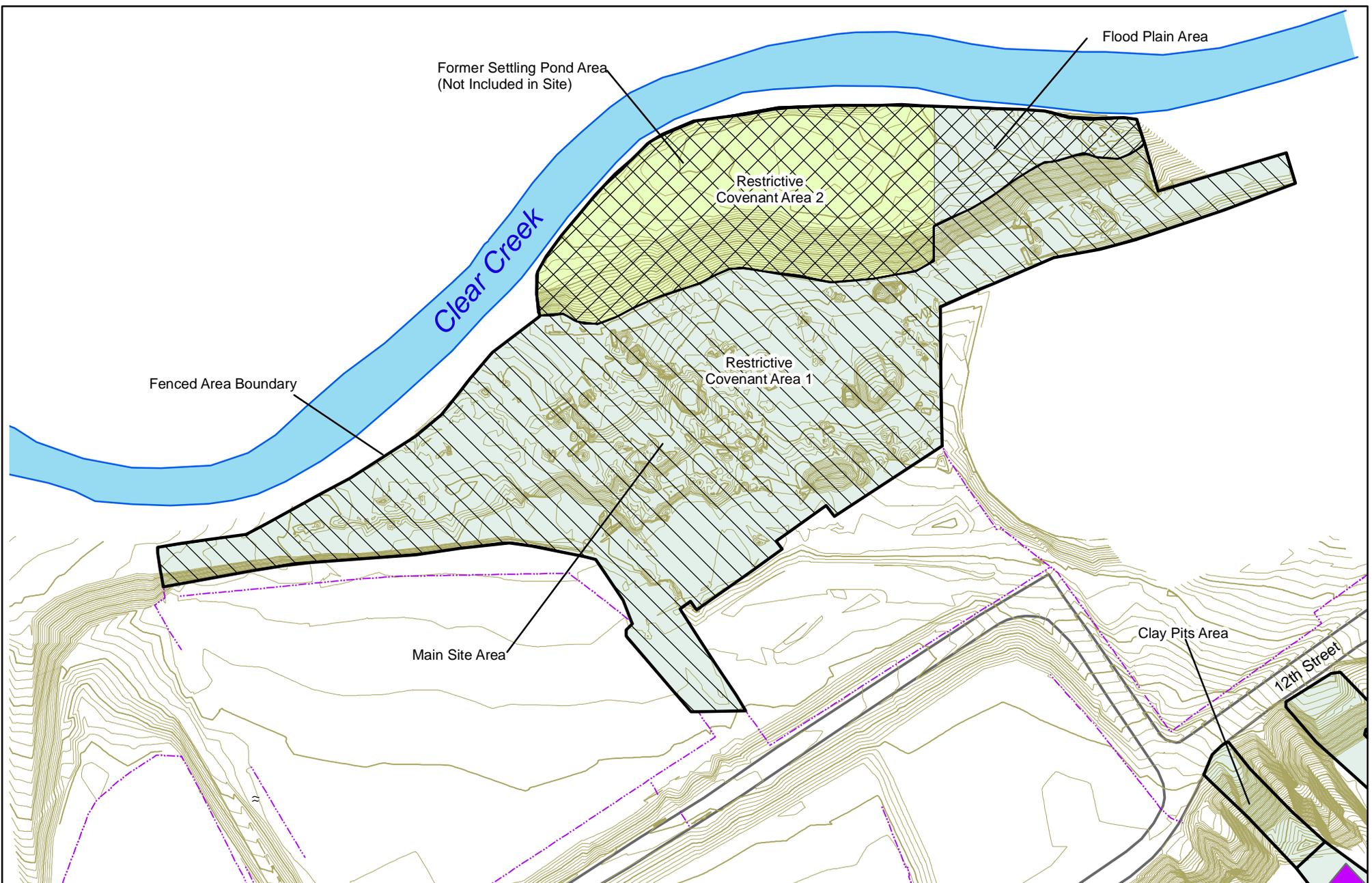


Figure 4  
 CSMRI Site Map  
 Showing Areas &  
 Covenants

CSMRI Creekside Site	Site Areas	Covenant Area 1
Fences		Covenant Area 2
Topography (5 ft Intervals)		
Topography (1 ft Intervals)		
Roads		

Explanation

Scale: 1" = 150'

0      75      150      300 Feet



CSMRI  
 July 2009  
 Remedial Implementation Report



Remediation of Site stockpiled soils was completed by the transportation from the Site of 11 truck loads of Stockpile A soil, 615 truck loads of Stockpile B soil, and nine truck loads of Site debris. Site soils now meet the Action Levels and qualify for restricted uses consistent with the environmental covenant for this portion of the Site. The air monitoring operations and associated reporting are being discontinued. The two air monitoring stations have been removed. The fence securing the Site has been removed. The soil in the upper terraced portion of the Site is available for all uses consistent with the environmental covenant.

The Main Site Area includes the upper terrace and has been remediated to the Site's Action Levels. One of the Site remedial action objectives, however, which is also part of the ARARs, is compliance with State, CERCLA/EPA, and NRC provisions to limit unacceptable radiation doses (TEDE to less than 25 mrem/yr and 15 mrem/yr, distinguishable from background; and less than 100 mrem/yr above background if institutional controls fail for on-site restricted use remedies) for the radionuclides found in the affected material (Stoller 2007b Section 7.1 and Table 8-1). The unexcavated soils above background but below Action Levels remaining in the upper terrace area would result in a dose of 42 mrem/yr to residents if radon mitigation systems were not in place and operational. Therefore, to comply with the remedial action objectives and ARARs, the School is placing an environmental covenant on this area requiring the use of radon mitigation in all residential structures built within the limits of this area of the Site. The radon mitigation systems will reduce doses to residents below 25 mrem/yr and 15 mrem/yr.

Additionally, the groundwater underneath the upper terrace soil is also being restricted with an environmental covenant as discussed in Section 9.4.

## **9.2 Clay Pits Soil Area**

The Clay Pits investigation was unable to identify impacts resulting from CSMRI operations; therefore, no further action is required in this area. An environmental covenant is not necessary for CSMRI materials. Appendix A contains a letter from the CDPHE radiation unit agreeing that this area does not require further action under this project.

## **9.3 Flood Plain Soil Area**

The excavation of soil from the Flood Plain Area east of the former pond was completed following guidelines established for the Main Site and presented in the work plan. Not all impacted soil above Action Levels, however, could be excavated from this area. During soil segregation activities, excavation of soil above Action Levels was limited by groundwater, surface water, and large old-growth trees. Additional soil excavation from this area was not practical. After discussions with the CDPHE radiation unit, it was agreed between the School and the CDPHE radiation unit that soil above Action Levels in this area would be left in place provided an environmental covenant was placed with the necessary restrictions to prevent unacceptable doses. The final condition of the Flood Plain Area, using laboratory data from all remaining non-excavated sample locations, indicates a mean Ra-226 concentration of 4.77 pCi/g, with a 95 percent upper confidence level of 5.5 pCi/g.

The soil remaining above Action Levels was left in place due to Site constraints and feasibility issues. Clean fill was placed into the excavated areas to re-establish drainage and prevent mosquito breeding sites. The fill soil was taken from uncontaminated piles located on the upper,

previously remediated terrace. This was to eliminate the safety concerns of leaving open shallow excavations filled with water and reduce the exposure potential of any recreational users. This portion of the Site will have a restrictive environmental covenant placed on it prohibiting residential structures. Residential structures with radon mitigation systems in this area could still result in doses greater than the remedial action objectives of 25 mrem/yr and 15 mrem/yr to residents, so no residential structures will be permitted in this area. Doses to industrial and commercial users without radon mitigation systems could still result in doses greater than the remedial action objectives of 25 mrem/yr and 15 mrem/yr. Radon mitigation systems, therefore, are necessary for commercial and industrial structures to be in compliance with the remedial action objectives for the Site.

The former pond area is included within the area covered by the environmental covenant placed on the Flood Plain Area. This is being done because the clean-up levels that were used by the EPA are greater than those used for the remainder of the Site. The following MicroShield modeling summary included the former pond area to determine appropriate restrictions on this area. This approach is protective of human health as demonstrated by modeling conducted using MicroShield as outlined below.

The dose to recreational users (bikers, walkers, sightseers) exposed to Ra-226 contamination at the lower terrace portion of the Site was evaluated using MicroShield 7.0 computer code (Grove Software, 2005). The lower terrace portion of the Site includes the Flood Plain Area and the former pond area.

The actual exposure potentials from this Site are below those calculated with MicroShield due to shielding from soil and vegetation as well as any improvements or covering on the path; distance from the contaminated points; and actual time spent in the area.

Construction workers building the path through the Flood Plain Area would also have the potential to be exposed to the residual activity in the soil. Using the same set of conservative assumptions each worker was evaluated as presented in Table 9-1.

**Table 9-1**  
**Doses to Construction Workers**

Scenario	Dose (mrem/yr)		
	Internal	External	Total
Cat Operator constructing bike path	0.0789	0.0275	0.0791
Bathroom construction			
- Concrete Worker	0.2490	0.0006	0.2500
- Carpenter	0.0684	0.0006	.06900
- Finisher (Siding and Roofing)	0.0342	0.0003	0.0345
- Plumber	0.5870	0.0000	0.5870

Recreational users of a foot path would receive a radiological dose of 0.0113 mrem/yr., which is below the remedial action objectives of 25 mrem/yr and 15 mrem/yr.

The doses to recreational users of the former pond area (Table 9-2) (using the same assumptions) are well below the regulatory limits as well.

**Table 9-2**  
**Doses to Recreational Users from Ra-226 Remaining in the Former Pond Area**

Soils Ra-226 Concentrations (pCi/g)	Soil Depth (inches)	Dose (mrem/yr)
5	6	0.00152
15	6-60	0.00785
	TOTAL	0.00937

The complete MicroShield evaluation is presented in Appendix N.

A materials management plan will be prepared for soil areas subject to an environmental covenant to cover contingencies that may arise during future soil-disturbing events (like construction), if any.

#### 9.4 Groundwater

The levels of uranium in groundwater, which have not attained the Colorado groundwater Standard for uranium for some of the monitoring wells on the Site, are expected to continue to drop resulting from the excavation and off-site disposal of source materials. However, it is anticipated that legacy management of groundwater, including monitoring of the elevated concentrations above the Colorado groundwater Standard for uranium will be required. The groundwater will have an environmental covenant placed on it that prohibits use of the water. The groundwater environmental covenant will be applied to groundwater within the fenced area of the Site.

A two-year monitoring period is currently being conducted to confirm the effectiveness of the Selected Remedy and to review the Legacy Management Plan. The current groundwater monitoring program consisting of quarterly sampling and analysis will be continued until such a time as levels drop to either below the Colorado groundwater Standard or demonstrate a trend sufficient to demonstrate success of the remedy at addressing the uranium contamination in the groundwater.

## 10. Certification

I certify that the actions described in this document and the data presented are to the best of my knowledge accurate and complete. Further I certify that the site currently exists in the state described and the selected remedial alternative has been implemented.

---

Stephen R. Brinkman, P.G.  
Stoller Project Manager

## 11. References

EPA 1989. Methods for Evaluating the Attainment of Cleanup Standards, Volume 1: Soils and Solid Media

EPA, 2002. U.S. Environmental Protection Agency, Guidance for Quality Assurance Project Plans.

EPA/630/R-03/003, [www.epa.gov/ncea/raf/cancer2003.htm](http://www.epa.gov/ncea/raf/cancer2003.htm), February.

Grove Software. 2005. Micro Shield 7.0 Dose Assessment Program. Grove Software, Inc., Lynchburg, Virginia.

Stoller 2006a. CSMRI Creekside Site Final Site Characterization Work Plan, dated May 12.

Stoller 2006b. Flood Plain Characterization Work Plan, prepared for Colorado School of Mines, Golden, Colorado. Prepared by S.M. Stoller Corporation, Broomfield, Colorado, November 21.

Stoller 2006c. Groundwater Monitoring Well Installation Work Plan CSMRI Site, prepared for Colorado School of Mines, Golden, Colorado. Prepared by S.M. Stoller Corporation, Broomfield, Colorado, December 6.

Stoller 2007a. Clay Pits Area Remedial Site Investigation Report, Colorado School of Mines Research Institute Site, Golden, CO. Prepared for Colorado School of Mines, Golden, CO. Prepared by The S.M. Stoller Corporation, Broomfield, April.

Stoller 2007b. Revised Remedial Investigation/Feasibility Study and Proposed Plan, Revision Date: May 2007, Original RI/FS Date: January 21, 2004, prepared for Colorado School of Mines, Golden, CO.

Stoller 2007c. Draft Implementation Report, Groundwater Monitoring Well Installation, Colorado School of Mines Research Institute, Golden, Colorado. Prepared for Colorado School of Mines, Golden, Colorado. Prepared by The S.M. Stoller Corporation, Broomfield, CO, June.

Stoller 2007d, Record of Decision, Colorado School of Mines Research Institute Site, Golden, CO, Revision Date: July 9, 2007, Original ROD Date: March 31, 2004, prepared by S.M. Stoller Corporation, Broomfield, Colorado.

Stoller 2007e. Colorado School of Mines Research Institute Stockpiled Soil Disposal Work Plan, prepared for Colorado School of Mines, Golden, Colorado, August 3.

## **Appendix A**

**Letter from CDPHE Releasing Site from Radioactive Materials License**

# STATE OF COLORADO

Bill Ritter, Jr., Governor  
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.  
Denver, Colorado 80246-1530  
Phone (303) 692-2000  
TDD Line (303) 691-7700  
Located in Glendale, Colorado

Laboratory Services Division  
8100 Lowry Blvd.  
Denver, Colorado 80230-6928  
(303) 692-3090

<http://www.cdph.state.co.us>



SEP 21 2007

Colorado Department  
of Public Health  
and Environment

SEP 14 2007

Linn D. Havelick, CIH  
Colorado School of Mines  
Environmental Health and Safety  
Golden, Colorado 80401-1887

RE: Clay Pits Area Remedial Site Investigation Report  
Colorado School of Mines Research Institute – Creekside Facility  
Radioactive Materials License Number 617-01

Dear Mr. Havelick:

A report entitled Clay Pits Area Remedial Site Investigation Report dated April 2007 (the Report) was received by the Colorado Department of Public Health and Environment (the Department) on July 28, 2007. The Report has been reviewed.

Based on the information presented it appears that you have characterized the Clay Pits disposal area as described in Colorado Radioactive Materials License No. 617-01. It does not appear that this area need be included in the current license. During the next License amendment, this area will be removed.

The characterization presented in the Report indicates that while a Radioactive Materials License may not be needed for this area, it is quite possible that any material dug up from the Clay Pits disposal area will qualify as Hazardous Waste and be subject to the restrictions and requirements of that designation.

If you have any technical questions or would like to set up a meeting, please call Edgar Ethington at (303) 692-3438, or me at (303) 692-3423.

Sincerely,

Steve Tarlton  
Radiation Management Unit Leader  
Compliance Program

CC Jerry Goad; AGO  
Steve Brinkman; S.M. Stoller Corporation

## **Appendix B**

### **Colorado School of Mines Research Institute Radioactive Materials License**

# STATE OF COLORADO

Bill Owens, Governor  
Dennis E. Ellis, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.  
Denver, Colorado 80246-1530  
Phone (303) 692-2000  
TDD Line (303) 691-7700  
Located in Glendale, Colorado

Laboratory Services Division  
8100 Lowry Blvd.  
Denver, Colorado 80230-6928  
(303) 692-3090

<http://www.cdphe.state.co.us>



DEC 19 2006

Colorado Department  
of Public Health  
and Environment

DEC 15 2006

Linn D. Havelick, CIH  
Colorado School of Mines  
Environmental Health and Safety  
Golden, Colorado 80401-1887

RE: Radioactive Materials License Number 617-01 Amendment Number 7

Dear Mr. Havelick:

Enclosed is a signed copy of Radioactive Materials License Number 617-01 Amendment Number 7. It is effective immediately upon receipt.

If you have any technical questions or would like to set up a meeting, please call Edgar Ethington at (303) 692-3438, or me at (303) 692-3423.

Sincerely,

Steve Tarlton  
Radiation Management Unit Leader  
Compliance Program

CC Jerry Goad; AGO  
Jefferson County Health Department

Enclosure (1)

**RADIOACTIVE MATERIALS LICENSE**

Pursuant to the *Colorado Radiation Control Act*, Title 25, Article 11, *Colorado Revised Statutes*, and the State of Colorado *Rules and Regulations Pertaining to Radiation Control*, Part 3, and in reliance on statements and representations heretofore made by the licensee designated below; a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive material(s) for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect of the Colorado Department of Public Health and Environment and to any conditions specified below.

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1. **Licensee:** Colorado School of Mines Research Institute
  2. **Address:** 1500 Illinois St., Golden, Colorado 80401-1887
  3. **License Number** Colo. 617-01, Amendment Number 07
  4. **Expiration date:** February 28, 2011
  5. **Reference Number:** **Fee Category:** 14.A
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6. **Authorized Radioactive Material and Uses:**
    - A. The licensee is authorized to possess, store, and transfer naturally occurring, source and byproduct radionuclides in soil, ore and process residues.
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**CONDITIONS**

7. Radioactive material shall be stored at and contiguous to West 12<sup>th</sup> Street, Golden, Colorado, including the clay pits (described as a parcel of land in former Block 20, Mineral Land Company's Addition to the City of Golden, Colorado, Jefferson County, more particularly described as beginning at the intersection of 12th and Maples Streets of said City of Golden, then S54°33'55"W along the centerline of said 12th Street 696.06 feet to a point, thence S44°29'54"E 233.47 feet to the true point of beginning, then N60°08'35"E 10.0 feet to a point, thence S29°51'25"E 73.65 feet to a point, thence S60°08'35"W 20.0 feet to a point, thence N29°51'25"W 73.65 feet to a point, thence N60°08'35"E 10.0 feet to the true point of beginning, containing 0.034 acres more or less), pending decommissioning and disposal activities approved by the Department:
8. The licensee shall comply with the provisions of the State of Colorado *Rules and Regulations Pertaining to Radiation Control*: Part 3, "Licensing of Radioactive Material"; Part 4, "Standards for Protection Against Radiation"; and Part 10, "Notices, Instructions and Reports to Workers; Inspections."

**RADIOACTIVE MATERIALS LICENSE**

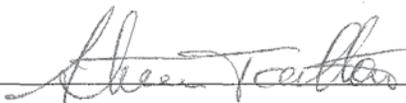
9. Radioactive material shall be stored under the supervision of Linn Havelick.
10. The designated Radiation Safety Officer is Linn Havelick.
11. Radioactive material authorized by License Condition 6 of this license shall be stored in a manner that will preclude use by unauthorized personnel.
12. The licensee shall provide the Department, on or before May 1, 2007, a complete and Department-approved site characterization report, a final decommissioning plan based on the site-characterization report, and a schedule of decommissioning implementation. The plan shall include all information required pursuant to RH 3.16.4.3.1 through 3.16.4.3.6 of the State of Colorado *Rules and Regulations Pertaining to Radiation Control*, and shall explicitly detail how remediation and decommissioning will be performed and monitored.
13. The licensee shall maintain a Department-approved financial assurance arrangement in accordance with RH 3.9.5 of the State of Colorado *Rules and Regulation Pertaining to Radiation Control*. An enforceable financial instrument must be provided by which CDPHE shall access Colorado School of Mines account number 53410-9014-3200 and/or other financial assets necessary to complete decommissioning. This financial instrument shall be submitted to the Department within sixty days of issuance of this license, and provide surety in an amount not less than \$2,780,000.00.
14. The licensee shall not transfer possession or control of materials or products containing radioactive material as a contaminant except:
  - A. By transfer to an specifically licensed recipient pursuant to the requirements of RH 3.22.2; or
  - B. By transfer to an authorized recipient as provided by specific condition of this license.
15. The State of Colorado *Rules and Regulations Pertaining to Radiation Control* shall govern unless the licensee's statements, representations, and procedures contained in the application and correspondence are more restrictive than the Regulations. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Item 6 of this license in accordance with the statements, representations, and procedures, as approved in writing by the Division, contained in the license application dated February 24, 2006.

**For The Colorado Department of Public Health and Environment**

Date: \_\_\_\_\_

12/15/06

By: \_\_\_\_\_



## **Appendix C**

### **Historical Groundwater Data**





**Table G-1  
Historical Summary of Radioisotopes in Groundwater (Stoller)**

Sample Station	Sample Date	Ra-226 (pCi/l)	Ra-228 (pCi/l)	Th-228 (pCi/l)	Th-230 (pCi/l)	Th-232 (pCi/l)	U-234 (pCi/l)	U-235 (pCi/l)	U-238 (pCi/l)	Total U (µg/l)
CSMRI-7B	2/27/07	NT	NT	NT	NT	NT	NT	NT	NT	NT
	6/26/07	0.65	0.22	0.036	0.054	0.027	NT	NT	NT	68
	9/10/07	NT	NT	NT	NT	NT	NT	NT	NT	NT
	11/26/07	NT	NT	NT	NT	NT	NT	NT	NT	NT
	2/26/08	NT	NT	NT	NT	NT	NT	NT	NT	NT
	4/15/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT
	9/24/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT
	12/3/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT
	3/16/09 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT
CSMRI-8	3/8/07	0.7	1.06	0.072	-0.031	0.016	NT	NT	NT	1,100
	6/27/07	0.8	0.4	0.039	0.046	0.008	NT	NT	NT	810
	9/10/07	1.31	0.9	0.031	0.05	0.009	NT	NT	NT	630
	11/27/07	1.27	1.2	-0.02	0.074	-0.003	NT	NT	NT	1,300
	2/27/08	1.19	1.38	0.089	0.1	0.043	NT	NT	NT	1,200
CSMRI-8	4/17/08	0.39	0.71	-0.015	-0.053	0.009	NT	NT	NT	770
	9/25/08	1.5	1.02	NT	NT	NT	NT	NT	NT	890
	12/5/08	1.55	1.44	NT	NT	NT	NT	NT	NT	1,900
	3/18/09	0.31	0.69	NT	NT	NT	NT	NT	NT	980
CSMRI-9	2/27/07	0.12	0.53	-0.017	0.04	0.027	NT	NT	NT	7.9
	6/26/07	0.22	0.37	0.018	0.004	-0.015	NT	NT	NT	32
	9/10/07	0.5	1.01	0.04	-0.043	0.012	NT	NT	NT	35
	11/26/07	0.25	0.27	0.023	0.003	0.003	NT	NT	NT	28
	2/27/08	0.11	0.24	0.047	0.037	0.041	NT	NT	NT	24
	4/15/08	0.27	0.65	-0.004	0.015	0.022	NT	NT	NT	22
	9/24/08	0.11	0.48	NT	NT	NT	NT	NT	NT	28
	12/5/08	0.13	0.65	NT	NT	NT	NT	NT	NT	26
	3/16/09	0.17	0.45	NT	NT	NT	NT	NT	NT	34
CSMRI-10	3/1/07	0.19	0.63	0.014	-0.004	0.018	NT	NT	NT	7.8
	6/26/07	0.26	0.43	-0.008	0.03	-0.005	NT	NT	NT	8.8
	9/10/07	-0.04	0.48	0.103	0.05	0.005	NT	NT	NT	9.9
	11/26/07	-0.05	0.57	0.068	0.141	0.031	NT	NT	NT	10
	2/26/08	0.12	0.44	0.094	0.011	0.019	NT	NT	NT	9.2
	4/15/08	0.03	0.56	-0.006	-0.05	0.005	NT	NT	NT	8.7
	9/24/08	0.21	0.48	NT	NT	NT	NT	NT	NT	11
	12/4/08	0.11	0.92	NT	NT	NT	NT	NT	NT	19
	3/16/09	0.15	1.01	NT	NT	NT	NT	NT	NT	16
CSMRI-11	3/1/07	0.16	0.46	0.051	0.085	0.007	NT	NT	NT	4.8
	6/26/07	0.37	0.43	0.084	0	0.008	NT	NT	NT	8.4
	9/10/07	-0.26	0.52	0.012	0.006	0.016	NT	NT	NT	10
	11/26/07	0.16	0.87	0.089	0.099	-0.012	NT	NT	NT	11
	2/26/08	0.28	-0.03	0.044	0.044	0.074	NT	NT	NT	8.7

**Table G-1  
Historical Summary of Radioisotopes in Groundwater (Stoller)**

Sample Station	Sample Date	Ra-226 (pCi/l)	Ra-228 (pCi/l)	Th-228 (pCi/l)	Th-230 (pCi/l)	Th-232 (pCi/l)	U-234 (pCi/l)	U-235 (pCi/l)	U-238 (pCi/l)	Total U (µg/l)
	4/15/08	0.35	0.75	-0.032	0.004	0.016	NT	NT	NT	7.6
CSMRI-11B	12/3/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT
	3/16/09 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT
MCL*		Total Ra = 5		NE	Th 230 + Th 232 = 60**		NE	NE	NE	30

\*Maximum Contaminant Level – National Primary Drinking Water Regulations

\*\*5 CCR 1002-41 Reg 41 – Colorado Groundwater Standards

pCi/l - picocuries per liter

NE – Not Established

NT – not tested

µg/l – micrograms per liter

**Table G-2**  
**Historical Summary of Metals in Groundwater (Stoller)**  
**(All results in milligrams per liter)**

Sample Station	Sample Date	Ag	As	Ba	Ca	Cd	Cr	Hg	K	Mg	Mo	Na	Pb	Se	V	Zn
CSMRI-1	2/25/05	ND	ND	ND	28	ND	ND	ND	2.8	9.4	ND	29	ND	ND	ND	0.032
	6/14/05	ND	ND	ND	17	ND	ND	ND	2.3	5.1	ND	16	ND	ND	ND	0.032
	9/7/05	ND	ND	0.055 (B)	21	ND	ND	ND	2.9	6.3	0.0021 (B)	25	ND	0.0041 (B)	ND	.034
	12/20/05	ND	ND	0.067 (B)	32	ND	ND	0.000034 (B)	2.9	10	ND	26	ND	ND	ND	0.052
	3/15/06	ND	ND	0.064 (B)	33	ND	ND	0.00002 (B)	2.6	10	0.0013 (B)	24	ND	ND	ND	0.049
	6/14/06	ND	ND	0.031 (B)	10	ND	ND	ND	1.9	3	0.0051 (B)	9.2	ND	0.0035 (B)	ND	0.015 (B)
	9/13/06	ND	ND	0.061 (B)	20	ND	0.041 (B)	ND	2.7	6	0.0038 (B)	14	ND	ND	ND	0.03
	3/1/07	ND	ND	0.081 (B)	39	0.00045 (B)	0.00063 (B)	0.000017 (B)	3	12	0.0059 (B)	26	ND	0.0066	ND	0.048
	6/27/07	ND	ND	0.063 (B)	23	ND	ND	0.0000073 (B)	2.4	9	ND	21	ND	ND	ND	0.017 (B)
	9/11/07	ND	ND	0.065 (B)	23	ND	0.00061 (B)	0.000011 (B)	2.5	7.2	0.002 (B)	14	ND	ND	ND	0.038
	11/27/07	ND	ND	0.075 (B)	31	ND	ND	0.000029 (B)	2.5	9.7	0.0014 (B)	18	ND	ND	ND	0.049
	2/27/08	ND	ND	0.08 (B)	36	ND	ND	ND	2.5	12	0.0013 (B)	22	ND	ND	ND	0.048
4/18/08	ND	ND	0.081 (B)	36	ND	ND	ND	2.7	11	0.0015 (B)	22	ND	ND	ND	0.057	
9/25/08	NT	NT	NT	30	NT	NT	NT	3	9	NT	18	NT	NT	NT	NT	
12/3/08	NT	NT	NT	39	NT	NT	NT	3.5	12	NT	25	NT	NT	NT	NT	
3/17/09	NT	NT	NT	46	NT	NT	NT	3	14	NT	27	NT	NT	NT	NT	
CSMRI-1B	3/1/07	ND	ND	0.098 (B)	130	ND	0.00014 (B)	0.000017 (B)	52	47	0.17	91	ND	0.0058	0.0009 (B)	ND
	6/26/07	ND	ND	0.071 (B)	83	ND	ND	0.0000072 (B)	10	38	0.029	35	ND	ND	ND	ND
	9/11/07	ND	ND	0.1	93	ND	ND	0.0000094 (B)	8.4	43	0.031	36	ND	ND	ND	0.0012 (B)
	11/27/07	ND	ND	0.11	100	ND	ND	0.000029 (B)	9.4	46	0.024	42	ND	ND	0.00073 (B)	0.0039 (B)
	2/28/08	ND	ND	0.11	97	ND	0.0015 (B)	ND	9.3	45	0.029	41	ND	0.0039 (B)	ND	0.0033 (B)
	4/18/08	ND	ND	0.11	93	ND	ND	ND	9.1	43	0.027	39	ND	ND	0.00065 (B)	ND
	9/24/08	NT	NT	NT	92	NT	NT	NT	7.3	39	NT	38	NT	NT	NT	NT
	12/5/08	NT	NT	NT	95	NT	NT	NT	7.6	39	NT	40	NT	NT	NT	NT
3/18/09	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
CSMRI-2	2/25/05	ND	ND	0.11	72	ND	ND	ND	7.1	32	ND	19	ND	ND	ND	0.02
	6/14/05	ND	ND	0.1	76	ND	ND	ND	6.3	32	ND	18	ND	ND	ND	ND
	9/7/05	ND	ND	0.11	81	ND	ND	ND	7.1	35	ND	19	ND	ND	ND	0.011 (B)
	12/20/05	ND	ND	0.098 (B)	76	ND	ND	0.000031 (B)	6.7	33	ND	18	ND	ND	ND	0.0043 (B)
	3/15/06	ND	ND	0.09 (B)	74	ND	ND	0.000023 (B)	6.1	31	ND	17	ND	ND	ND	0.0059 (B)
	6/14/06	ND	ND	0.093 (B)	70	ND	ND	ND	6.3	31	0.0048 (B)	17	ND	0.0031 (B)	ND	0.0092 (B)
	9/13/06	ND	ND	0.11	81	ND	ND	ND	6.7	35	0.0014 (B)	19	ND	ND	ND	0.0092 (B)
	3/8/07	ND	0.0058 (B)	0.12	88	ND	ND	ND	8.3	39	ND	21	ND	0.03	ND	0.0011 (B)
	6/28/07	ND	ND	0.11	97	ND	ND	0.0000056 (B)	7.9	49	ND	26	ND	ND	0.002 (B)	0.0041 (B)
	9/11/07	ND	ND	0.1	91	ND	ND	0.000016 (B)	7.2	43	ND	23	ND	ND	0.00086 (B)	0.0082 (B)
	11/27/07	ND	ND	0.093 (B)	83	ND	ND	0.000023 (B)	7	38	ND	22	ND	ND	0.001 (B)	0.0075 (B)
	2/28/08	ND	ND	0.094 (B)	81	ND	0.0018 (B)	ND	6.6	38	ND	21	ND	ND	0.0017 (B)	0.0073 (B)
	4/17/08	ND	ND	0.092 (B)	78	ND	ND	ND	6.6	36	ND	20	ND	ND	0.0014 (B)	0.0055 (B)
	9/24/08	NT	NT	NT	74	NT	NT	NT	6.4	34	NT	19	NT	NT	NT	NT
12/5/08	NT	NT	NT	75	NT	NT	NT	6.6	33	NT	20	NT	NT	NT	NT	
3/18/09	NT	NT	NT	76	NT	NT	NT	6.4	34	NT	19	NT	NT	NT	NT	



**Table G-2**  
**Historical Summary of Metals in Groundwater (Stoller)**  
**(All results in milligrams per liter)**

Sample Station	Sample Date	Ag	As	Ba	Ca	Cd	Cr	Hg	K	Mg	Mo	Na	Pb	Se	V	Zn
	6/26/07	ND	ND	0.056 (B)	70	ND	ND	0.000006 (B)	5.5	37	0.024	53	ND	ND	0.00061 (B)	0.0041 (B)
	9/10/07	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	11/26/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	2/27/08	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	4/15/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	9/24/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	12/3/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	3/16/09 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CSMRI-8	3/8/07	ND	0.0053 (B)	0.068 (B)	230	ND	ND	ND	23	72	0.094	74	ND	0.034	ND	0.0024 (B)
	6/27/07	ND	ND	0.053 (B)	190	ND	ND	0.0000099 (B)	19	55	0.043	52	ND	ND	ND	0.069
	9/10/07	ND	0.0069 (B)	0.076 (B)	160	ND	0.00074 (B)	0.000027 (B)	15	49	0.034	54	0.0018 (B)	ND	ND	0.025
	11/27/07	ND	ND	0.091 (B)	230	ND	ND	0.000024 (B)	15	67	0.026	70	ND	0.0046 (B)	0.001 (B)	0.011 (B)
	2/27/08	ND	0.036 (B)	0.07 (B)	270	ND	ND	ND	15	82	0.019	100	ND	ND	ND	0.038
	4/17/08	ND	ND	0.046 (B)	210	ND	0.0011 (B)	ND	13	63	0.016	73	ND	ND	ND	0.032
	9/25/08	NT	NT	NT	230	NT	NT	NT	17	68	NT	70	NT	NT	NT	NT
	12/5/08	NT	NT	NT	400	NT	NT	NT	18	95	NT	84	NT	NT	NT	NT
	3/18/09	NT	NT	NT	250	NT	NT	NT	13	74	NT	97	NT	NT	NT	NT
CSMRI-9	2/27/07	ND	ND	0.08 (B)	69	ND	0.0011 (B)	0.000024 (B)	12	31	0.045	33	ND	0.011	0.001 (B)	ND
	6/26/07	ND	ND	0.049 (B)	160	ND	ND	0.000002 (B)	8.5	77	0.0028	150	ND	0.0049 (B)	0.00096 (B)	0.0096 (B)
	9/10/07	ND	0.004 (B)	0.059 (B)	100	ND	0.0009 (B)	0.000016 (B)	6	51	0.0037 (B)	49	ND	ND	0.00071 (B)	0.0097 (B)
	11/26/07	ND	ND	0.078 (B)	110	0.00051 (B)	0.0011 (B)	0.000031 (B)	5.9	56	0.0023 (B)	52	ND	0.0054	0.0012 (B)	0.015 (B)
	2/27/08	ND	ND	0.079 (B)	110	ND	ND	ND	5.4	56	ND	49	ND	0.0033 (B)	ND	0.011
	4/15/08	ND	ND	0.077 (B)	100	ND	ND	0.000013 (B)	5	52	0.0017 (B)	46	ND	ND	0.00077 (B)	0.0079 (B)
	9/24/08	NT	NT	NT	110	NT	NT	NT	5.8	54	NT	50	NT	NT	NT	NT
	12/5/08	NT	NT	NT	100	NT	NT	NT	5.3	48	NT	46	NT	NT	NT	NT
3/16/09	NT	NT	NT	100	NT	NT	NT	4.7	49	NT	45	NT	NT	NT	NT	
CSMRI-10	3/1/07	0.00051 (B)	ND	0.064 (B)	79	ND	0.0013 (B)	0.000024 (B)	7.3	33	0.01	36	ND	0.01	0.0011 (B)	ND
	6/26/07	ND	ND	0.079 (B)	100	ND	ND	0.0000063 (B)	4.7	44	ND	37	ND	0.0044 (B)	0.00055 (B)	ND
	9/10/07	ND	0.0039 (B)	0.071 (B)	89	ND	0.0012 (B)	0.00002 (B)	4.2	38	0.0014 (B)	36	ND	ND	0.00099 (B)	0.0042 (B)
	11/26/07	ND	ND	0.085 (B)	110	ND	ND	0.000026 (B)	4.7	43	ND	41	ND	ND	ND	ND
	2/26/08	ND	ND	0.09 (B)	110	ND	ND	ND	4.6	46	ND	41	ND	ND	ND	0.0052
	4/15/08	ND	ND	0.088 (B)	100	ND	0.0044 (B)	ND	4.5	44	ND	40	ND	ND	0.00059 (B)	0.0018 (B)
	9/24/08	NT	NT	NT	100	NT	NT	NT	4.6	42	NT	41	NT	NT	NT	NT
	12/4/08	NT	NT	NT	100	NT	NT	NT	4.8	41	NT	43	NT	NT	NT	NT
3/16/09	NT	NT	NT	110	NT	NT	NT	4.5	43	NT	43	NT	NT	NT	NT	
CSMRI-11	2/27/07	ND	ND	0.073 (B)	75	ND	0.00013 (B)	0.000023 (B)	9.7	29	0.033	33	ND	0.013	0.00073 (B)	0.0023 (B)
	6/26/07	ND	ND	0.096 (B)	110	ND	0.0012 (B)	0.0000071 (B)	5.4	44	0.0014 (B)	39	ND	0.0064	0.00059 (B)	ND
	9/10/07	ND	0.004 (B)	0.071 (B)	96	ND	0.00083 (B)	0.000016 (B)	4.5	39	0.0016 (B)	44	ND	ND	0.00078 (B)	0.0033 (B)
	11/26/07	ND	ND	0.11	110	ND	ND	0.000028 (B)	4.9	44	0.0012 (B)	40	ND	ND	0.0013 (B)	ND
	2/26/08	ND	ND	0.11	110	ND	ND	ND	4.6	42	ND	44	ND	ND	ND	0.0048

**Table G-2**  
**Historical Summary of Metals in Groundwater (Stoller)**  
**(All results in milligrams per liter)**

Sample Station	Sample Date	Ag	As	Ba	Ca	Cd	Cr	Hg	K	Mg	Mo	Na	Pb	Se	V	Zn
	4/15/08	ND	ND	0.12	100	ND	ND	ND	4.7	41	ND	44	ND	ND	ND	ND
CSMRI-11B	12/3/08 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
	3/16/09 (DRY)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Detection Limits		0.01	0.01	0.1	1	0.005	0.01	0.0002	1	1	0.01	1	0.003	0.005	0.01	0.02
MCL*		NE	0.01	2	NE	0.005	0.1	0.002	NE	NE	NE	NE	0.015	0.05	NE	NE

\*Maximum Contaminant Level – National Primary Drinking Water Regulations  
 ND – non detect  
 NE – not established  
 NT – not tested  
 (B) – Detected above Instrument Detection Level but below Reported Detection Level

**Table G-3  
Historical Summary of Radioisotopes in Surface Water (Stoller)**

Sample Station	Sample Date	Ra-226 (pCi/l)	Ra-228 (pCi/l)	Th-228 (pCi/l)	Th-230 (pCi/l)	Th-232 (pCi/l)	U-234 (pCi/l)	U-235 (pCi/l)	U-238 (pCi/l)	Total U (µg/l)
SW-1	2/25/05	0	0.58	0.018	-0.026	-0.001	0.89	0.083	0.65	1.97
	6/14/05	0.14	0.05	0.05	-0.025	0.016	0.246	0.021	0.251	0.75
	9/7/05	0.18	0.42	0.041	0.25	0.102	0.35	0.031	0.35	1.04
	12/20/05	-0.31	0.47	0.028	0.197	-0.005	0.64	0.041	0.7	2.11
	3/15/06	-0.16	0.35	0.059	0.125	0.005	0.6	0.029	0.53	1.59
	6/14/06	0.13	0.45	0.16	0.53	0.062	0.11	0.08	0.19	0.61
	9/13/06	-0.03	0.25	-0.019	-0.035	0.01	0.37	-0.005	0.34	1
	3/1/07	-0.1	0.25	-0.038	0.15	0.026	NT	NT	NT	1.7
	6/27/07	0.13	0.77	0.006	0.016	0.014	NT	NT	NT	0.6
	9/11/07	0.15	0.74	0.063	0.088	0.012	NT	NT	NT	0.94
	11/27/07	0.2	0.24	0.026	0.049	0.025	NT	NT	NT	1.8
	2/27/08	0.1	0.48	0.014	0.002	0.024	NT	NT	NT	2
	4/18/08	0.06	-0.07	-0.023	-0.026	0.012	NT	NT	NT	1.9
	9/25/08	0.18	-0.01	NT	NT	NT	NT	NT	NT	1.1
	12/3/08	-0.06	0.34	NT	NT	NT	NT	NT	NT	1.6
3/16/09	0.14	0.73	NT	NT	NT	NT	NT	NT	1.9	
SW-2	2/25/05	0.45	0.06	0.011	-0.016	0.033	0.8	0.066	0.42	1.29
	6/14/05	0.04	0.29	0.071	-0.028	0.007	0.259	0.032	0.23	0.69
	9/7/05	-0.08	0.24	-0.013	0.107	0.051	0.54	0.014	0.54	1.62
	12/20/05	0.09	0.07	-0.003	0.126	0	0.71	0.067	0.49	1.5
	3/15/06	-0.04	-0.15	0.009	0.184	0.01	0.79	0.004	0.51	1.52
	6/14/06	0.03	0.04	0.172	0.24	0.1	0.39	0	0.48	1.44
	9/13/06	0.11	0.35	0.009	-0.03	0.01	0.43	-0.006	0.3	0.89
	3/8/07	0.12	0.73	0.047	-0.055	0	NT	NT	NT	1.7
	6/28/07	0.02	0.78	0.028	0.014	0	NT	NT	NT	0.57
	9/11/07	0.1	0.27	0.066	0.068	0.002	NT	NT	NT	0.97
	11/26/07	0.11	0.36	0.007	0	0.012	NT	NT	NT	1.7
	2/26/08	0.1	0	-0.01	0.113	0.011	NT	NT	NT	2
	4/18/08	0.13	0.58	0.015	0.24	0.024	NT	NT	NT	1.8
	9/24/08	-0.16	-0.02	NT	NT	NT	NT	NT	NT	0.99
	12/3/08	0.1	0.46	NT	NT	NT	NT	NT	NT	1.5
3/16/09	0.2	0.29	NT	NT	NT	NT	NT	NT	1.9	
MCL*		Total Ra = 5		NE	Th 230 + Th 232 = 60**		NE	NE	NE	30

\*Maximum Contaminant Level – National Primary Drinking Water Regulations

\*\*5 CCR 1002-31 Reg 31 – Colorado Surface Water Standards

pCi/l - picoCuries per liter

µg/l -- micrograms per liter

**Table G-4**  
**Historical Summary of Metals in Surface Water (Stoller)**  
**(All results in milligrams per liter)**

Sample Station	Sample Date	Ag	As	Ba	Ca	Cd	Cr	Hg	K	Mg	Mo	Na	Pb	Se	V	Zn
SW-1	2/25/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	6/14/05	ND	ND	ND	11	ND	ND	ND	1.1	2.8	ND	5.2	ND	ND	ND	0.2
	9/7/05	ND	0.0037 (B)	0.029 (B)	20	ND	ND	ND	2.2	4.4	0.0044 (B)	8.5	ND	0.0045 (B)	ND	0.09
	12/20/05	ND	ND	0.042 (B)	35	0.00057 (B)	ND	0.000034 (B)	3.7	7.6	0.004 (B)	19	ND	ND	ND	0.063
	3/15/06	ND	ND	0.04 (B)	37	0.00084 (B)	0.00047 (B)	0.000024 (B)	3.7	8.5	0.0048 (B)	23	ND	ND	ND	0.22
	6/14/06	0.0012 (B)	0.0032 (B)	0.011 (B)	8.2	ND	ND	ND	1	1.9	0.0042 (B)	3.1	ND	ND	0.00067 (B)	0.19
	9/13/06	ND	ND	0.03 (B)	21	ND	ND	ND	2.1	4.4	0.0049 (B)	8.6	ND	ND	ND	0.029
	3/1/07	ND	ND	0.049 (B)	44	0.0011 (B)	0.00092 (B)	0.000023 (B)	4.3	11	0.0046 (B)	26	ND	ND	ND	0.053
	6/27/07	ND	ND	0.018 (B)	10	ND	ND	0.0000068 (B)	0.93 (B)	2.5	0.0017 (B)	3.2	ND	ND	ND	0.22
	9/11/07	ND	ND	0.032 (B)	21	ND	ND	0.000019	1.7	5	0.0029 (B)	7.4	ND	ND	ND	0.067
	11/27/07	ND	ND	0.042 (B)	33	0.00076 (B)	ND	0.00027 (B)	2.8	8.2	0.0032 (B)	15	ND	ND	ND	0.078
	2/27/08	ND	ND	0.042 (B)	36	ND	ND	ND	3.3	9.6	0.0022 (B)	19	ND	ND	ND	0.18
	4/18/08	ND	ND	0.044 (B)	35	0.00044 (B)	ND	ND	3.4	9	0.0034 (B)	23	ND	ND	ND	0.15
	9/25/08	NT	NT	NT	23	NT	NT	NT	1.9	5.1	NT	9	NT	NT	NT	0.13
12/3/08	NT	NT	NT	32	NT	NT	NT	3	7.1	NT	15	NT	NT	NT	NT	
3/16/09	NT	NT	NT	35	NT	NT	NT	3.1	8.9	NT	17	NT	NT	NT	NT	
SW-2	2/25/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17
	6/14/05	ND	ND	ND	11	ND	ND	ND	1.1	2.8	ND	4.8	ND	ND	ND	0.085
	9/7/05	ND	ND	0.028 (B)	20	ND	ND	ND	2.1	4.4	0.0037 (B)	8.7	ND	0.0037 (B)	ND	0.051
	12/20/05	ND	ND	0.042 (B)	35	0.00043 (B)	ND	0.000034 (B)	3.8	8	0.0038 (B)	19	ND	ND	ND	0.21
	3/15/06	ND	ND	0.042 (B)	39	0.00053 (B)	0.00055 (B)	0.000022 (B)	3.8	8.9	0.0046 (B)	25	ND	ND	0.00053 (B)	0.2
	6/14/06	ND	0.0022 (B)	0.011 (B)	8.4	ND	ND	ND	1	1.9	0.0045 (B)	3	ND	ND	ND	0.031
	9/13/06	ND	ND	0.03 (B)	21	ND	ND	ND	2.1	4.4	0.0048 (B)	8.5	ND	ND	ND	0.04
	3/8/07	ND	0.0053 (B)	0.049 (B)	39	0.00064 (B)	ND	ND	4.2	9.8	0.0014 (B)	22	ND	ND	ND	0.17
	6/28/07	ND	ND	0.019 (B)	10	ND	ND	0.0000056 (B)	0.93 (B)	2.6	ND	3.3	ND	ND	ND	0.075
	9/11/07	ND	ND	0.033 (B)	21	ND	ND	0.00001	1.7	5.1	0.0035 (B)	7.5	ND	ND	ND	0.084
	11/26/07	ND	ND	0.044 (B)	35	0.0005 (B)	ND	0.00027 (B)	2.9	8.6	0.0027 (B)	15	ND	ND	ND	0.19
	2/26/08	ND	ND	0.051	35	0.0005 (B)	ND	ND	3.1	9.2	0.0023 (B)	21	ND	ND	ND	0.15
	4/18/08	ND	ND	0.045 (B)	35	0.0005 (B)	ND	ND	3.4	9.1	0.0031 (B)	23	ND	ND	ND	0.14
	9/24/08	NT	NT	NT	23	NT	NT	NT	1.9	5.1	NT	9	NT	NT	NT	NT
12/3/08	NT	NT	NT	31	NT	NT	NT	3	7.5	NT	15	NT	NT	NT	NT	
3/16/09	NT	NT	NT	37	NT	NT	NT	3.5	9.7	NT	19	NT	NT	NT	NT	
Detection Limits		0.01	0.01	0.1	1	0.005	0.01	0.0002	1	1	0.01	1	0.003	0.005	0.01	0.02
MCL*		0.01	0.01	2	NE	0.005	0.1	0.002	NE	NE	NE	NE	0.015	0.05	NE	NE

\*Maximum Contaminant Level – National Primary Drinking Water Regulations

ND – Non Detect

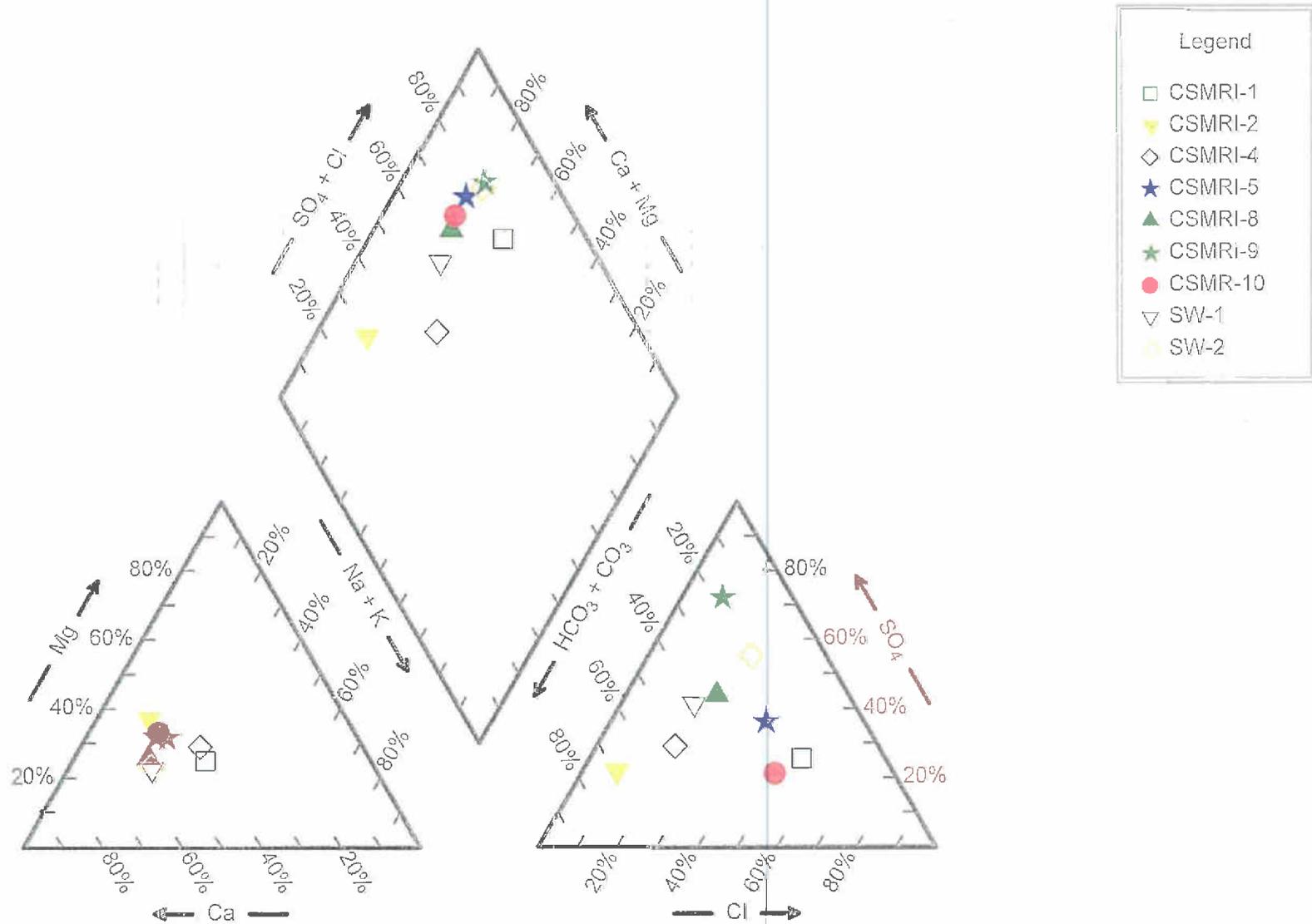
NE – Not Established

(B) – Detected above Instrument Detection Level but below Reported Detection Level

## **Appendix D**

### **Piper Stiff Diagram and Anion/Cation Analyses**

Piper Diagram CSMRI 2009 Quarter 2



# CSMRI-1

<b>Water Type</b>	Ca-Cl		
<b>Dissolved Solids</b>	283.47 mg/kg	282.69 mg/L	Calculated
<b>Density</b>	0.99724 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	562 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	143.82 mg/kg	143.43 mg/L	Calculated
Carbonate	125.15	124.8	
Non-Carbonate	18.673	18.622	

# CSMRI-1

## Primary Tests

### Anion-Cation Balance

Anions	3.9	
Cations	4.34	
% Difference	5.407	Not within $\pm 2\%$

### Measured TDS = Calculated TDS

Measured	N/A	
Calculated	283.471	
Ratio	N/A	

### Measured EC = Calculated EC

Measured	562.000	
Calculated	436.110	
Ratio	1.289	Not within range 0.9 to 1.1

## Secondary Tests

### Measured EC and Ion Sums:

Anions	0.693460	Not within preferred range (0.9-1.1)
Cations	0.772744	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.504	Not within preferred range (0.55-0.7)

### Measured TDS to EC ratio

Measured TDS unavailable

## Organic Mass Balance

### DOC $\geq$ Sum of Organics

Dissolved Organic Carbon	1.000 mg/L	
Sum of Organics	0.000 mg/L	OK

# CSMRI-1B

Water Type	Ca-SO <sub>4</sub>		
Dissolved Solids	969.37 mg/kg	967.2 mg/L	Calculated
Density	0.99776 g/cm <sup>3</sup>		Calculated
Conductivity	2120 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	602.13 mg/kg	600.78 mg/L	Calculated
Carbonate	493.76	492.65	
Non-Carbonate	108.37	108.12	

## CSMRI-1B

### Primary Tests

#### **Anion-Cation Balance**

Anions	13.4	
Cations	14.8	
% Difference	4.724	OK

#### **Measured TDS = Calculated TDS**

Measured	N/A	
Calculated	969.369	
Ratio	N/A	

#### **Measured EC = Calculated EC**

Measured	2120.000	
Calculated	1291.796	
Ratio	1.641	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	0.633261	Not within preferred range (0.9-1.1)
Cations	0.696062	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.457	Not within preferred range (0.55-0.7)

#### **Measured TDS to EC ratio**

Measured TDS unavailable

### Organic Mass Balance

#### **DOC ≥ Sum of Organics**

Dissolved Organic Carbon	2.600 mg/L	
Sum of Organics	0.000 mg/L	OK

## CSMRI-2

<b>Water Type</b>	Ca-HCO <sub>3</sub>		
<b>Dissolved Solids</b>	563.03 mg/kg	561.6 mg/L	Calculated
<b>Density</b>	0.99746 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	1280 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	337.26 mg/kg	336.4 mg/L	Calculated
Carbonate	337.26	336.4	
Non-Carbonate	0.0	0.0	

## CSMRI-2

### Primary Tests

#### Anion-Cation Balance

Anions	6.76	
Cations	7.76	
% Difference	6.918	Not within ± 2%

#### Measured TDS = Calculated TDS

Measured	N/A	
Calculated	563.032	
Ratio	N/A	

#### Measured EC = Calculated EC

Measured	1280.000	
Calculated	650.458	
Ratio	1.968	Not within range 0.9 to 1.1

### Secondary Tests

#### Measured EC and Ion Sums:

Anions	0.527895	Not within preferred range (0.9-1.1)
Cations	0.606360	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.440	Not within preferred range (0.55-0.7)

#### Measured TDS to EC ratio

Measured TDS unavailable

### Organic Mass Balance

#### DOC ≥ Sum of Organics

Dissolved Organic Carbon	1.000 mg/L	
Sum of Organics	0.000 mg/L	OK

## CSMRI-4

<b>Water Type</b>	Ca-HCO <sub>3</sub>		
<b>Dissolved Solids</b>	804.9 mg/kg	803 mg/L	Calculated
<b>Density</b>	0.99764 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	1190 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	379.61 mg/kg	378.72 mg/L	Calculated
Carbonate	379.61	378.72	
Non-Carbonate	0.0	0.0	

## CSMRI-4

### Primary Tests

#### **Anion-Cation Balance**

Anions	10.2	
Cations	10.9	
% Difference	3.639	OK

#### **Measured TDS = Calculated TDS**

Measured	N/A	
Calculated	804.901	
Ratio	N/A	

#### **Measured EC = Calculated EC**

Measured	1190.000	
Calculated	952.797	
Ratio	1.249	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	0.853222	Not within preferred range (0.9-1.1)
Cations	0.917657	Within preferred range (0.9-1.1)

#### **Calculated TDS to EC ratio**

0.676	OK
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#### **Measured TDS to EC ratio**

Measured TDS unavailable

### Organic Mass Balance

#### **DOC ≥ Sum of Organics**

Dissolved Organic Carbon	9.000 mg/L	
Sum of Organics	0.000 mg/L	OK

## CSMRI-5

<b>Water Type</b>	Ca-Cl		
<b>Dissolved Solids</b>	861.5 mg/kg	859.5 mg/L	Calculated
<b>Density</b>	0.99768 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	1500 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	531.74 mg/kg	530.51 mg/L	Calculated
Carbonate	395.15	394.23	
Non-Carbonate	136.59	136.28	

## CSMRI-5

### Primary Tests

#### **Anion-Cation Balance**

Anions	12.1	
Cations	13	
% Difference	3.330	OK

#### **Measured TDS = Calculated TDS**

Measured	N/A	
Calculated	861.498	
Ratio	N/A	

#### **Measured EC = Calculated EC**

Measured	1500.000	
Calculated	1191.236	
Ratio	1.259	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	0.808847	Not within preferred range (0.9-1.1)
Cations	0.864576	Not within preferred range (0.9-1.1)

Calculated TDS to EC ratio 0.574 OK

#### **Measured TDS to EC ratio**

Measured TDS unavailable

### Organic Mass Balance

#### **DOC ≥ Sum of Organics**

Dissolved Organic Carbon	2.600 mg/L	
Sum of Organics	0.000 mg/L	OK

## CSMRI-8

Water Type	Ca-SO <sub>4</sub>		
Dissolved Solids	1055.3 mg/kg	1053 mg/L	Calculated
Density	0.99783 g/cm <sup>3</sup>		Calculated
Conductivity	7520 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	623.51 mg/kg	622.15 mg/L	Calculated
Carbonate	608.8	607.48	
Non-Carbonate	14.707	14.675	

## CSMRI-8

### Primary Tests

#### **Anion-Cation Balance**

Anions	13.3	
Cations	15.4	
% Difference	7.344	Not within $\pm 5\%$

#### **Measured TDS = Calculated TDS**

Measured	N/A	
Calculated	1055.293	
Ratio	N/A	

#### **Measured EC = Calculated EC**

Measured	7520.000	
Calculated	1312.358	
Ratio	5.730	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	0.176783	Not within preferred range (0.9-1.1)
Cations	0.204806	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.140	Not within preferred range (0.55-0.7)

#### **Measured TDS to EC ratio**

Measured TDS unavailable

### Organic Mass Balance

#### **DOC $\geq$ Sum of Organics**

Dissolved Organic Carbon	4.500 mg/L	
Sum of Organics	0.000 mg/L	OK

# CSMRI-9

<b>Water Type</b>	Ca-SO <sub>4</sub>		
<b>Dissolved Solids</b>	1740.4 mg/kg	1737.5 mg/L	Calculated
<b>Density</b>	0.99834 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	2300 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	1037.8 mg/kg	1036.1 mg/L	Calculated
Carbonate	526.33	525.46	
Non-Carbonate	511.44	510.59	

## CSMRI-9

### Primary Tests

#### **Anion-Cation Balance**

Anions	24.2	
Cations	26.2	
% Difference	4.128	OK

#### **Measured TDS = Calculated TDS**

Measured	N/A	
Calculated	1740.384	
Ratio	N/A	

#### **Measured EC = Calculated EC**

Measured	2300.000	
Calculated	2201.533	
Ratio	1.045	OK

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	1.050061	Within preferred range (0.9-1.1)
Cations	1.140488	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.757	Not within preferred range (0.55-0.7)

#### **Measured TDS to EC ratio**

Measured TDS unavailable

### Organic Mass Balance

#### **DOC ≥ Sum of Organics**

Dissolved Organic Carbon	4.800 mg/L	
Sum of Organics	0.000 mg/L	OK

**CSMR-10**

<b>Water Type</b>	Ca-Cl		
<b>Dissolved Solids</b>	652.22 mg/kg	650.6 mg/L	Calculated
<b>Density</b>	0.99752 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	1150 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	419.58 mg/kg	418.54 mg/L	Calculated
Carbonate	337.24	336.41	
Non-Carbonate	82.333	82.129	

## CSMR-10

### Primary Tests

#### Anion-Cation Balance

Anions	9.31		
Cations	10.2		
% Difference	4.673		Not within $\pm 2\%$

#### Measured TDS = Calculated TDS

Measured	N/A		
Calculated	652.215		
Ratio	N/A		

#### Measured EC = Calculated EC

Measured	1150.000		
Calculated	938.996		
Ratio	1.225		Not within range 0.9 to 1.1

### Secondary Tests

#### Measured EC and Ion Sums:

Anions	0.809281		Not within preferred range (0.9-1.1)
Cations	0.888624		Not within preferred range (0.9-1.1)

#### Calculated TDS to EC ratio

	0.567		OK
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#### Measured TDS to EC ratio

Measured TDS unavailable

### Organic Mass Balance

#### DOC $\geq$ Sum of Organics

Dissolved Organic Carbon	1.300 mg/L		
Sum of Organics	0.000 mg/L		OK

SW-1

Water Type	Ca-SO <sub>4</sub>		
Dissolved Solids	58.291 mg/kg	58.12 mg/L	Calculated
Density	0.99707 g/cm <sup>3</sup>		Calculated
Conductivity	79 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	30.461 mg/kg	30.372 mg/L	Calculated
Carbonate	30.461	30.372	
Non-Carbonate	0.0	0.0	

**SW-1**

**Primary Tests**

**Anion-Cation Balance**

Anions	628×10 <sup>-3</sup>	
Cations	774×10 <sup>-3</sup>	
% Difference	10.419	OK

**Measured TDS = Calculated TDS**

Measured	N/A
Calculated	58.291
Ratio	N/A

**Measured EC = Calculated EC**

Measured	79.000	
Calculated	78.182	
Ratio	1.010	OK

**Secondary Tests**

**Measured EC and Ion Sums:**

Anions	0.795232	Not within preferred range (0.9-1.1)
Cations	0.980208	Within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.738	Not within preferred range (0.55-0.7)

**Measured TDS to EC ratio**

Measured TDS unavailable

**Organic Mass Balance**

**DOC ≥ Sum of Organics**

Dissolved Organic Carbon	2.100 mg/L	
Sum of Organics	0.000 mg/L	OK

SW-2

Water Type	Ca-SO <sub>4</sub>		
Dissolved Solids	59.474 mg/kg	59.3 mg/L	Calculated
Density	0.99708 g/cm <sup>3</sup>		Calculated
Conductivity	112 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	30.874 mg/kg	30.783 mg/L	Calculated
Carbonate	30.874	30.784	
Non-Carbonate	0.0	0.0	

SW-2

Primary Tests

**Anion-Cation Balance**

Anions	472×10 <sup>-3</sup>	
Cations	784×10 <sup>-3</sup>	
% Difference	24.830	Not within ± 0.2meq/L

**Measured TDS = Calculated TDS**

Measured	N/A	
Calculated	59.474	
Ratio	N/A	

**Measured EC = Calculated EC**

Measured	112.000	
Calculated	72.843	
Ratio	1.538	Not within range 0.9 to 1.1

Secondary Tests

**Measured EC and Ion Sums:**

Anions	0.421326	Not within preferred range (0.9-1.1)
Cations	0.699666	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.531	Not within preferred range (0.55-0.7)

**Measured TDS to EC ratio**

Measured TDS unavailable

Organic Mass Balance

**DOC ≥ Sum of Organics**

Dissolved Organic Carbon	2.100 mg/L	
Sum of Organics	0.000 mg/L	OK

**Appendix E**  
**Site Photo Log**

## CSMRI Soil Loadout Photo Log



Stockpile A soil being loaded into lined trucks for transportation to Clean Harbors Deer Trail Facility. A total of 11 trucks were shipped to this facility on August 20, 2007.



Stockpile B soils were transported to Allied Wastes Foothills Facility using side dump trucks. A total of 615 truck loads were transported from August 21 through September 7, 2007.



After the trucks were loaded with soil, they stopped at the site checkout where all paperwork was completed and any dry decontamination that was needed was completed. Each truck was also scanned to ensure no spread of contamination was occurring and that the load was within control limits.



Each truck is scanned for both the activity emanating from the load to ensure compliance with DOT and landfill requirements, and the truck tires are scanned to ensure no spread of contamination.



Soil was trucked to the disposal facility where it was dumped in a specific designated area. Each load was spread using a dozer and covered with clean soil.



At the landfill, soil was spread with a dozer and covered with clean soil using a scraper.



The soil disposal area at Foothills landfill was located just past the bottom of the access road as seen in this picture. One truck coming and one leaving as the spreading and covering operations proceed. North Table Mountain is in the background.



Trucks entered the site and pulled forward to the loadout area. A dozer pushed soil to the excavator which was completing the loadout. Dust control was performed continuously as soil movement was in progress.



As the pile became smaller, soil along with the liner were pushed toward the excavator.



Final site surveys were conducted using a sodium iodide detector to ensure all soil requiring removal was included in the last truck. Final confirmatory sampling was conducted after all impacted soil was removed.

**Appendix F**

**Site Personnel Documents**  
**Safety Meeting Documentation**  
**Employee and Visitor Logs**

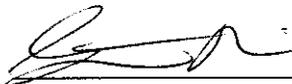
# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Heat, mosquitoes, soil review of coasams. Fishing

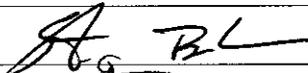
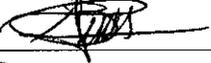
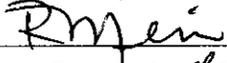
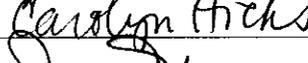
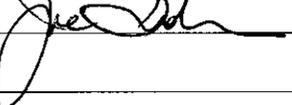
Date of Meeting 8/17/07

Meeting Conducted by:

Printed Name Steve B. Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
AUG 17	STEVE BOULMUN	
AUG. 17.	Alvaro Aguirre.	
8-17-07	Bob Mein	
8/17/07	Jerry Mattson	
8/17/07	Carolyn Hicks	
8/17/07	Joe Gordon	

# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Traffic control, flagging, dust.

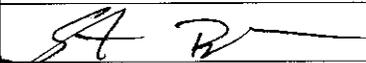
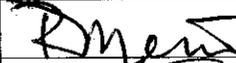
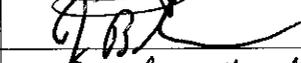
Date of Meeting 8/20/07

Meeting Conducted by:

Printed Name Steve Brinkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/20	STEVE BRINKMAN	
8/20	Bob Mein	
8/20	Alvaro Aguirre	
8/20	J. ~ DASHOR	
8/20	Carolyn Hicks	Carolyn Hicks
8/20	Jerry Mattson	J. Mattson

# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Truck flow pattern, Wind direction, Heat issues, Trucker Handouts

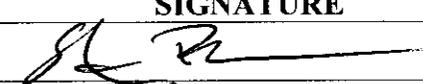
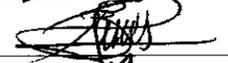
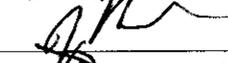
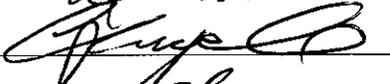
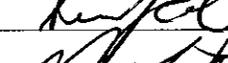
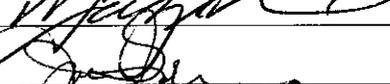
Date of Meeting 8/21/07

Meeting Conducted by:

Printed Name Steve Burkhardt Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/21	STEVE BURKHARDT	
8/21	Alvaro Aguirre	
8/21	Jim Baston	
8-21	Bob Mein	
8-21	Carolyn Hicks	Carolyn Hicks
821	Ken Shannon	Ken Shannon
8/21	Chuck Foy	
8/21	Sean O'Leary	
8/21	MARK PHELAN	
8/21	Joe Gordin	
8-21	Rick Anacleto	

# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Road Dust Control, T-Storms (establish a procedure for Rain/Waterwashing)

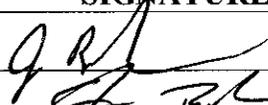
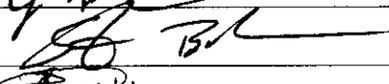
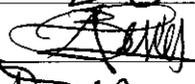
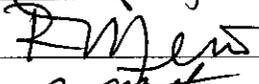
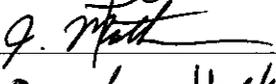
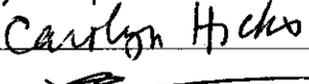
Date of Meeting 8/22/07

Meeting Conducted by:

Printed Name Steve Brinkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/22	JIM BASHOR	
8/22	STEVE BULKNUM	
8/22	Alvaro Aguirre	
8-22	Bob Mein	
8/22	Jerry Mattson	
8/22	Carolyn Hicks	
8/22	JP Benson	
8/22	Nick Benson	







# Stoller

## TAILGATE MEETING DOCUMENTATION

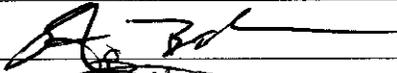
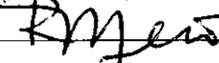
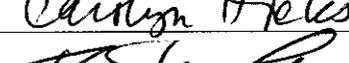
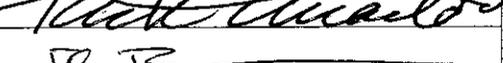
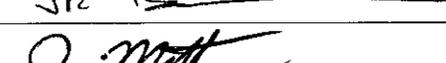
Tailgate Discussion Topic
Truck coordination between B pile + floodplain trucks Cross line construction traffic

Date of Meeting 8-28-07

Meeting Conducted by: Carolyn Hicks

Printed Name Carolyn Hicks Signature \_\_\_\_\_

Meeting Attendees: Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/28/07	STEVE BULLHORN	
8/28/07	Alvaro J. Aguirre	
8-28-07	Bob Meier	
8-28-07	Paul Mendoza	
8/28/07	Carolyn Hicks	
8/28/07	Rick Anacleto	
8/28/07	JR Baise	
8/28/07	Jerry Mattson	
<del>8-28-07</del>	<del>Carolyn</del>	

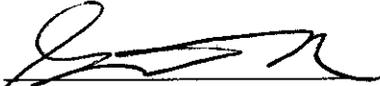
# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
End-of-day Dust Suppression. Maintaining Productivity (Feed the excavator) & how to do it all safely!

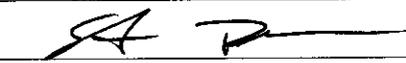
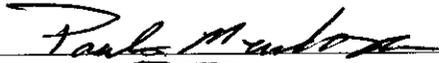
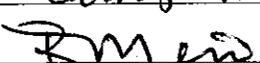
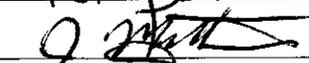
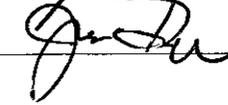
Date of Meeting 8/29/07

Meeting Conducted by:

Printed Name Steve Brinkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/29/07	STEVE BRINKMAN	
8/29/07	Paul Mendoza	
8/29/07	Alvaros J. Aguirre	
8/29/07	Carolyn Hicks	Carolyn Hicks
8/29/07	Bob Mein	
8/29/07	Jerry Mattson	
8/29/07	Joe Gordon	

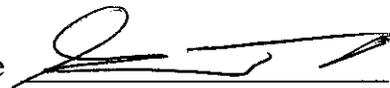
# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Larger Dozer - Any Issues ? - - Slow & Safe - How dirt will be moved ? - Dust is the main issue

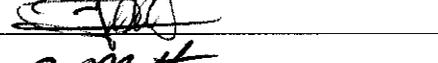
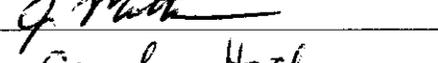
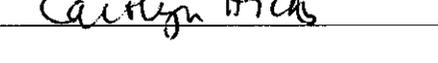
Date of Meeting 8/20/07

Meeting Conducted by:

Printed Name Steve Berkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/30/07	STEVE BERKMAN	
	Paul Madero	
	Steve Scott	
8/30/07	Alvaro J Aguirre	
8/30/07	Jessy Mattson	
8/30/07	Carolyn Hicks	

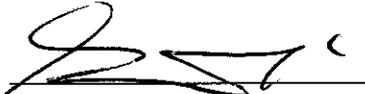
# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Long week-end STATS - Dust, weekend prep & sire stabilize

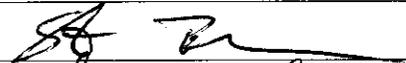
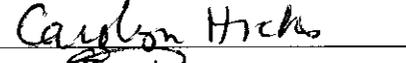
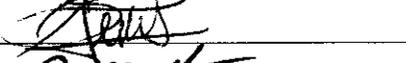
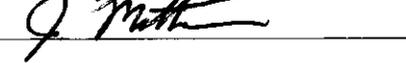
Date of Meeting 8/31/07

Meeting Conducted by:

Printed Name Steve Brinkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
8/31	STEVE BRINKMAN	
8/31	STEVE SWALES	
8/31	Paul mendez	
8/31	Carolyn Hicks	
8/31	Alvaro J. Aguirre	
8/31	Jerry Mattson	

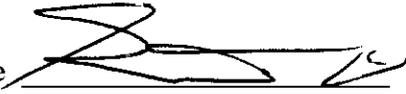
# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Dust Control vs Making mud, Track count, Schedule, Scales on 93

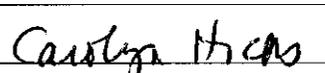
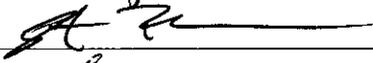
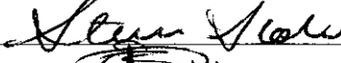
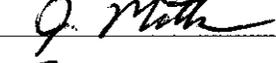
Date of Meeting 9/4/07

Meeting Conducted by:

Printed Name Steve Brinkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
9-4-07	Carolyn Hicks	
9/4/07	STEVE BRINKMAN	
9/4/07	STEVE SCALIS	
9/4/07	Alvaro J. Aguirre	
9/4/07	Jerry Mattson	
9/4/07	Nick Maloney	



# Stoller

## TAILGATE MEETING DOCUMENTATION

Tailgate Discussion Topic
Mosquitoes, haul truck, lightning Dust from concrete

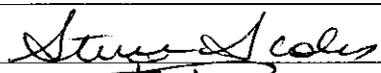
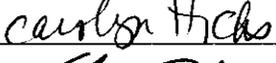
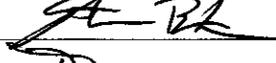
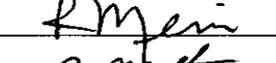
Date of Meeting 9/6/07

Meeting Conducted by:

Printed Name Steve Brinkman Signature 

Meeting Attendees:

Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
9/6/07	STEVEN SCOLES	
9/6/07	Alvaro J. Aguirre	
9/6/07	Carolyn Hicks	
9/6/07	STEVE BRINKMAN	
9-6-07	Bob Mein	
9-6-07	Jerry Mattson	
9/6/07	Nick Maloney	

# Stoller

## TAILGATE MEETING DOCUMENTATION

### Tailgate Discussion Topic

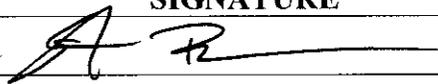
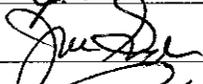
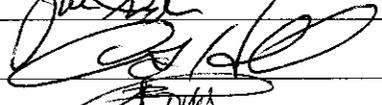
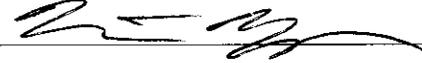
Last day.  
Stay focussed  
Dust control

Date of Meeting 9/7/07

Meeting Conducted by:

Printed Name Jerry Mattson Signature J. Mattson

Meeting Attendees: Attach Any Handouts and File in Project Files

DATE	PRINTED NAME	SIGNATURE
9/7/07	STEVE BURKETT	
9/7/07	Carolyn Hicks	Carolyn Hicks
9/7/07	Jerry Mattson	J. Mattson
9/7/07	Joe Gordon	
9/7/07	Curt Holl	
9/7/07	Alvaro J. Aguirre	
9/7/07	STEVEN SCOLEY	Steven Soley
9/7/07	Nick Malozky	

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Carolyn Hicks		8-16-07	0700	0330	8.5	
Jerry Mattson	Rsd	8-16-07	0700	0330	8.5	
Carolyn Hicks		8-17-07	0700	0410	9	
Siege Binkov		8/17/07	0640	12 <sup>noon</sup>		
Bob Meier		8-17-07	0640			
Alvaro Aguirre		8/17/07	6:40			
STEVE BURKIN	FOREMAN	AUG 17 07	6:40			
Jerry Mattson		8/17/07	0700			
Joe Gordon		8/17/07	0830	10:40		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Linn Hardick	CSM	8-17	9:00AM	10:00		Precast. Mtg
Steve Brink	PM	8/20	6:20			
STIEBUCKEN	FOREMAN	8/20	6:20AM	12:00		
Bob Mein	Field Coordinator	8/20	6:26			
Alvaro Aguirre		8/20	6:27			
SIN BASHOR		8/20	6:27			
Carolyn Hicks		8/20	6:50	1630		
Jerry Mattson		8/20	0700	1630		
FRANK GRIGLE	-	8/20	1300	1345		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Steve Brinkman	PM	8/21	6:30	12:00		
Jerry Mattson	Road	8/21	6:30	4:30		
STEVE BUCKMAN	PLASTER FOREMAN	8/21	6:30	↗		
Alvaro Aguirre.		8/21	6:30	↘		
Sir BASHOR		8/21	6:30			
Bob Meier		8-21	6:30			
Carolyn Hicks		8-21	6:50	4:30		
Ken Shannon	Driver	8/21	7:00			
Chuck Foy	Driver	8/21	<del>7:00</del>			

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Sean Brown	Driver	8/21	7 AM			
MARK PHELAN	DRIVER	8/21	0700			
Rafael Colaco	Driver	8-21-07	7:00			
Josue w. Ruiz	DRIVER	8-21-07	7:00			
M.K. Murray	DRIVER	8-21	7:00			
Joe Gordon	Staller	8/21	8:00	9:00		
Rick Anacleto	Platinum	8-21	11:00	11:45		
Steve Brinkman	Sallyport	8/21	6:20	10:30		
Jim Basco		8/22	6:20			

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
STEVE BUCKNUM	FOREMAN	8/22	6:30			
ALVARO FIGUEROA		8/22	6:30			
Jerry Mattson	Rad	8/22	6:30	4:45		
Carolyn Hicks	Rad	8/22	0700	4:45		
JE BOSE	oversight	8/22	1:00	1:45		
Nick Benson	INSURANCE SURVEY	8/22	1:00	1:45		
PARK GRIEVE	FOREMAN	8/22	2:00			
JOE GRIEVE	MECHANIC	8/22	2:00			
Carolyn Hicks	rad	8/23	0630	04:00		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Steve Burkman	PM	8/23	6:30			
Jerry Mattson STEVE BURKMAN	Red Foreman	8/23	6:30			
Jim Gasior		8/23	6:30			
Alvaro Aquino Bob Merin		8/23	6:30			
Jerry Mattson	Red	8/24	0630	940		
Tracey Powell	Swinspect.	8/24	0815	0845		
Bob Merin	Field Coord	8/24	6:30	940		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
ALVARO AGUIRRE		8/24	6:30	9:40		
SIM BASTOR		8/24	6:30	9:40		
Carolyn Hicks	rad	8/24	6:30	9:40		
Steve Binkton	PM	8/27	6:15	8 AM		
Carolyn Hicks	rad	8/27	6:35	4:45		
Bob Meiro	Field Coord	8/27	6:45			
STEVE BINKTON	FORSMAN	8/27	6:45			
ALVARO AGUIRRE		8/27	6:45	4:45		
Jerry Mattson	Rad	8/27	6:30	4:45		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Jerry Mattson	Rad	8/28	0630			
STEVE Buckner	PLATINUM FORUM	8/28	6:30			
Alvaro J. Aguirre	Platinum	8/28	6:50			
Bob Mein	truck	8/28	6:45			
Paul Mendoza	Platinum	8/28	6:45			
Cardyn Hicks	rad	8/28	6:35	4:40		
Barbara Jensen	rad	8/28	6:55	4:40		
Reck Amelob	Platinum	8/28	7:20	3 PM		
JE Bork	Platinum	8/28	7:20	3 PM		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Jerry Mattson	Rad	8/29	0630	430		
Carolyn Hicks	rad	<del>8/29</del>	0640	430		
Steve Brubaker	PM	8/29	0550	2:00		
STEVE BUCKMAN	PLATINUM EMER	8/29	5:50			
Alvaro J. Aguirre	Platinum F.	8/29	6:30			
Paul Mendoza	Platinum	8/29	6:30			
Bob Meiw	"	8-29-07	6:30			
Joe Gordon	Stellar	8/29/07	12:00			
Jerry Mattson	Rad	8/30/07	6:30	1615		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Steve Brink	P.M	8/30	6:40			
Carolyn Hicks	rad	8/30	6:40	16:15		
STEVE SCOTT STEVE BRINK	OPERATOR FOREMAN	8/30 8/30	7:00 6:00 AM			
Paul Mendo	11	8/30	6:00			
Alvaro J. Aguirre	Platinum	8/30	6:40			
Barbara Schoen	rad	8/30	12:05	16:15		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Steve Robinson	PM	8/31	5:57			
STEVE Robinson	Platinum Foreman	8/31	5:45			
Paul meador	"	8/31	5:45			
Carolyn Hicks	rad	8/31	6:00	1300		
Alexis J. Aguirre	Platinum	8/31	6:00			
Jerry Mattson	Rad	8/31	0600	1300		
Steve Sears	Operator	8/31	5:50			
Jerry Mattson	RS	9/4	6:30	4:30		
Steve Robinson	PM	9/4	6:50	9:20		

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Carolyn Hicks	rad	9-4-07	0645	4:30		
STEVE BUCKNUM	PLATINUM FORGER	9/4/07	6:30			
STEVE SCOTTS	Platinum Operator	9/4/07	6:30			
Alvaro Aguirre	Platinum	9/4/07	6:30			
Nick Malczuk	geologist	9/4/07	0700	4:30		
Jerry Mattson	H&S	9/5/07	0630			
Carolyn Hicks	rad	9/5/07	0640			
Steve B	PR	"	0625			
Steve Scott	Operator	9/5/07	6:35			

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Alvaro J Aguirre	Platinum	9/5/07	6:30			
STEVE BURNUM	PLATINUM FORERAN	9/5/07	6:30			
Nick McLeck	Stake	9/5/07	0700			
STEVEN SAGES	OPERATOR	9/6/07	6:30			
Alvaro J. Aguirre	Platinum	9/6/07	6:30			
Carolyn Hicks	rad	9-6-07	0710	4:10		
STEVE BURNUM	PLATINUM FORERAN	9/6/07	6:30			
Bob Meyer	driver	9-6-07	7:15			
Jerry Mattson	HRS	9/6/07	0730			

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Mick McLeary	stoller	9/6/07	0845			
STAN Buckman	PLATTINUM BURN	9/7/07	6:30			
Carolyn Hicks	rad	9/7/07	6:30			
Jerry Mattson	Rad	9/7/07	6:30			
S. binh...	pin	9/7/07	7 -			
J. Gordon	Stoller	9/7/07	8:00			
Curt Hull	Stoller	9/7/07	8 -			
Tim Sweitzer	EHS- CSM	9-7-07	8:35			
Tom Glenn	EHS / CSM	9/7/07	8:35			

**Employee Log  
(including contractors)**

Name	Job Function	Date	Time In	Time Out	Total Hours	Specific Activities Performed
Alvaro J. Aguirre.	Platinum	9/7/07	6:30			
STEVEN SACKS	Platinum	9/7/07	6:30			
MIKE MALCZYK	Stoller	9/7/07	12:00			

## **Appendix G**

### **Radiological Instrumentation Calibration Records**



Designer and Manufacturer  
of  
Scientific and Industrial  
Instruments

# CERTIFICATE OF CALIBRATION

**LUDLUM MEASUREMENTS, INC.**  
POST OFFICE BOX 810 PH. 325-235-5494  
501 OAK STREET FAX NO. 325-235-4672  
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER S M STOLLER CORP

ORDER NO. 281554/316067

Mfg. Ludlum Measurements, Inc. Model 2360 Serial No. 223249  
Mfg. Ludlum Measurements, Inc. Model 43-89 Serial No. PR-227111

Cal. Date 15-Aug-07 Cal Due Date 15-Aug-08 Cal. Interval 1 Year Meterface 202-855

Check mark  applies to applicable instr. and/or detector IAW mfg. spec. T. 74 °F RH 41 % Alt 699.8 mm Hg

- New Instrument  Instrument Received  Within Toler. +/-10%  10-20%  Out of Tol.  Requiring Repair  Other-See comments
- Mechanical ck.  Meter Zeroed  Background Subtract  Input Sens. Linearity  
 F/S Resp. ck.  Reset ck.  Window Operation  Geotropism  
 Audio ck.  Alarm Setting ck.  Batt. ck. (Min. Volt) 2.2 VDC  
 Calibrated in accordance with LMI SOP 14.8 rev 12/05/89.  Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 750 v

HV Readout (2 points) Ref./Inst. 500 1 500 V Ref./Inst. 1500 1 1500 V

Firmware Version: 39010n24

Alpha Threshold: 120mv

Beta Threshold: 3.5mv

Beta Window: 30mv

Overload Set to simulate a light leak

Instrument calibrated with a 39" cable.

High voltage set with detector disconnected

(EEPROM Settings)

User Time: 1.0

Alpha Alarm: 999999

Beta Alarm: 999999

A/B Alarm: 999999

Model 2360 Date: 8/15/07

Calibration Date Due: 8/15/08

**COMMENTS:** Calibrated w/39" cable

Eff. for Th230sn:1495, Eff. ≈ 34.5% $\pi$ /17.6% $\pi$ , Source cout ≈ 3487cpm - 0cpm Background

Source size = 10100cpm/19800dpm

Eff. for Tc99sn:5280-04, Eff. ≈ 22% $\pi$ /13.9% $\pi$ , Source cout ≈ 13290cpm - 270cpm Background

Source size = 58300cpm/93239dpm

Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
x1000	400kcpm	400	400
x1000	100kcpm	100	100
x100	40kcpm	400	400
x100	10kcpm	100	100
x10	4kcpm	400	400
x10	1kcpm	100	100
x1	400kcpm	400	400
x1	100kcpm	100	100

\*Uncertainty within ± 10% C.F. within ± 20%

**ALL Range(s) Calibrated Electronically**

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
400kcpm	39678 (0)	39678 (0)			
40kcpm	3968	3968			
4kcpm	396	396			
400cpm	40	40			
40cpm	4	4			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCCL Z540-1-1994 and ANSI N323-1978

State of Texas Calibration License No. LO-1963

**Reference Instruments and/or Sources:**  S-394/1122  1131  781  
Cs-137 Gamma S/N  1162  G112  M565  5105  T1008  T879  E552  E551  720  734  1616  Neutron Am-241 Be S/N T-304  
 Alpha S/N PR 239 SN: 2928-01  Beta S/N Tc99 SN: 5280-04 / Sr90 SN: 5281-04  Other \_\_\_\_\_  
 m 500 S/N 50800  Oscilloscope S/N \_\_\_\_\_  Multimeter S/N 83990502

Calibrated By: Charles Shirk Date 15 Aug 07  
Reviewed By: Rhonda Harris Date 15 Aug 07



Designer and Manufacturer  
of  
Scientific and Industrial  
Instruments

# CERTIFICATE OF CALIBRATION

**LUDLUM MEASUREMENTS, INC.**  
POST OFFICE BOX 810 PH. 325-235-5494  
501 OAK STREET FAX NO. 325-235-4672  
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER S M STOLLER CORP ORDER NO. 281554/316067

Co. Ludlum Measurements, Inc. Model 2350-1 Serial No. 216175

Cal. Date 14-Aug-07 Cal Due Date 14-Aug-08 Cal. Interval 1 Year Meterface n/a

Check mark  applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 46 % Alt 701.8 mm Hg

New Instrument Instrument Received  Within Toler. +10%  10-20%  Out of Tol.  Requiring Repair  Other-See comments

Mechanical check  Input Sens. Linearity

F/S Resp. check  Reset check  Window Operation

Audio check  Alarm Setting check  Battery check (Min. Volt) 4.4 VDC

Ratemeter Linearity check  Integrated Dose check  Recycle Mode check

Data Log check  Overload check  Scaler Readout check Threshold Dial Ratio 100 = 10 mV

Calibrated in accordance with LMI SOP 14.8 rev 12/05/89.  Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

HV Readout (2 points) Ref./Inst. 500 1 497 V Ref./Inst. 2000 1 1997 V

**COMMENTS:** *Firmware: 37122N28* *Resolution for Cs-137 ≈ 9.5%*  
*I10 Firmware: 37123N05*

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source. *Calibrated w/ 39" cable*

Probe Model	Serial #	High Voltage	Threshold	Units/Time Base	Dead Time Correction Factor	Calibration Constant	Linearity ±10%*
Detector #1 LMI44-10	PR233824	1000	100	7 / 1	1.029659E-05	1.000000E+00	
Detector #2 LMI44-10	PR233824	1000	100	4 / 2	1.029659E-05	5.117758E+10	✓
Detector #3 CS137 PK.	662KEV	694	642	7 / 1	0.000000E+00	1.000000E+00	
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							
Detector #							

Units: 0 - rad, 1 - Gray, 2 - rem, 3 - Sv, 4 - R, 5 - C/Kg, 6 - Disintegrations, 7 - Counts, 8 - Ci/cm sq., 9 - Bq/cm sq.  
Time Base: 0 - Seconds, 1 - Minutes, 2 - Hours \* See attached detector documentation, if applicable.

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
400kcpm	39642 (0)	39642 (0)	400cpm	40 (0)	40 (0)
40kcpm	3965	3965	40cpm	4	4
4kcpm	396	396			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

**Reference Instruments and/or Sources:** Cs-137 Gamma S/N  S-394  1122  781  
 1162  G112  M565  5105  T1008  T879  E552  E551  720  734  1616  Neutron Am-241 Be S/N-T-304  
 Alpha S/N  Beta S/N  Other Am241-0.76µCi

m 500 S/N 50800  Multimeter S/N 83990502

Calibrated By: Rhonda Hein Date 14 Aug 07  
Reviewed By: Rhonda Hein Date 14 Aug 07



Designer and Manufacturer  
of  
Scientific and Industrial  
Instruments

# CERTIFICATE OF CALIBRATION

**LUDLUM MEASUREMENTS, INC.**  
POST OFFICE BOX 810 PH. 325-235-5494  
501 OAK STREET FAX NO. 325-235-4672  
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER S M STOLLER CORP ORDER NO. 281554/316067

Ludlum Measurements, Inc. Model 2929 Serial No. 176089

Mfg. Ludlum Measurements, Inc. Model 43-10-1 Serial No. PR-188733

Cal. Date 14-Aug-07 Cal Due Date 14-Aug-08 Cal. Interval 1 Year Meterface 202-014

Check mark  applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 46 % Alt 701.8 mm Hg

New Instrument  Instrument Received  Within Toler. +-10%  10-20%  Out of Tol.  Requiring Repair  Other-See comments

Mechanical ck.  Window Operation

Audio ck.

Meter Zeroed Alpha Sensitivity 175 mV Beta Sensitivity 4 mV Beta Window 50 mV

Calibrated in accordance with LMI SOP 14.8 rev 12/05/89.  Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 82.5 V = 3.42 on High Voltage dial. High Voltage set with detector connected.

HV Readout (2 points) Ref./Inst. 500 1 500 V Ref./Inst. 1200 2000 CS 1 1200 V

### COMMENTS:

Eff. for Tc99sn:8744, Eff ≈ 59% $\pi$ /37% $\pi$ , Source count ≈ 10758cpm - 67cpm background  
Source size = 18000cpm/28800dpm

Eff. for Th230sn:1495, Eff ≈ 77% $\pi$ /39% $\pi$ , Source count ≈ 7826cpm - 1cpm background  
Source size = 10100cpm/19800dpm

*Hv. Calibrated with detector connected.*

*Calibrated w/39" cable*

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

Alpha Channel Digital Readout	REFERENCE CAL POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
	400K cpm	<u>39683</u> (07)	<u>39683</u> (07)
	40K cpm	<u>3968</u> L	<u>3968</u> L
	4K cpm	<u>397</u> L	<u>397</u> L
	400 cpm	<u>40</u> L	<u>40</u> L
	40 cpm	<u>4</u> L	<u>4</u> L

Beta/Gamma Channel Digital Readout	REFERENCE CAL POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
	400K cpm	<u>39681</u> (07)	<u>39681</u> (07)
	40K cpm	<u>3968</u> L	<u>3968</u> L
	4K cpm	<u>397</u> L	<u>397</u> L
	400 cpm	<u>40</u> L	<u>40</u> L
	40 cpm	<u>4</u> L	<u>4</u> L

\*Uncertainty within ± 10% C.F. within ± 20%

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANS/NCSL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:  S-394/1122  1131  781

Cs-137 Gamma S/N  1162  G112  M565  5105  T1008  T879  E552  E551  720  734  1616  Neutron Am-241 Be S/N T-304

Alpha S/N Pu239SN:8744  Beta S/N Tc99sn:5279-04  Other \_\_\_\_\_

m 500 S/N 50800  Oscilloscope S/N \_\_\_\_\_  Multimeter S/N 83990502

Calibrated By: Charles Shirk Date 14 Aug 07

Reviewed By: Rhonda Hami Date 14 Aug 07



Designer and Manufacturer  
of  
Scientific and Industrial  
Instruments

# CERTIFICATE OF CALIBRATION

**LUDLUM MEASUREMENTS, INC.**

POST OFFICE BOX 810 PH. 325-235-5494  
501 OAK STREET FAX NO. 325-235-4672  
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER S M STOLLER CORP

ORDER NO. 281554/316067

Ludlum Measurements, Inc. Model 19

Serial No. 144043

Mfg. Model

Serial No.

Cal. Date 14-Aug-07 Cal Due Date 14-Aug-08 Cal. Interval 1 Year Meterface 202-016

Check mark  applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 46 % Alt 701.8 mm Hg

New Instrument  Instrument Received  Within Toler. +-10%  10-20%  Out of Tol.  Requiring Repair  Other-See comments

Mechanical ck.  Meter Zeroed  Background Subtract  Input Sens. Linearity

F/S Resp. ck.  Reset ck.  Window Operation  Geotropism

Audio ck.  Alarm Setting ck.  Batt. ck. (Min. Volt) 2.2 VDC

Calibrated in accordance with LMI SOP 14.8 rev 12/05/89.  Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 825 V Input Sens. 34 mV Det. Oper. \_\_\_\_\_ V at \_\_\_\_\_ mV Threshold Dial Ratio \_\_\_\_\_ = \_\_\_\_\_ mV

HV Readout (2 points) Ref./Inst. 500 / \_\_\_\_\_ V Ref./Inst. 1000 / \_\_\_\_\_ V

## COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000 uR/hr	<u>4000</u>	<u>4000</u>
5000	1000 uR/hr	<u>1050</u>	<u>1050</u>
500	400 uR/hr = <u>74100 cpm</u>	<u>400</u>	<u>400</u>
500	100 uR/hr	<u>105</u>	<u>105</u>
250	200 uR/hr = <u>36700 cpm</u>	<u>200</u>	<u>200</u>
250	100 uR/hr	<u>100</u>	<u>100</u>
50	<u>7410</u> cpm	<u>40</u>	<u>40</u>
50	<u>1850</u> cpm	<u>10</u>	<u>10</u>
25	<u>3670</u> cpm	<u>20</u>	<u>20</u>
25	<u>917</u> cpm	<u>5</u>	<u>5</u>

\*Uncertainty within ± 10% C.F. within ± 20%

50, 25 Range(s) Calibrated Electronically

Digital Readout	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	Log Scale	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
	_____	_____	_____		_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978

State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:  S-394/1122  1131  781  
Cs-137 Gamma S/N  1162  G112  M565  5105  T1008  T879  E552  E551  720  734  1616  Neutron Am-241 Be S/N T-304  
 Alpha S/N \_\_\_\_\_  Beta S/N \_\_\_\_\_  Other \_\_\_\_\_  
m 500 S/N 50800  Oscilloscope S/N \_\_\_\_\_  Multimeter S/N 83990502

Calibrated By: Charles Shick Date 14 Aug 07  
Reviewed By: Rhonda Ham Date 14 Aug 07

**Appendix H (on CD)**

**Truck Departure Forms  
Outgoing Radiological Surveys,  
Weigh Tickets,  
and Non-hazardous Waste Manifests**

# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Griene 12	9-5-07	0955	1004	18 cy
Griene 8		1004	1010	
Collazo 13		1020	1030	
Marquez 961		1025	1039	
Ruiz 95		1030	1045	
JD 04		1040	1049	
Marquez 96		1048	1055	
Griene 23		1050	1104	
Griene 24		1104	1115	
Griene 12		1115	1124	
Griene 8		1124	1130	
Collazo 13		1135	1143	
Marquez 961		1155	1210	
Ruiz 95		1220	1237	
JD 04		1237	1247	
Marquez 96		1247	1259	
Griene 23		1300	1312	
Griene 24		1312	1326	
Griene 12		1326	1337	
Griene 8		1337	1352	

85.7

85.1

80.8

89.9

debris

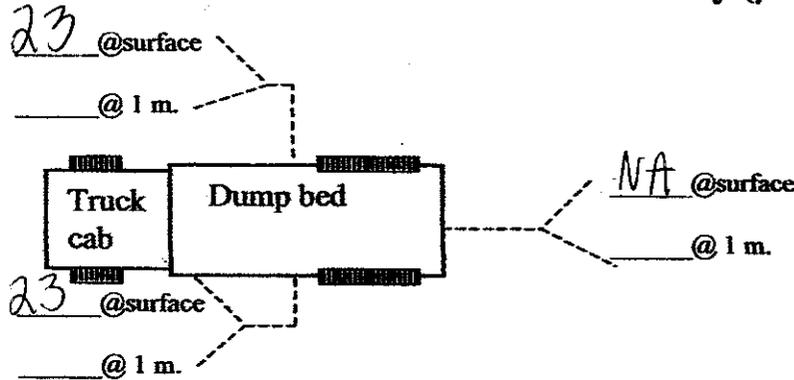




## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1004 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

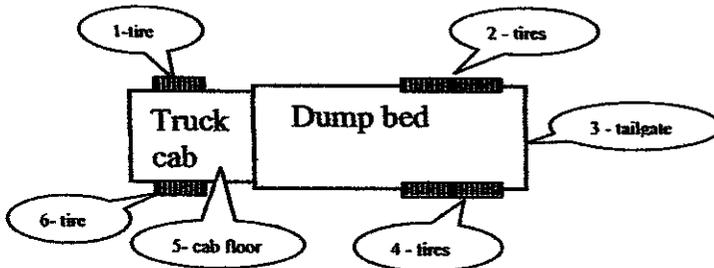
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

0550890

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Wilton St Golden, CO 80401 303-273-3668			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3668		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name Greene Trucking #112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Wilton St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 187 070908 YS11915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 8 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 8 5 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519615

12

FOOTHILLE LANDFILL  
8700 HIGHWAY 92  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589967	GRID 0000
WEIGHMASTER IS00056 Barber's Jo S		
DATE IN 5 September 2007	TIME IN 10:20 am	
DATE OUT 5 September 2007	TIME OUT 10:20 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550890	ORIGIN	

OG Gross Weight 85,740.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 48,040.00 lb 24.02 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.02	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550890

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of		
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998			
4. Phone ( )		6. Phone ( )				
7. Transporter #1 Company Name Greco Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone		
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone		
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 2500 14th St Golden, CO		14. US EPA ID Number		15. Facility's Phone		
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070906 YS11915		18. Containers		
				No.	Type	19. Total Quantity
				18	Y-Yards	Tons
b.						
c.						
d.						
21. Additional Descriptions for Materials Listed Above						
22. Special Handling Instructions and Additional Information						
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Printed/Typed Name Steve Beckman		Signature		Month	Day	Year
				4	5	07
24. Transporter #1: Acknowledgement of Receipt of Materials						
Printed/Typed Name Steve Beckman		Signature		Month	Day	Year
				4	5	07
25. Transporter #2: Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
26. Discrepancy Indication Space						
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)						
Printed/Typed Name Steve Beckman		Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

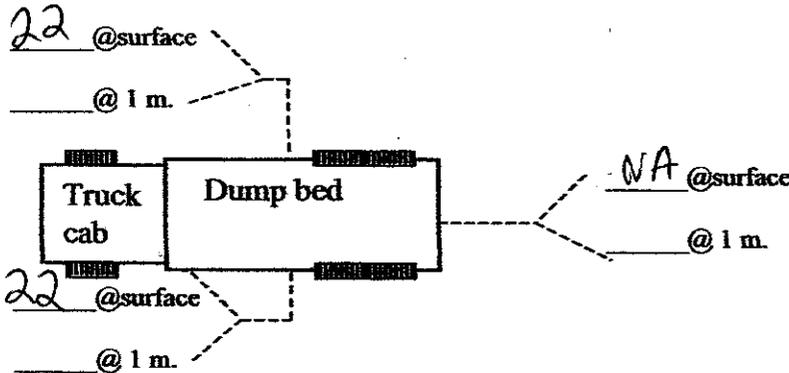
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1010 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

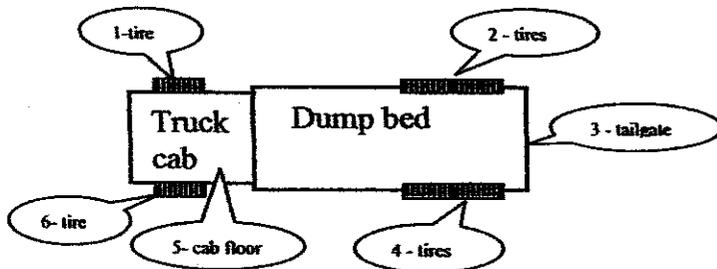
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

0550891

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3036			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3036				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Cathala / 107-110 2500 Hwy. 93 Golden, CO 80401 # 303-273-3036 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 097 07/0008 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month	Day		
Steve Blawie				8	5		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day		
Chuck Foy				01	05		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

519624

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YB11915

SITE 01	TICKET 889902	GRID 0000
WEIGHMASTER \$800056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 10:25 am	
DATE OUT 5 September 2007	TIME OUT 10:25 am	
VEHICLE YB11915	ROLL OFF	
REFERENCE 0550571	ORIGIN	

CO Gross Weight 81,260.00 lb  
 Tare Weight 36,540.00 lb Inbound --  
 Net Weight 44,720.00 lb 22.36 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.36	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0550891

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez, CO 8970 Hwy 93 Golden, CO ACCOUNT # 99999 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L07 070808 Y511815		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Blankman		Signature:		Month: 8	Day: 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature:		Month: 01	Day: 05
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature: _____		Month: _____	Day: _____
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name: _____		Signature: _____		Month: _____	Day: _____

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

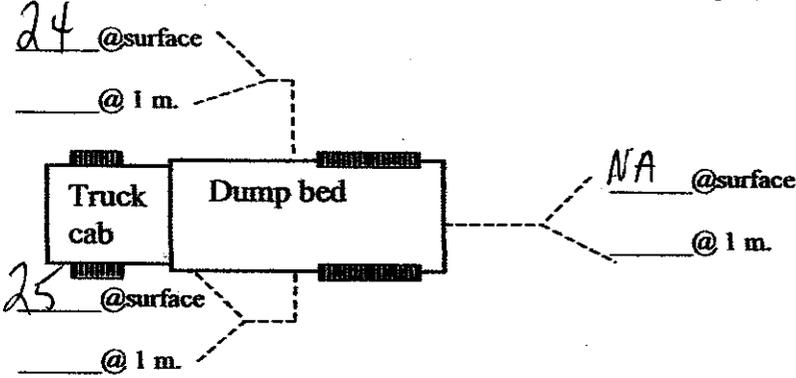
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1030 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

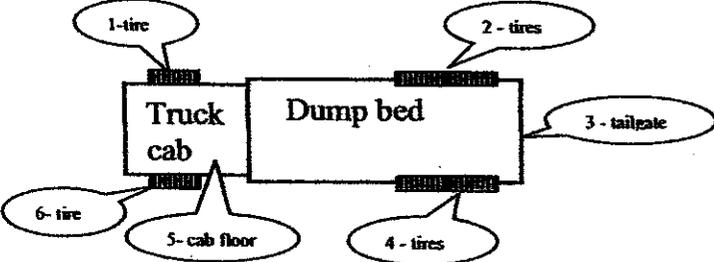
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

13  
0550892

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3898		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Central Landfill 2800 Hwy 69 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 167-0709-01511915		19. Total Quantity Y-Yards	
b.				20. Unit T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brattman			Signature <i>[Signature]</i>		Month Day Year 7 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Narciso Collazo Lopez			Signature <i>[Signature]</i>		Month Day Year 09 05 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519635

FOOTHILLS LANDFILL  
 8900 HIGHWAY 92  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589987	GRID 0000
WEIGHMASTER 800056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 10:50 am	
DATE OUT 5 September 2007	TIME OUT 10:50 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0530692	ORIGIN	

Gross Weight 85,100.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 49,400.00 lb 24.70 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.70	TN	SUB-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0553892

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Sutro's Landfill 1500 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				Drums	
				Tons	
a. Norm Soil		CO 1107 070903 1511915		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				7 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Rafael Colazo Lopez				09 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
				7	

GENERATOR

TRANSPORTER

T/S/D FACILITY

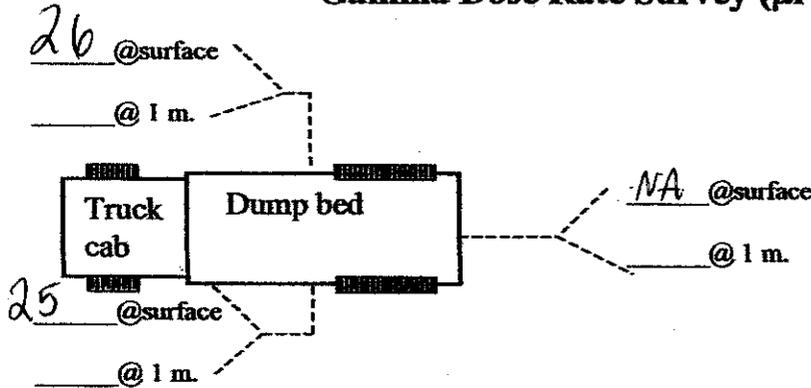
TRANSPORTER #1

COM000039

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1039 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

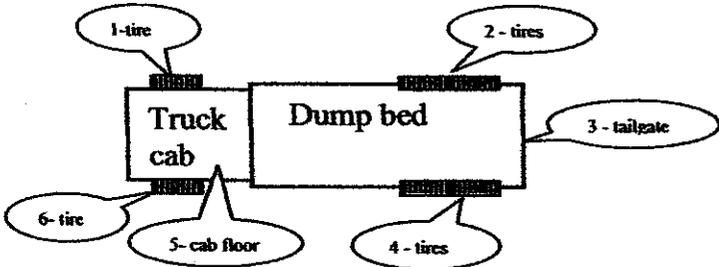
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



961

# NON-HAZARDOUS WASTE MANIFEST

## 0550893

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070900 1511915		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				1	5 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				1	5 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY





961

# NON-HAZARDOUS WASTE MANIFEST

## 0550893

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3000		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontiers Landfill 3000 Hwy 50 Golden, CO 80401 # 15111815 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Soil		17. Allied Waste Approval # and Exp. Date CO 167 070903 15111815		18. Containers	
				No.	Type
				18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month 7	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

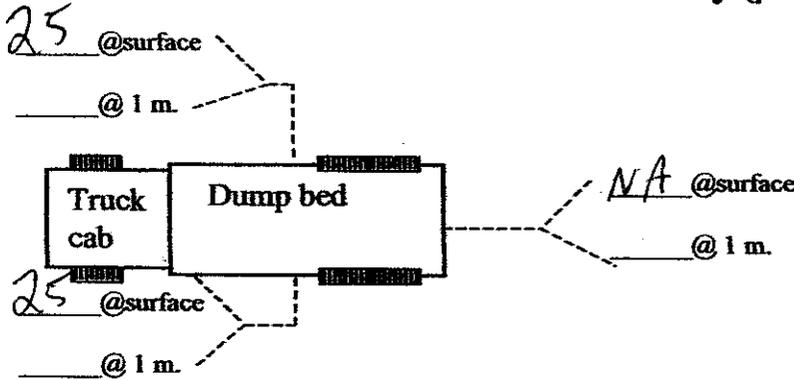
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/04 1045 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

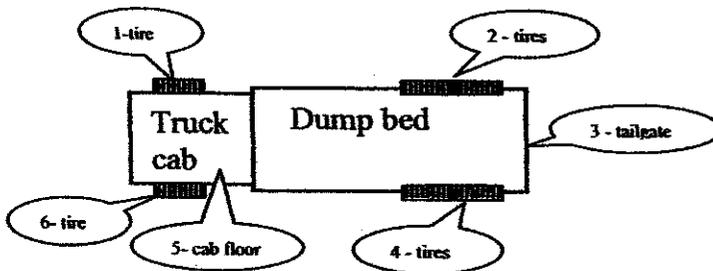
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

0550894

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden CO 80401 303-273-3096			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden CO 80401 303-273-3096		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado Waste 8500 Hwy 30 Golden CO ACCOUNT # 060003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Term Soil		CC 167 070906 Y5: 1915		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Birkman		Signature		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 7	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space				Month	Day
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

GENERATOR'S COPY

COM000033

519842

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191E

SITE 01	TICKET 529775	GRID 0000
WEIGHMASTER 0500056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 11:01 am	
DATE OUT 5 September 2007	TIME OUT 11:01 am	
VEHICLE Y51191E	ROLL OFF	
REFERENCE 0250874	ORIGIN	

Gross Weight 50,520.00 lb  
 Tare Weight 36,950.00 lb      Inbound -  
 Net Weight 13,570.00 lb 21.92 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.92	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550894

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401				
4. Phone ( ) 303-273-3660				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address F. Schiffs Levee 2500 Hwy 66 Golden, CO ACCOUNT # 960000 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Harm Soil			17. Allied Waste Approval # and Exp. Date CO16702901511015		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	C drums	Gallons
					18	Yards	Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>			Month 8	Day 5	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Mark			Signature <i>[Signature]</i>			Month 7	Day 1	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature			Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

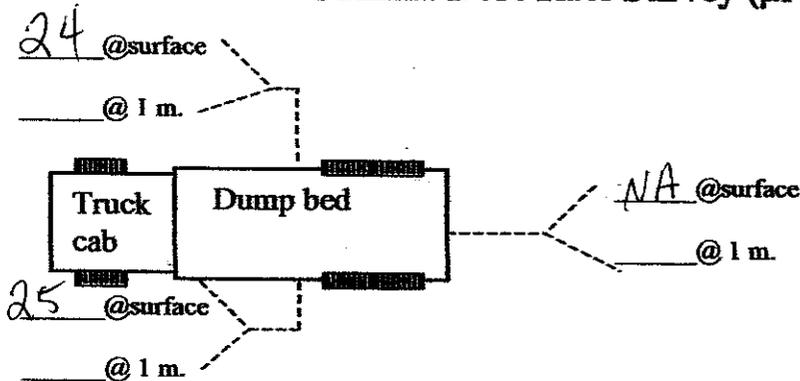
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1049 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: JD04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

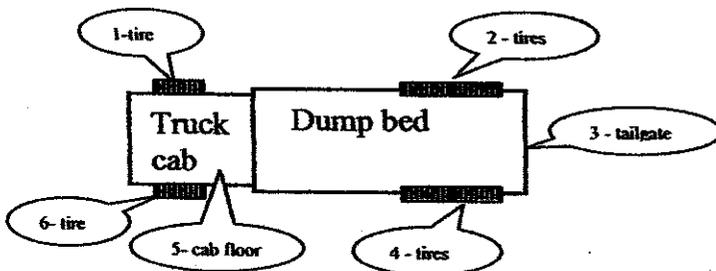
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



04

# NON-HAZARDOUS WASTE MANIFEST

## 0550895

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Winoe St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3668				
4. Phone ( ) 303-273-3668				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 80 Golden, CO (Allied Waste # 000000 Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Containers	Containers
a. Norm Soil			CO167070006 (5/19/15)				Y-Yards	T-Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Bratton			Signature			Month 7	Day 5	Year 04
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Sanji Vargos			Signature			Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature			Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519648

FOOTHILLS LANDFILL  
 8900 HIGHWAY 90  
 GOLDEN  
 CO  
 800603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589997	GRID 0000
WEIGHMASTER 6600056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 11:06 am	
DATE OUT 5 September 2007	TIME OUT 11:06 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0850895	ORIGIN	

Gross Weight 76,480.00 lb  
 Tare Weight 35,640.00 lb Inbound --  
 Net Weight 40,840.00 lb 20.42 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.42	TN	SW-COINT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-5-07



NON-HAZARDOUS WASTE MANIFEST

0550895

04

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fairbills Landfill 8000 Hwy 92 Golden, CO ACCOUNT # 00000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070900 7511915		15	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brakman				9 5 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Santiago Vargas					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

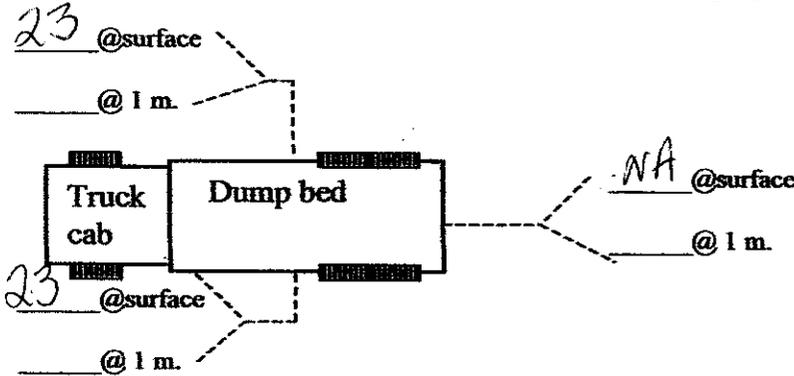
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1055 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

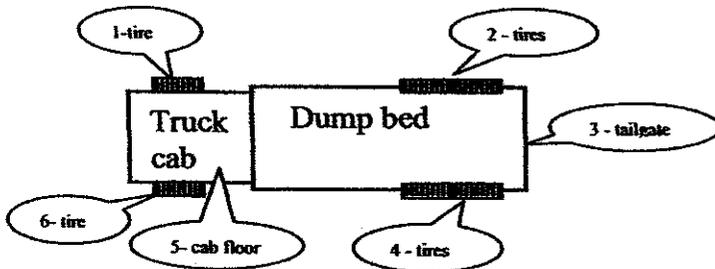
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



NON-HAZARDOUS WASTE MANIFEST

0550896

96

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dinkel Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 5000 Hwy 63 Golden, CO ACCOUNT # 00803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 187 070908 7511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>		Signature <i>[Signature]</i>		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>James H. Kenna</i>		Signature <i>[Signature]</i>		Month 9	Day 05
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

519547

FOOTHILLS LANDFILL  
8500 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1300 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 529995	GRID 0000
WEIGHMASTER 8300006 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 11:11 am	
DATE OUT 5 September 2007	TIME OUT 11:11 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0350874	ORIGIN	

00 Gross Weight 50,560.00 lb  
 Tare Weight 36,580.00 lb      Inbound --  
 Net Weight 43,780.00 lb 21.89 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.89	TN	SH-DOMT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*  
 SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

96  
0550896

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Foothill Golden, CO 80401 303-273-3998	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Sol		CO LPT 071200 1511915		19. Total Quantity 20. Unit Wt/Vol	
				7 Yards 7-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 7 5 04	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name James H. Kenna		Signature <i>[Signature]</i>		Month Day Year 9 8 04	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

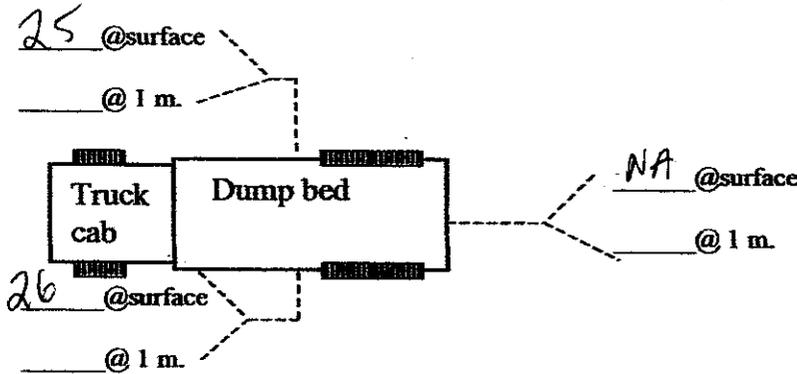
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1104 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

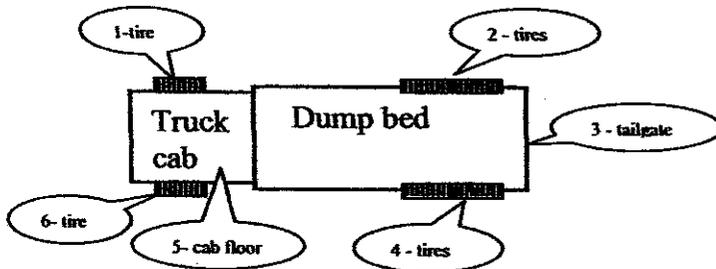
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25 mrem)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



23

# NON-HAZARDOUS WASTE MANIFEST

## 0550897

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facility Name 3000 E. 1st St Golden, CO AQUIFAC # 18167 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Horn Oil		CO 067 070908 1511815		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Beckman				7	5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		9	5
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature			
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519555

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
730603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y311915

SITE 01	TICKET 590007	GRID 0000
WEIGHMASTER 1500058 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 11:20 am	
DATE OUT 5 September 2007	TIME OUT 11:50 am	
VEHICLE Y311915	ROLL OFF	
REFERENCE 0550897	ORIGIN	

Gross Weight 32,000.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 46,900.00 lb 23.45 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.45	TN	SW-COMT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

## 0550897

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3968			6. Phone ( ) 303-273-3968		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 90 Golden, CO ADDRESS # 983000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 107 071901 10/1/95		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Binkman		Signature <i>[Signature]</i>		Month 1	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHILLAN		Signature <i>[Signature]</i>		Month 9	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

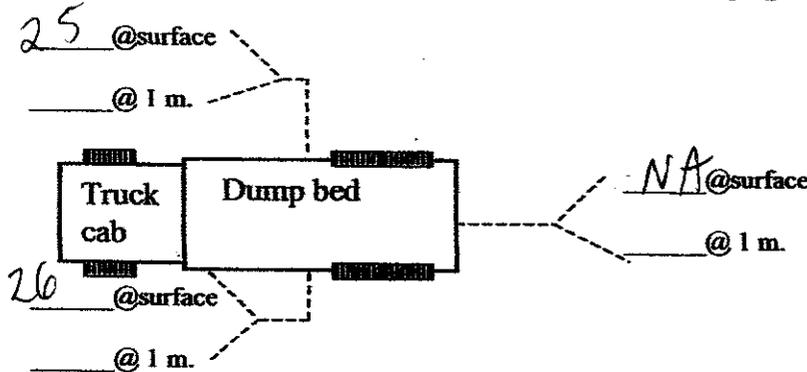
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1115 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

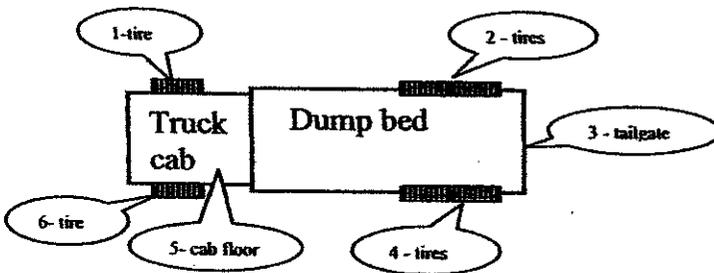
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



24

# NON-HAZARDOUS WASTE MANIFEST

## 0550899

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-275-3098				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-275-3098	
7. Transporter #1 Company Name Joe Grieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 20 Golden, CO 80601 (Distance School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Hazardous		17. Allied Waste Approval # and Exp. Date 20167077003 YE11915		18. Containers	
				No.	Type
				184	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brakman		Signature <i>[Signature]</i>		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month 10	Day 05
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

FOOTHILLS LANDFILL  
 8700 HIGHWAY 92  
 GOLDEN  
 CO  
 746403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# Y511915

24 519662

SITE 01	TICKET 590014	GRID 0000
WEIGHMASTER 800056 Barbara Jo S		
DATE IN 5 September 2007		TIME IN 11:32 am
DATE OUT 5 September 2007		TIME OUT 11:32 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0550899	ORIGIN	

Gross Weight 33,320.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 46,120.00 lb 23.06 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.06	TN	SW-CDNT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

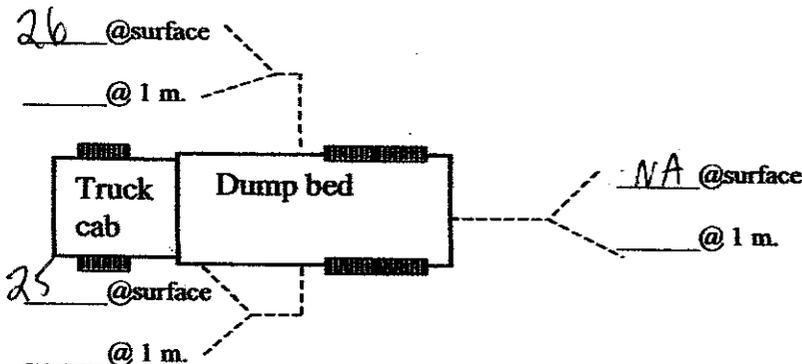


SIGNATURE *[Handwritten Signature]*

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1124 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

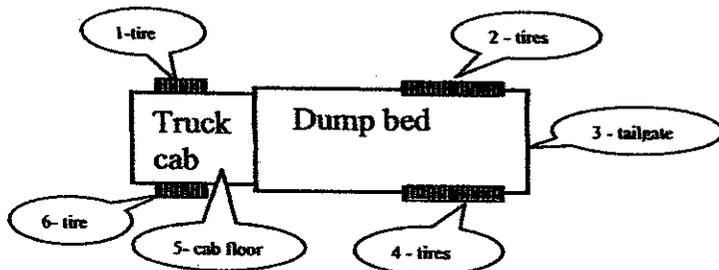
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

0550898

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3693				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698	
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		10. Transporter #2 Company Name		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3010 1/2 Hwy 95 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norml Soil		CO L67 070903 1511015		19. Total Quantity 0 Drums Y-Yards	
				20. Unit G-Gallons T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature	
				Month Day Year 11 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Beckman				Signature	
				Month Day Year 9 8 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

GENERATOR'S COPY

COM000033

319671

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YS11915

SITE 01	TICKET 590023	GRID 0000
WEIGHMASTER #500054 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 11:42 am	
DATE OUT 5 September 2007	TIME OUT 11:42 am	
VEHICLE YS11915	ROLL OFF	
REFERENCE 0550898	ORIGIN	

Gross Weight 89,980.00 lb  
Tare Weight 37,700.00 lb      Imboured -  
Net Weight 52,280.00 lb 26.14 Tn

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.14	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550898

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3850			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Utah St Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Globe		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Proville Landfill 6900 Hwy 92 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 167 070908 Y611315		19. Total Quantity 20. Unit Wt/Vol	
				15 Y-Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature		Month Day Year 9 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve J. Cannon		Signature		Month Day Year 9 5 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

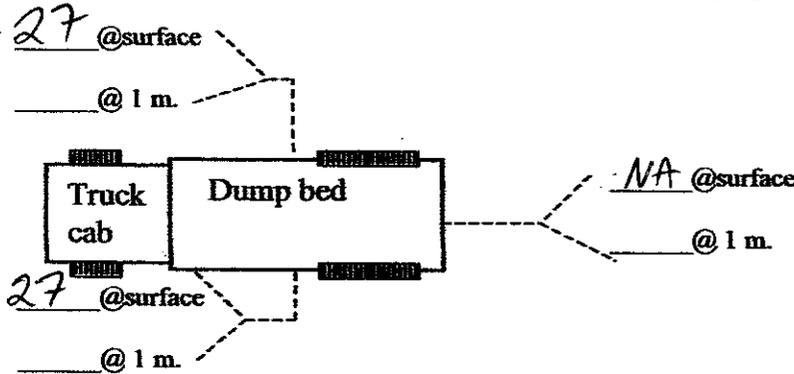
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/04 1130 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

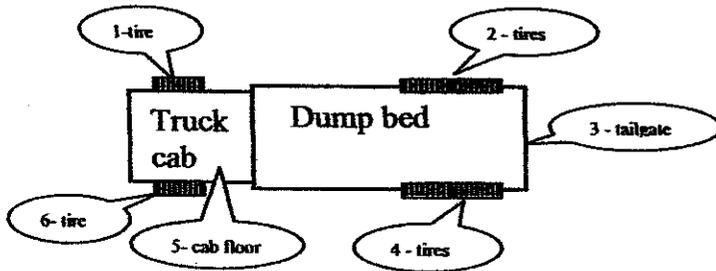
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



NON-HAZARDOUS WASTE MANIFEST

0550900

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 W. 14th St Golden, CO 80401 303-273-3058			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3058				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 W. 14th St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity 0-Drums	20. Unit Wt/Vol Gallons
a. Normal Soil		CO 157 070908 1511015		18	4	7 Drums	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman				Signature		Month Day Year 7 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Foy				Signature		Month Day Year 09 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

519674

FOOTHILLS LANDFILL  
 2900 HIGHWAY 92  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590024	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 11:47 am	
DATE OUT 5 September 2007	TIME OUT 11:47 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0530900	ORIGIN	

Gross Weight 86,400.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 49,860.00 lb 24.93 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.93	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LI	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0550900

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																									
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-3938			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3938																										
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone																									
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone																									
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone																									
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Birch St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone																									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																									
a. Norm Sol		00107 070908 1511915		<table border="1"> <thead> <tr> <th colspan="2">18. Containers</th> <th>19. Total Quantity</th> <th>20. Unit</th> </tr> <tr> <th>No.</th> <th>Type</th> <th>Drums</th> <th>Wt/Vol</th> </tr> </thead> <tbody> <tr> <td>18</td> <td>4</td> <td>7 Yards</td> <td>Tons</td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		18. Containers		19. Total Quantity	20. Unit	No.	Type	Drums	Wt/Vol	18	4	7 Yards	Tons	b.				c.				d.			
18. Containers		19. Total Quantity	20. Unit																										
No.	Type	Drums	Wt/Vol																										
18	4	7 Yards	Tons																										
b.																													
c.																													
d.																													
21. Additional Descriptions for Materials Listed Above																													
22. Special Handling Instructions and Additional Information																													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																													
Printed/Typed Name		Signature		Month Day Year																									
Steve Beckman				9 5 07																									
24. Transporter #1: Acknowledgement of Receipt of Materials																													
Printed/Typed Name		Signature		Month Day Year																									
Chuck Foy				09 05 07																									
25. Transporter #2: Acknowledgement of Receipt of Materials																													
Printed/Typed Name		Signature		Month Day Year																									
26. Discrepancy Indication Space																													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																													
Printed/Typed Name		Signature		Month Day Year																									
				9 5 07																									

GENERATOR

TRANSPORTER

T/S/D FACILITY

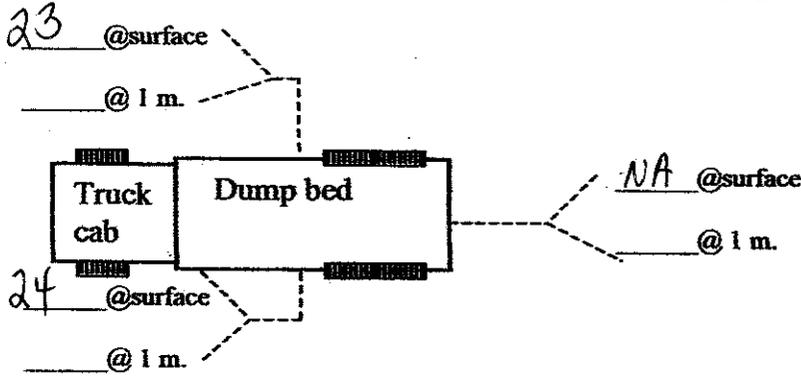
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1143 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

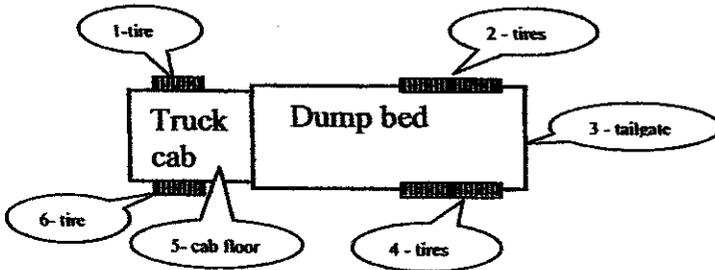
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



13

# NON-HAZARDOUS WASTE MANIFEST

## 0550901

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( ) 303-273-3998				6. Phone ( )					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Facilities Limited 6000 Hwy 90 Golden, CO 80401 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Mine Soil			17. Allied Waste Approval # and Exp. Date CO 057 07008 Y011915		18. Containers		19. Total Quantity	20. Unit	
					No.	Type	G-Drams	G-Gallons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Bradman				Signature			Month 7	Day 5	Year 04
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Maria Colero Lopez				Signature			Month 7	Day 27	Year 04
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519680

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 890032	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 5 September 2007		TIME IN 12:03 PM
DATE OUT 5 September 2007		TIME OUT 12:03 PM
VEHICLE YD11915		ROLL OFF
REFERENCE 0030901	ORIGIN	

Contract: YD11915

Gross Weight 86,600.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 50,900.00 lb 25.45 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
25.45	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



13

# NON-HAZARDOUS WASTE MANIFEST

0550901

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3098				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098	
4. Phone ( ) 303-273-3098			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Toubette Landfill 8800 Hwy 90 Golden, CO (Allied Waste # 000003) (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 187 070003 1511815		19. Total Quantity D-Drums Y-Yards 20. Unit Wt/Vol G-Gallons T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>	
				Month Day Year 7 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Matt Colare Lopez				Signature <i>[Signature]</i>	
				Month Day Year 07 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

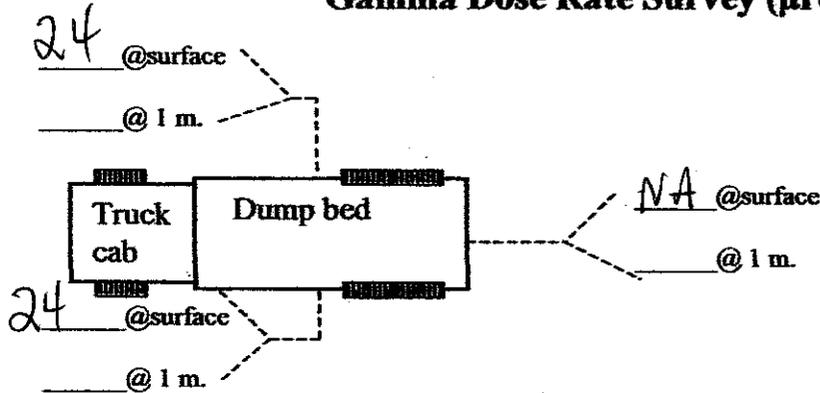
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1210 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

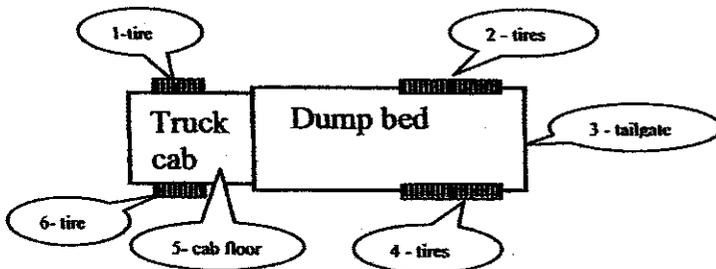
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

961  
0550902

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado Landfill 8900 Hwy 93 Golden, CO 80401 # 0550902 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		70187073908 Y511915		0 Drums	0 Cans
b.				Y-Yards	T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 7 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]			Signature <i>[Signature]</i>		Month Day Year 7 5 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

313894

FOOTHILLE LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590047	GRID 0000
WEIGHMASTER 8300056 Barbara Jo S		
DATE IN 5 September 2007		TIME IN 12:27 pm
DATE OUT 5 September 2007		TIME OUT 12:27 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 0550902	ORIGIN	

Gross Weight 71,260.00 lb  
 Tare Weight 34,400.00 lb Inbound -  
 Net Weight 36,860.00 lb 18.43 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.43	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

961  
0550902

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1501 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1501 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non Sol		CO 067 070900 Y511915		19. Total Quantity D Drums Y-Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Gore Decker		Signature <i>[Signature]</i>		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]		Signature <i>[Signature]</i>		Month 7	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

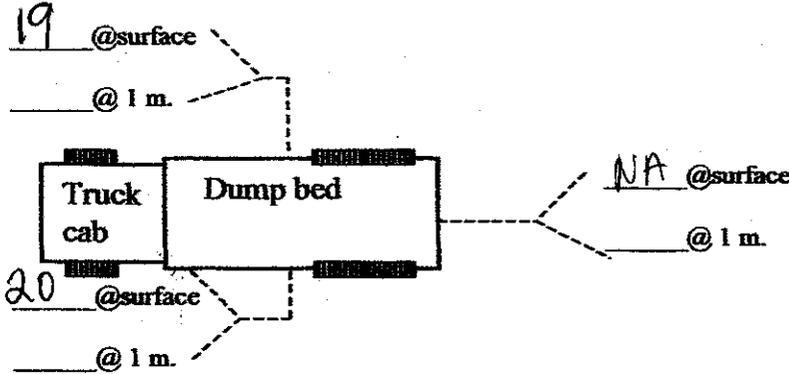
TRANSPORTER #1

CCM000034

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1237 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

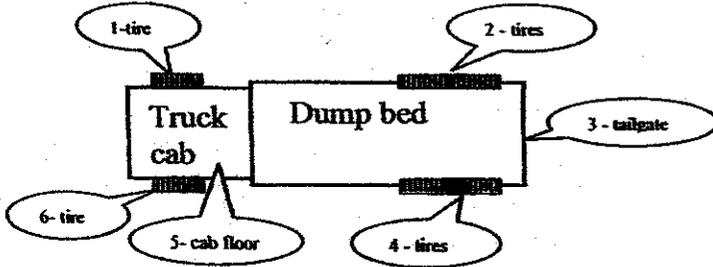
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



95

# NON-HAZARDOUS WASTE MANIFEST

## 0550903

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Lincoln St Golden, CO 80401 303-273-3056			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3056		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Control Lab 3500 Hwy 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
a. Norm Box		00 LB7 070908 Y5 1915		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve B...		<i>[Signature]</i>		9 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
[Name]		<i>[Signature]</i>		1 1 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
[Name]		<i>[Signature]</i>		[Date]	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
[Name]		<i>[Signature]</i>		[Date]	

GENERATOR

TRANSPORTER

T/S/D FACILITY

510712

FOOTHILLS LANDFILL  
 8900 HIGHWAY 70  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 570046	GRID 0000
WEIGHMASTER 500056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 12:56 pm	
DATE OUT 5 September 2007	TIME OUT 12:56 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550903	ORIGIN	

Gross Weight 56,180.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 19,200.00 lb 9.60 TM

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
9.60	TM	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



45

# NON-HAZARDOUS WASTE MANIFEST

## 0550903

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3898			6. Phone ( ) 303-273-3898		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 1870 Hwy 99 Golden, CO 80401 (Allied Waste # 960903 (Colorado School of Mines))		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Num: Soil		CO LEF 070903 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Binkman				9	5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
John J. ...				1	1 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

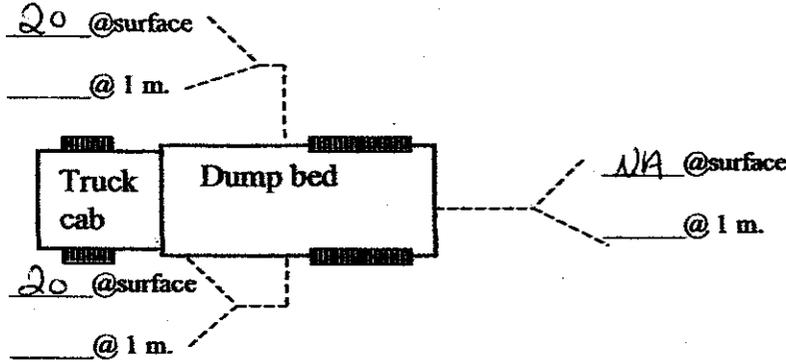
TRANSPORTER #1

COM00093

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1247 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: J004

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

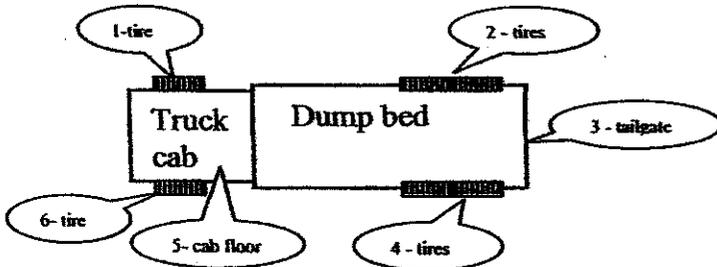
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

04  
0550904

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 7. Metals Can Mill 8500 Hwy 80 Golden, CO ACCOUNT # 000003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 157 07/003 15/11/915		18. Containers	
				No.	Type
a. Harm Sol				Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Buchanan			Signature 		Month Day Year 7 5 01
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas			Signature 		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519723

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590074	GRID 0000
WEIGHMASTER #800056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 1:06 pm	
DATE OUT 5 September 2007	TIME OUT 1:06 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0530904	ORIGIN	

Gross Weight 50,400.00 lb  
 Tare Weight 35,640.00 lb      Inbound --  
 Net Weight 14,760.00 lb 7.88 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
7.88	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL REDCOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-5-07



NON-HAZARDOUS WASTE MANIFEST

0553904

04

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Booths Landfill 5270 Hwy 80 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 197 (7/808) Y511915		18. Containers	
				19. Total Quantity 0 Drums Y-Yards	
				20. Unit Wt/Vol Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Smith		Signature 		Month Day Year 7 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas		Signature 		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

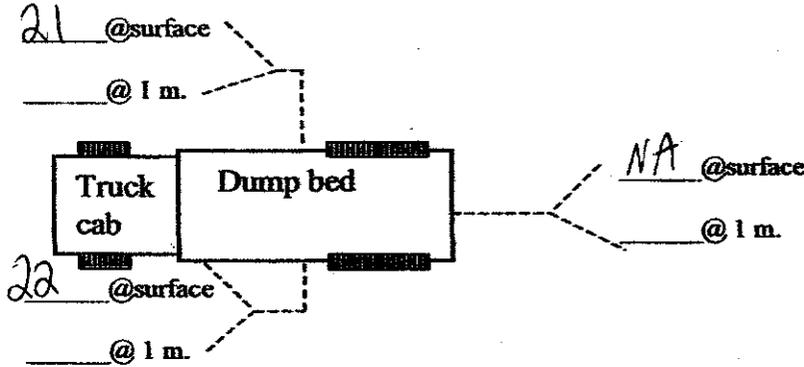
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1259 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

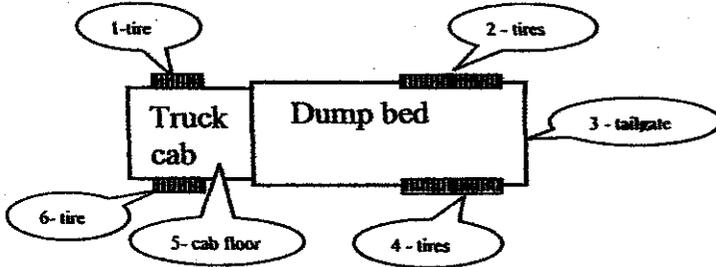
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	1220				12200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



96

# NON-HAZARDOUS WASTE MANIFEST

## 0550905

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Problems Control Rocky Hwy 50 Golden, CO 80001 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Ref		CO LA7070000 Y511915		19. Total Quantity 0 Drums 0 Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bestway		Signature <i>[Signature]</i>		Month Day Year 1 5 05	
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

510732

FOOTHILLS LANDFILL  
 8700 HIGHWAY 92  
 GOLDEN  
 CO  
 804003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

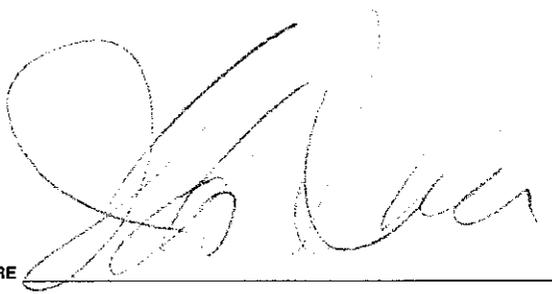
Contract: Y511915

SITE 01	TICKET 890056	GRID 0000
WEIGHMASTER 890056 Barbara Jo-S		
DATE IN 5 September 2007		TIME IN 1418 pm
DATE OUT 5 September 2007		TIME OUT 1418 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 0530905	ORIGIN	

00 Gross Weight 60,140.00 lb  
 Tare Weight 36,580.00 lb      Inbound -  
 Net Weight 23,560.00 lb 11.75 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.75	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE





96

# NON-HAZARDOUS WASTE MANIFEST

## 0550905

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3000			6. Phone ( ) 303-273-3000		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontville Landfill 630 Hwy 20 Golden, CO ACCOUNT # 842603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070000 1511016			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Berkey		Signature: [Signature]		Month: 7	Day: 5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando Barron		Signature: [Signature]		Month: 9	Day: 12
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month:	Day:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month:	Day:

GENERATOR

TRANSPORTER

T/S/D FACILITY

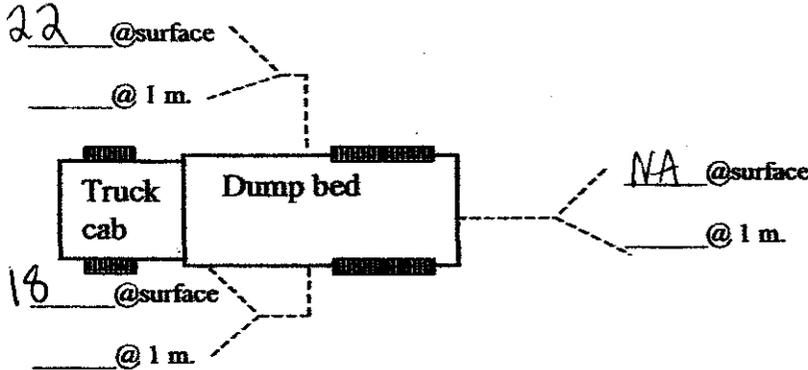
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1312 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

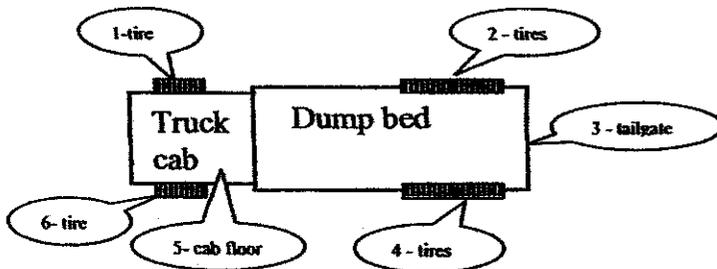
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

0550906

23

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401 (ACCOUNT # 000003 Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date CO 187 07/906 Y511015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month 7	Day 5
				Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Pughan		Signature 		Month 9	Day 5
				Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
				Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519740

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
940603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 590095	GRID 0000
WEIGHMASTER 30005e Barbara Jo E		
DATE IN 5 September 2007		TIME IN 1:29 am
DATE OUT 5 September 2007		TIME OUT 1:29 pm
VEHICLE YE11915		ROLL OFF
REFERENCE 0830906	ORIGIN	

Gross Weight 43,530.00 lb  
Tare Weight 35,100.00 lb  
Net Weight 25,430.00 lb 14.24 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

0550906

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6900 Hwy 10 Golden, CO ACCOUNT # 48603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date CO187070006 Y511915		18. Containers	
				No.	Type
b.				18 Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 9 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Pielan		Signature <i>[Signature]</i>		Month Day Year 9 5 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name [Signature]		Signature <i>[Signature]</i>		Month Day Year 9 5 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

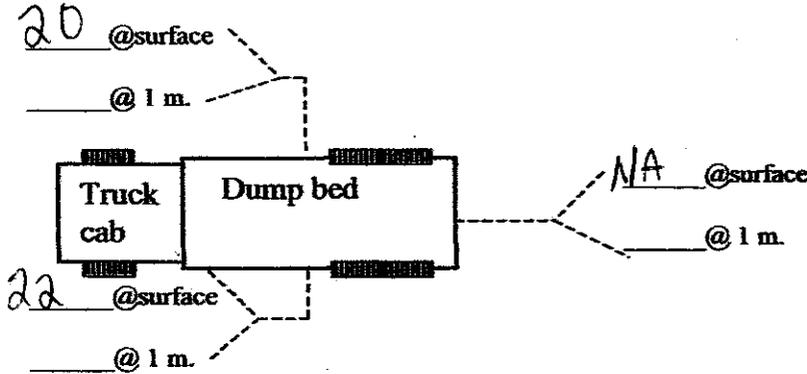
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1326 Surveyed by: J. Mattson G. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

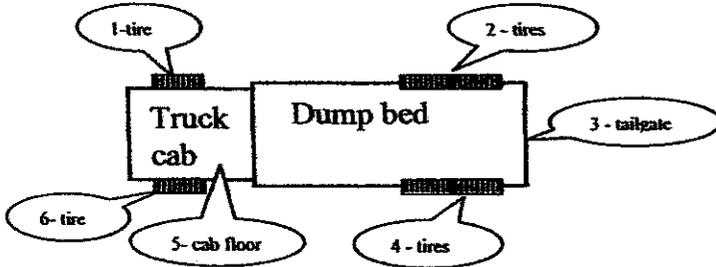
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0

24

519731

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806605  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 550106	GRID 0000
WEIGHMASTER #800056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 1:48 pm	
DATE OUT 5 September 2007	TIME OUT 1:48 pm	
VEHICLE YE11915	ROLL OFF	
REFERENCE 0550707	ORIGIN	

Gross Weight 40,520.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 23,320.00 lb 11.66 TN

Enclosed --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.66	TN	SW-COFT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*

SIGNATURE



NON-HAZARDOUS WASTE MANIFEST

0550907

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3090			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3090		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name JOE GRIEVE TRUCKING		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address Footprints Landfill 5500 Hwy 50 Golden, CO ACCOUNT # 447213 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Namt Soil		CC107070903 Y51181E		19. Total Quantity 18 Y-Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 7 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Shannon			Signature <i>[Signature]</i>		Month Day Year 07 05 08
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

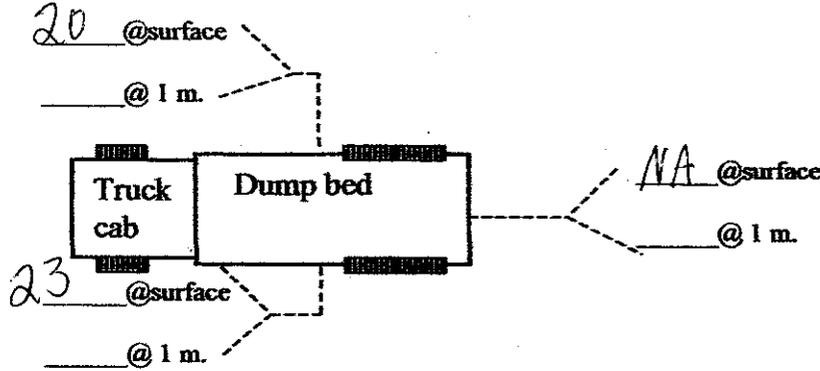
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1337 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

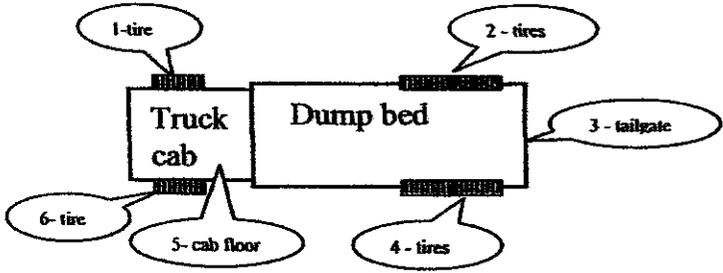
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

12  
0550908

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3386			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3098		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name GRIWE #112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Buffalo Landfill 2500 Hwy 30 Golden, CO ACCOUNT # 991000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. None Sent		17. Allied Waste Approval # and Exp. Date CO167070908-1511915		18. Containers	
				No.	Type
				18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name SIC-Business			Signature <i>[Signature]</i>		Month Day Year 7 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name John J. Olson			Signature <i>[Signature]</i>		Month Day Year 7 5 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

310750

FOOTHILLE LANDFILL  
8940 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET E90111	GRID 0000
WEIGHMASTER 4500036 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 1:57 pm	
DATE OUT 5 September 2007	TIME OUT 1:57 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550708	ORIGIN	

Contract: Y511915

Gross Weight 54,660.00 lb  
Tare Weight 37,700.00 lb  
Net Weight 16,960.00 lb @ 48 TR

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
2.48	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0550908

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name G.M.W.C. #112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8500 Hwy 93 Golden, CO ACCOUNT # 80816 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 00167 070000 7/1/97		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature 	
				Month Day Year 7 5 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean J. Olson				Signature 	
				Month Day Year 7 5 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

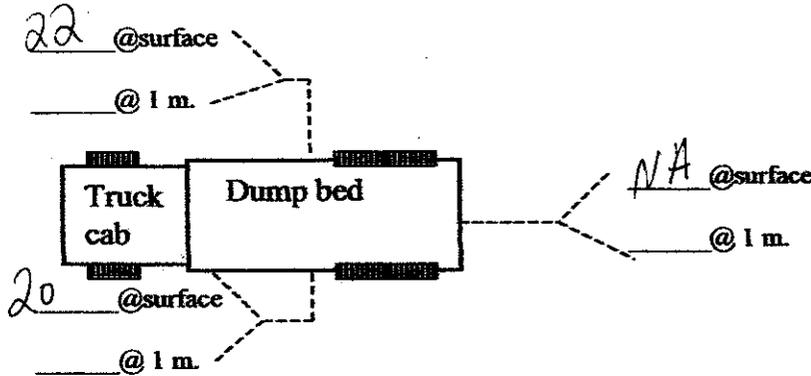
60100038

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 1352 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

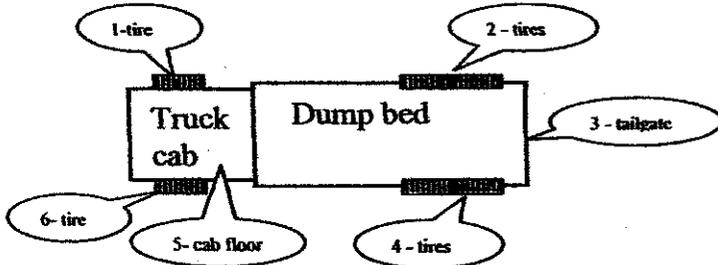
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

# 0550909

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3006			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		0016747008 01/19/15		19. Total Quantity 18 Yards	
				20. Unit Wt/Vol Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Graham		Signature		Month Day Year 7 27 15	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature		Month Day Year 09 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

519781

FOOTHILLS LANDFILL  
2900 HIGHWAY 95  
GOLDEN  
CO  
940603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590117	GRID 0000
WEIGHMASTER 1450066 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 2:12 pm	
DATE OUT 5 September 2007	TIME OUT 2:12 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550909	ORIGIN	

Gross Weight 48,540.00 lb  
Tare Weight 36,540.00 lb      Inbound --  
Net Weight 12,000.00 lb 6.00 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
6.00	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0550909

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-773-3906			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Cortez Hills Landfill 2900 Hwy 63 Golden, CO 80401 # 899666 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity Drums	20. Unit Wt/Vol Gallons
				No.	Type		
a. Heavy Soil		CO 167470908 YS11315		18	4	7-Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month	Day	Year	
Steve L...				1		07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day	Year	
Chuck Foy				09	05	07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day	Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day	Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

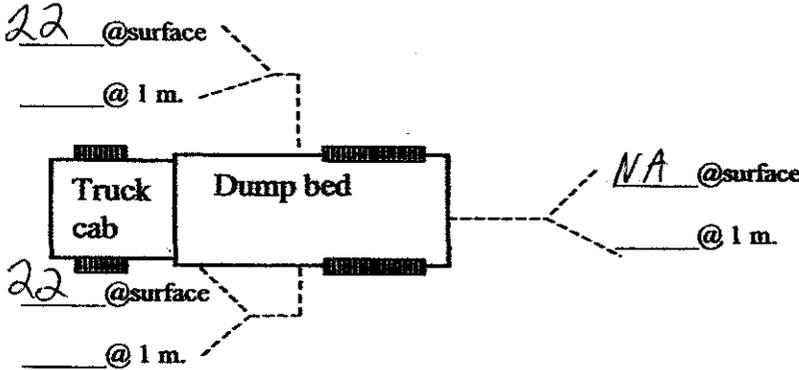
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/5/08 1407 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

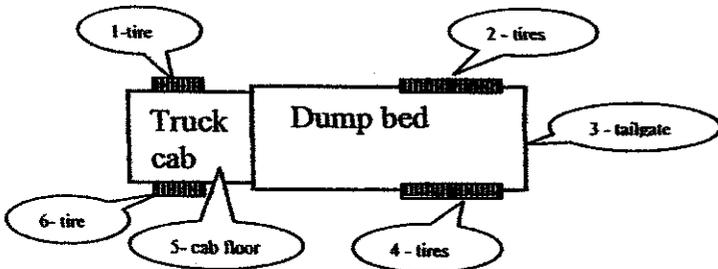
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 µrem/hr	0.0 α	253.0 β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

13  
0530910

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 167670306 YS11316		19. Total Quantity 18 Y-Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 17 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rafael Collazo Lopez		Signature <i>[Signature]</i>		Month Day Year 09 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

518773

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE1191E

SITE 01	TICKET 870129	GRID 0000
WEIGHMASTER 8600056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 2:30 PM	
DATE OUT 5 September 2007	TIME OUT 2:30 PM	
VEHICLE YE1191E	ROLL OFF	
REFERENCE 0330910	ORIGIN	

GC Gross weight 37,260.00 lb  
 Tare Weight 35,700.00 lb Inbound --  
 Net Weight 21,960.00 lb 10.98 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
10.98	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0550910

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1900 Hwy 57 Golden, CO ACCOUNT # 90016 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO 687 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						0 Drums	0 Gallons
				18		Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Brannon		Signature:		Month Day Year: 1 5 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Rafael Collazo Lopez		Signature:		Month Day Year: 09 05 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name:		Signature:		Month Day Year:			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:		Signature:		Month Day Year:			

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

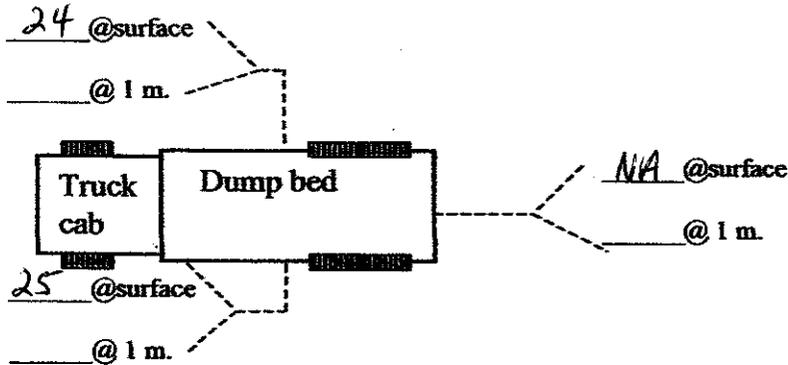
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1422 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

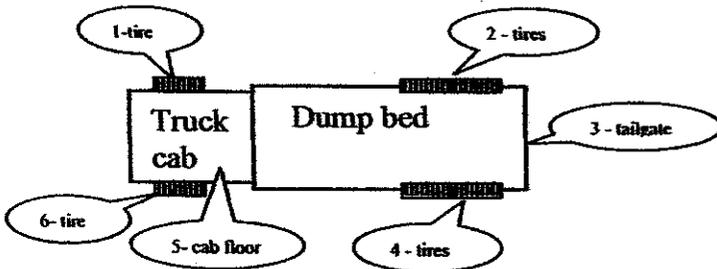
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

0550911

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Bird St Golden, CO 80401		
4. Phone ( ) 303-276-3888			6. Phone ( ) 303-276-3898		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Landfill 6500 Hwy 50 Golden, CO 80401 (Adjacent to Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		00187 (70000) YS11815			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Beckman				7	5
Year					
2002					
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
H. AD. M. M. C.				7	5
Year					
2002					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Year					
2002					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
Year					
2002					

GENERATOR

TRANSPORTER

T/S/D FACILITY

519730

FOOTHILLE LANDFILL  
 8700 HIGHWAY 92  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590130	GRID 0000
WEIGHMASTER 8000056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 2:40 pm	
DATE OUT 5 September 2007	TIME OUT 2:40 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0520711	ORIGIN	

00 Gross Weight 55,620.00 lb  
 Tare Weight 34,400.00 lb      Inbound -  
 Net weight 21,220.00 lb 10.61 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
10.61	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0550911

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill #55X1 Hwy 60 (Golden, CO) ACCOUNT # 109403 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 187070008 Y511815		18. Containers	
				No.	Type
					18 Yards Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 7	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed Name		Signature 		Month	Day

GENERATOR

TRANSPORTER

TRANSPORTER #1

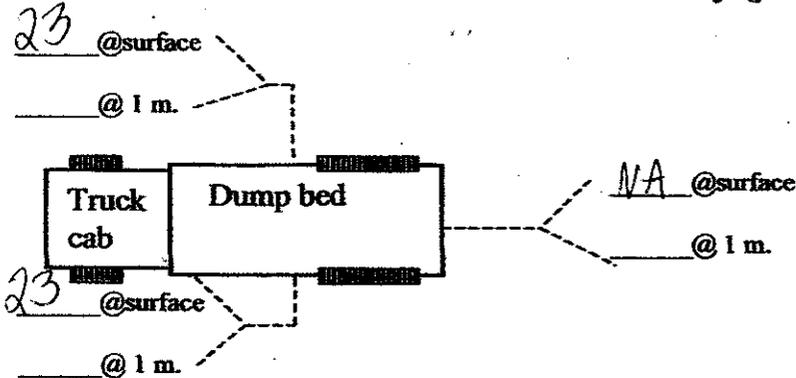
COM00003

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1437 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

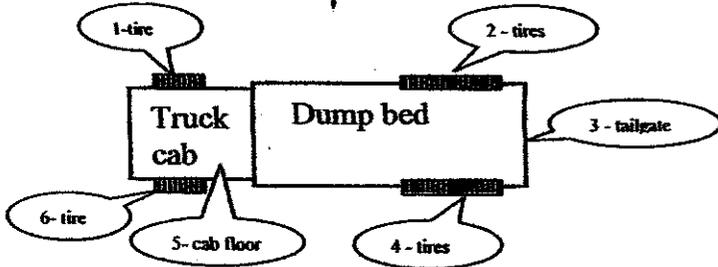
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



NON-HAZARDOUS WASTE MANIFEST

0550912

75

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Wino St Golden, CO 80401 303-270-3908				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-270-3908	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 3800 Hwy 93 Golden, CO ACCOUNT # 0550912 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 147 070906 / 511915		0	0 Drums
b.					0 Drums
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Brathman				7	5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Murd...				1	1
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY



75

# NON-HAZARDOUS WASTE MANIFEST

0550012

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3888			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3888		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO ACCOUNT # 89900 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit Wt/Vol	
a. None Sent		CO 087470006 15/1915		D-Drums Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benson			Signature:		Month: 7   Day: 5   Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: 1   Day: 1   Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month:   Day:   Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: 7   Day: 1   Year: 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000033

519788

FOOTHILLS LANDFILL  
 8900 HIGHWAY 70  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191F

SITE 01	TICKET 590145	GRID 0000
WEIGHMASTER 1600036 Barbara Jo B		
DATE IN 5 September 2007		TIME IN 2:53 pm
DATE OUT 5 September 2007		TIME OUT 2:53 pm
VEHICLE Y51191F		ROLL OFF
REFERENCE 0530912	ORIGIN	

Gross Weight 78,320.00 lb  
 Tare Weight 36,980.00 lb Inbound -  
 Net Weight 41,340.00 lb 20.67 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.67	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



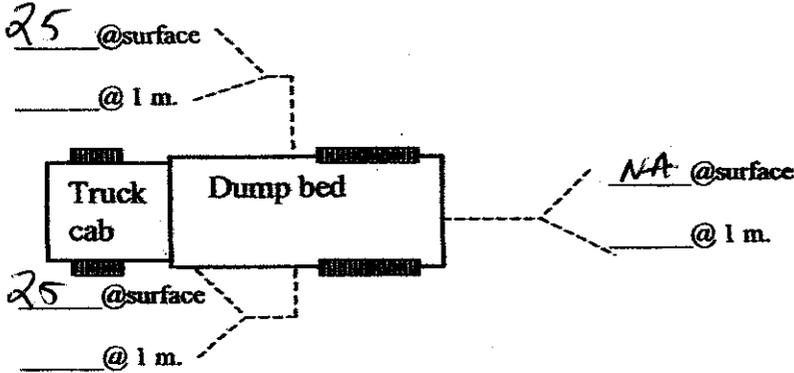
SIGNATURE

*[Handwritten Signature]*

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 1445 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: JD04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

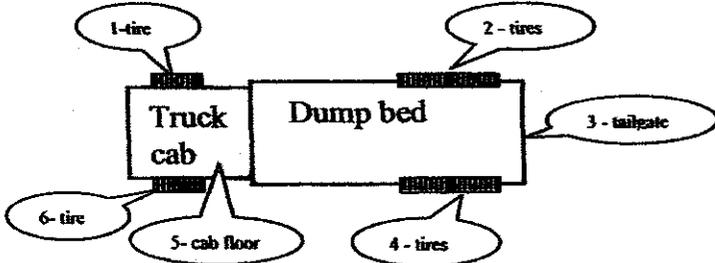
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

# 0550919

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3950			6. Phone ( ) 303-273-3950		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Northgate Landfill 1800 Hwy 10 Golden, CO ACCOUNT # 000001 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 107 070908 YS 11915		18. Containers	
				No.	Type
a. Norm Soil					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>			Signature <i>[Signature]</i>		Month <i>12</i> Day <i>2</i> Year <i>03</i>
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature <i>[Signature]</i>		Month Day Year
Printed/Typed Name <i>Scott Vargas</i>					
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
Printed/Typed Name					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

310502

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
926603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: 7E11915

SITE 01	TICKET 590150	GRID 0000
WEIGHMASTER R000080 SIMA C		
DATE IN 5 September 2007		TIME IN 3:17 pm
DATE OUT 5 September 2007		TIME OUT 3:19 pm
VEHICLE 7E11915		ROLL OFF
REFERENCE 0850919	ORIGIN	

Gross Weight 84,000.00 lb  
Tare Weight 38,640.00 lb      Inbound -  
Net Weight 45,360.00 lb 24.18 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.18	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-5-07



# NON-HAZARDOUS WASTE MANIFEST

# 0550919

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3968			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3968		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Front Hills Landfill 8000 Hwy 90 Golden, CO 80401 (aka # 800013 (Colorado School of Mines))		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 167 070398 1511915		18 7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brakman				1	15 99
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Santitas Vargas				11	15 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
Mural del				11	15 97

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

9-5-07 Pile B

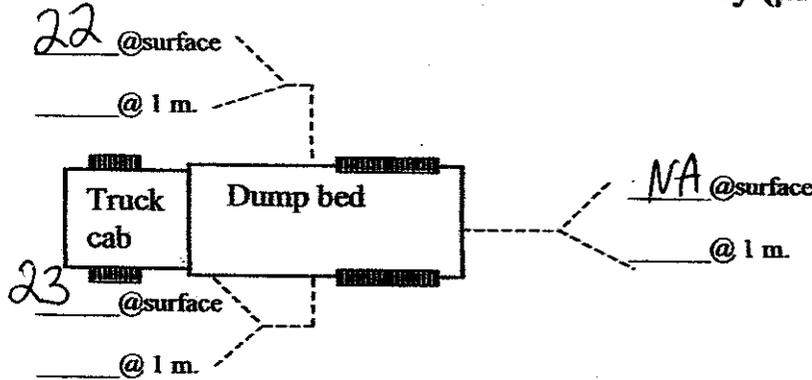
## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Grieve 23	9-5-07	0700	0717	18 cy	81.0
Grieve 24		0700	0730		80.6
Grieve 12		0700	0741		81.5
Grieve 8		0700	0751		84.0
Collazo 13		0715	0755		82.8
Marquez 961		0730	0802		81.9
Ruiz 95		0730	0808		78.7
JD 04		0730	0816		77.1
Marquez 96		0730	0822		75.4
Grieve 23		0820	0839		81.8
Grieve 24		0830	0847		84.7
Grieve 12		0850	0859		85.2
Grieve 8		0855	0905		85.4
Collazo 13		0905	0914		81.9
Marquez 961		0914	0920		79.3
Ruiz 95		0920	0926		78.3
JD 04		0925	0932		77.1
Marquez 96		0932	0939		80.7
Grieve 23		0939	0945		87
Grieve 24	↓	0945	0955	↓	83.7

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0717 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

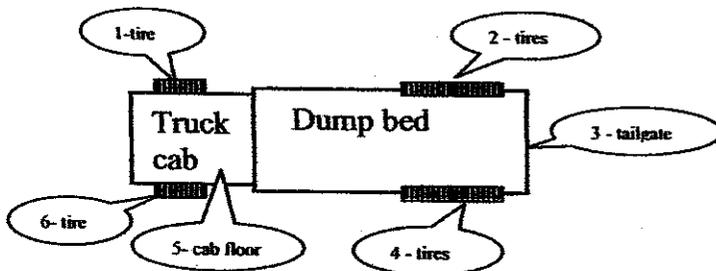
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

93  
0550980

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address School of Mines Research Institute 1501 Wino St. Golden, CO 80401 303-273-3906				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3906									
4. Phone ( )				6. Phone ( )									
7. Transporter #1 Company Name				8. US EPA ID Number				9. Transporter #1's Phone					
10. Transporter #2 Company Name				11. US EPA ID Number				12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Allied Waste 5000 Hwy 50 Golden, CO 80401 #1 # 051915 (Colorado School of Mines)				14. US EPA ID Number				15. Facility's Phone					
16. Waste Shipping Name and Description a. Norm Sol				17. Allied Waste Approval # and Exp. Date CO 167 0709/05-511915				18. Containers		19. Total Quantity		20. Unit	
								No.		Type		Drums	
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Brinkman				Signature 				Month 7		Day 5		Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name Mark Phelan				Signature 				Month 9		Day 5		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name				Signature				Month		Day		Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519512

FOOTHILL LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 559663	GRID 0000
WEIGHMASTER P000000 BINA C		
DATE IN 5 September 2007		TIME IN 7:05 am
DATE OUT 5 September 2007		TIME OUT 7:05 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0550960	ORIGIN	

Gross Weight 81,020.00 lb  
 Tare Weight 35,100.00 lb      Impounds ---  
 Net Weight 45,920.00 lb 22.96 Tn

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.96	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

23  
0550900

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3098				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Grand Golden, CO 80401 303-273-3098	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8900 Hwy 51 Golden, CO 80401 # 9100 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 0018707008 YS11915		18. Containers	
				No.	Type
a. Non Sol					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 9	Day 5
Printed/Typed Name MARK PHELAN		Signature		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
				Year 7	

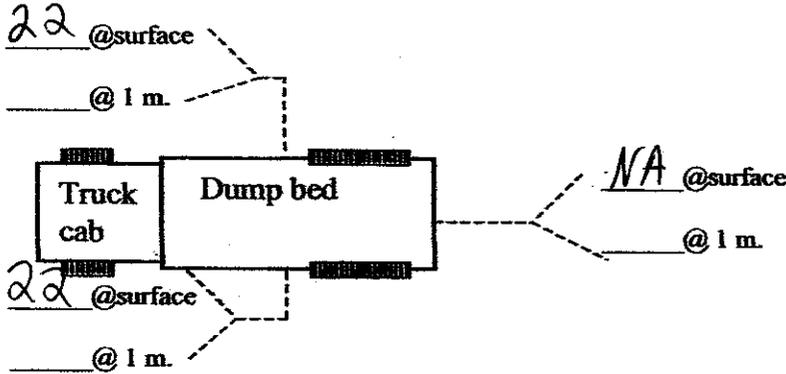
TRANSPORTER #1

COM000633

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/5/07 0730 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 24

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

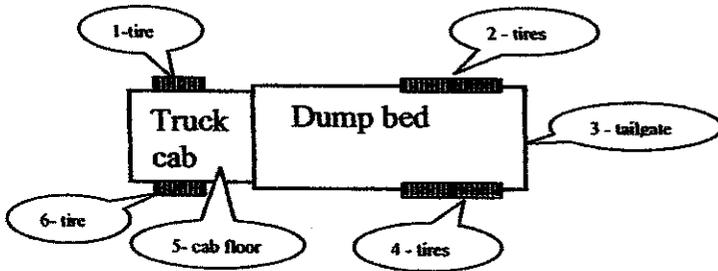
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	554.0

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

24 510513

SITE 01	TICKET 559667	GRID 0000
WEIGHMASTER		
S000050 BINA C		
DATE IN 7 September 2007	TIME IN 7:48 am	
DATE OUT 8 September 2007	TIME OUT 7:48 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550961	ORIGIN	

Gross Weight 80,500.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 43,400.00 lb 21.70 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.70	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Kens



24

# NON-HAZARDOUS WASTE MANIFEST

## 0550961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3548			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3586				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name <b>Joe Gerie Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 6071 Hwy 28 Golden, CO 80401 # 400003 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. <b>Warm Soil</b>		17. Allied Waste Approval # and Exp. Date CO LW 07/08/511915		18. Containers			
				No.	Type	19. Total Quantity D.Cups	20. Unit W/Vol Gals
				18	Y	Y Yards	Yards
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <b>Steve Beckman</b>		Signature <i>[Signature]</i>		Month	Day	Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>KER SHANNON</b>		Signature <i>[Signature]</i>		Month	Day	Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day	Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day	Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

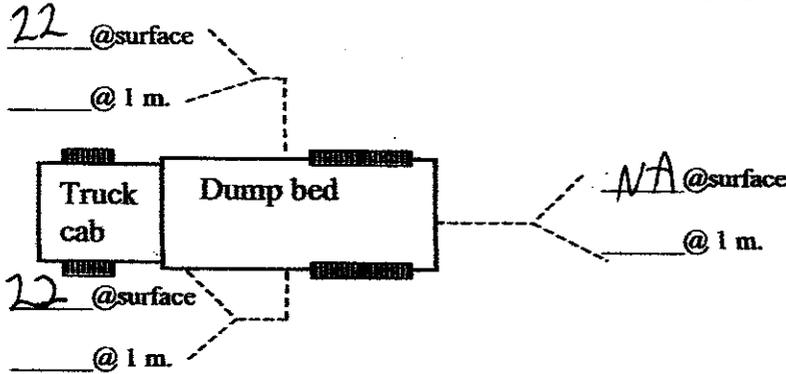
GENERATOR'S COPY

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0741 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

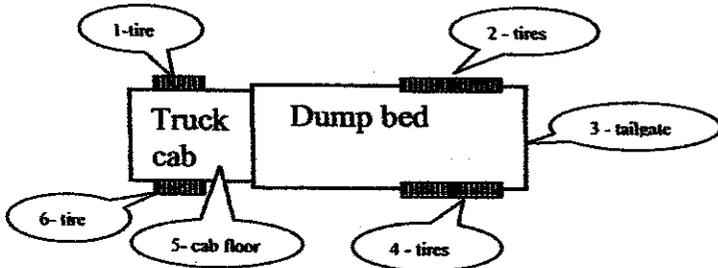
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

0550662

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Bruce St Golden, CO 80401 303-273-3996			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Ditch St Golden, CO 80401 303-273-3996		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name <i>Greene Trucking #12</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address SCHOOL OF MINES 8970 Hwy 90 Golden, CO 80401 (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 07167 07/99 1/31/95		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Seaman</i>		Signature <i>[Signature]</i>		Month 8	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Steve Seaman</i>		Signature <i>[Signature]</i>		Month 8	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

519572

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191E

SITE 01	TICKET 559973	GRID 0000
WEIGHMASTER		
RC00080 GINA C		
DATE IN 5 September 2007	TIME IN 7:55 AM	
DATE OUT 5 September 2007	TIME OUT 7:58 AM	
VEHICLE Y51191E	ROLL OFF	
REFERENCE 0550942	ORIGIN	

Gross Weight 81,520.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 43,820.00 lb 21.91 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.91	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550992

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1677 Illinois St Golden, CO 80401 303-273-3993			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3993		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Greene Trucking #112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 11th St Golden, CO ACCOUNT # 98673 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Mine Spoil		17. Allied Waste Approval # and Exp. Date CO L67 070900 Y511S15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name John J. Jones		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

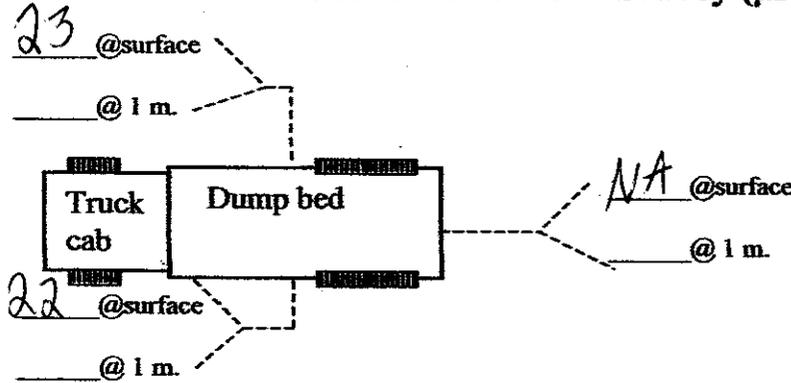
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/5/07 0751 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

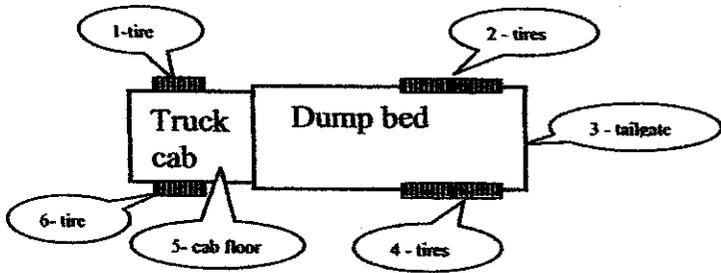
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17.0 µrem/hr	0.0 α	253.0 β
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	554.0



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550963

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fuchs's Landfill XXXX Hwy 90 Golden, CO 80401 # 160000 (Generator: School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Soil		17. Allied Waste Approval # and Exp. Date CO 167 070904 7511015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 7 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature 		Month Day Year 09 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

319527

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
804603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YEL1915

SITE 01	TICKET 889878	GRID 0000
WEIGHMASTER R000080 619A C		
DATE IN 5 September 2007	TIME IN 8:07 am	
DATE OUT 5 September 2007	TIME OUT 8:07 am	
VEHICLE YEL1915	ROLL OFF	
REFERENCE 880963	ORIGIN	

Gross Weight 84,000.00 lb  
Tare Weight 36,540.00 lb      Inbound -  
Net Weight 47,460.00 lb 23.75 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.75	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550963

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 90 Golden, CO ACCOUNT # 360603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070900 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				9 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				09 05 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
				9	

GENERATOR

TRANSPORTER

T/S/D FACILITY

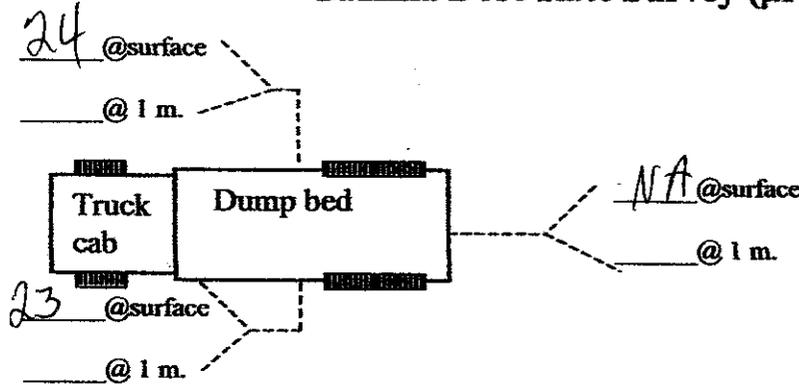
TRANSPORTER #2

COM00033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/5/07 0755 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

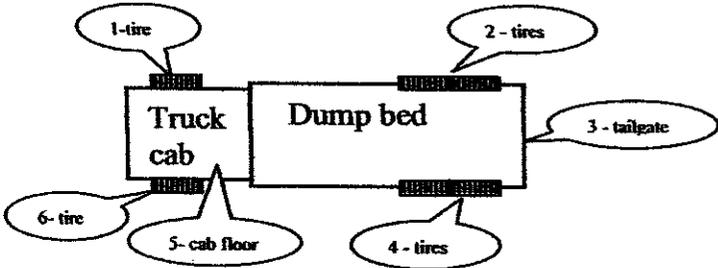
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 µrem/hr	0.0 α	253.0 β	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



NON-HAZARDOUS WASTE MANIFEST

0550964

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-275-3888			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3888		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 16707008 12/19/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rafael Allara Lopez		Signature <i>[Signature]</i>		Month 07	Day 05
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

513531

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80402  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 809832	GRID 0000
WEIGHMASTER		
REDOUGO 51NA C		
DATE IN 5 September 2007		TIME IN 8:13 am
DATE OUT 5 September 2007		TIME OUT 8:13 am
VEHICLE Y511915		ROLL OFF
REFERENCE 850764	ORIGIN	

Gross Weight 85,840.00 lb  
 Tare Weight 35,700.00 lb      Inbound -  
 Net Weight 49,140.00 lb 23.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.57	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550964

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO ACCOUNT # 887773 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Worm Soil		CO LB2 #700001511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Brinkman				7	15
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
Rafael Collazo Lopez				6	05
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

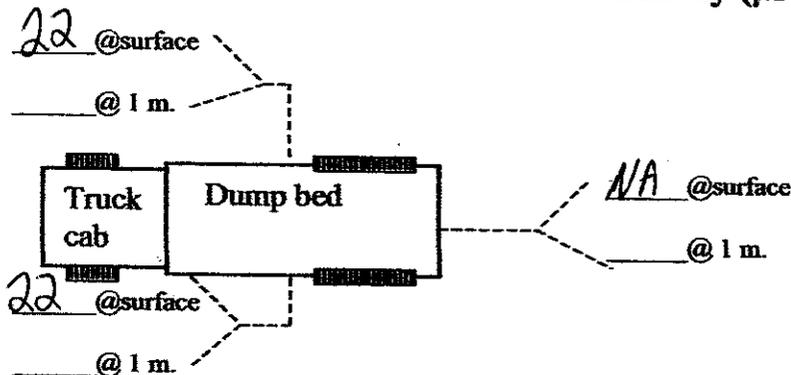
TRANSPORTER #1

COM000038

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0802 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

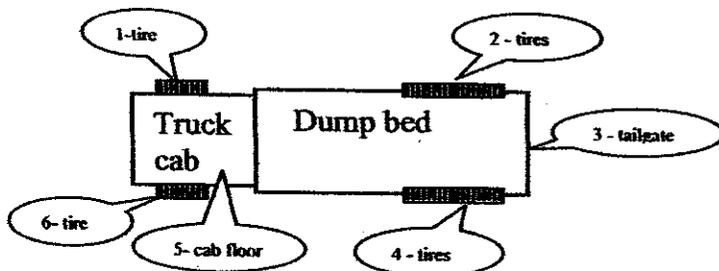
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



NON-HAZARDOUS WASTE MANIFEST

0550965

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 W. 13th St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2600 Hwy 281 Golden, CO ACCOUNT # 990000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 127 070901 7511615		18. Containers	
				No.	Type
a. Burn Soil					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 1 1 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 1 1 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY





961

# NON-HAZARDOUS WASTE MANIFEST

## 0550965

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Boothell's Landfill 2500 Hwy 93 Golden, CO ACCOUNT # 960001 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Home Soil		CO 011070008 1511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Berkman				1	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
[Signature]					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
[Signature]					

GENERATOR

TRANSPORTER

T/S/D FACILITY

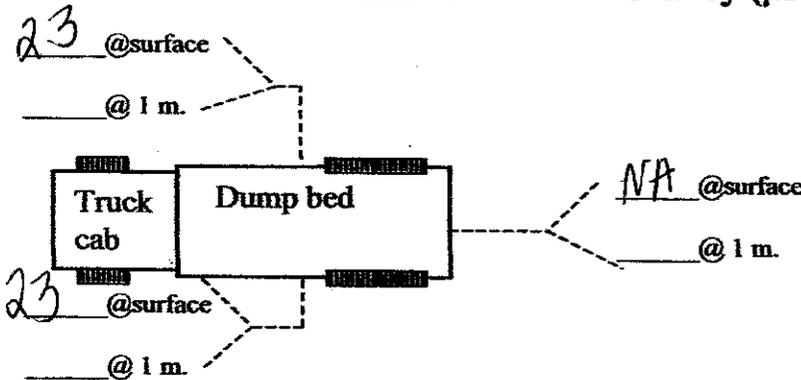
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/06 0808 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

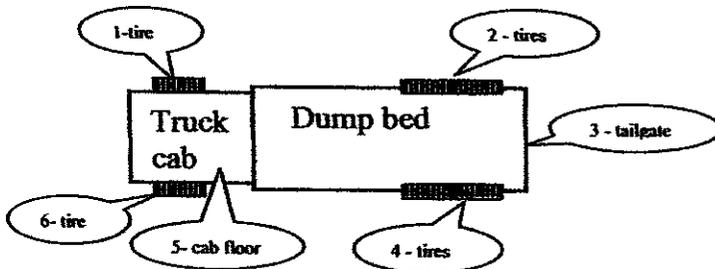
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				4220		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



95

# NON-HAZARDOUS WASTE MANIFEST

0550988

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3898		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fountain Creek 8000 N. 70th St Golden, CO (SCHOOL OF MINES RESEARCH INSTITUTE)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non-Sol		CC 167 070508 YS14915			1-Yards Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman			Signature <i>[Signature]</i>		Month Day Year 9 27 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Signature]			Signature <i>[Signature]</i>		Month Day Year 9 27 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

619537

FOOTHILLS LANDFILL  
 8900 HIGHWAY 90  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 559835	GRID 0000
WEIGHMASTER		
0000050 GINA D		
DATE IN 5 September 2007		TIME IN 8:27 am
DATE OUT 5 September 2007		TIME OUT 8:27 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0550955	ORIGIN	

Gross Weight 75,740.00 lb  
 Tare Weight 36,980.00 lb Inbound -  
 Net Weight 41,760.00 lb 20.85 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.85	TN	SW-COVT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0550968

95

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1570 Illinois St Golden, CO 80401 303-273-3886			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3886		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1570 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Heavy Soil		CO 167 070008 YS11915		19. Total Quantity 18 Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Johnson			Signature <i>[Signature]</i>		Month Day Year 1 1 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>			Signature <i>[Signature]</i>		Month Day Year 1 1 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name L. A. [Name]			Signature <i>[Signature]</i>		Month Day Year 1 1 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

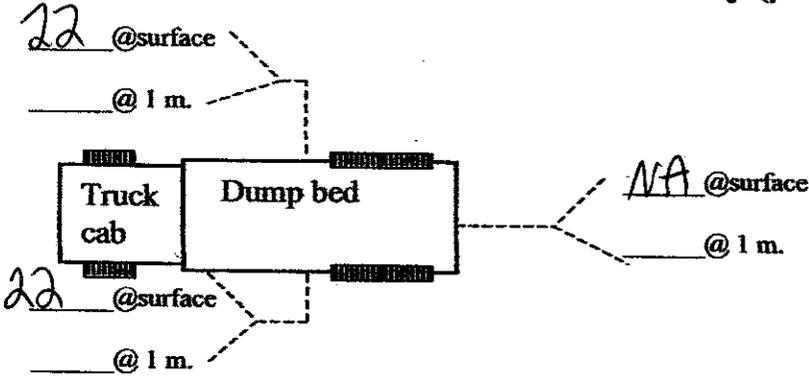
COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/08 0816 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no. /state: JD04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

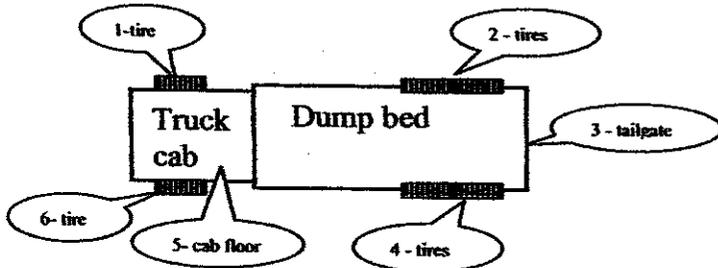
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



NON-HAZARDOUS WASTE MANIFEST

0550969

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St. Golden, CO 80401 303-273-0998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-0998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 5500 Hwy 20 Golden, CO ACCOUNT # 880819 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date CO L07 070006 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Berhman		Signature 		Month 7	Day 27
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santoso Vorjas		Signature 		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

510548

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589891	GRID 0004
WEIGHMASTER R000080 GINA C		
DATE IN 5 September 2007		TIME IN 8:33 am
DATE OUT 5 September 2007		TIME OUT 9:33 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0550987	ORIGIN	

Gross Weight 77,060.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 41,420.00 lb 20.71 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.71	TN	SM-CONT SOIL				
1.00	LN	ENVIRONMENTAL FEE				
1.00	LN	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-5-07



# NON-HAZARDOUS WASTE MANIFEST

0550969

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Comrade School of Mines Research Institute 1500 Minors St Golden, CO 80401 303-273-3698			5. Generating Location (if different) Comrade School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facinda Landfill 1500 Day St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Hom Soil		CO LG7 670908 Y511815		19. Total Quantity 7 Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Behrman		Signature 		Month 6	Day 17
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santago Vargas		Signature 		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month 9	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

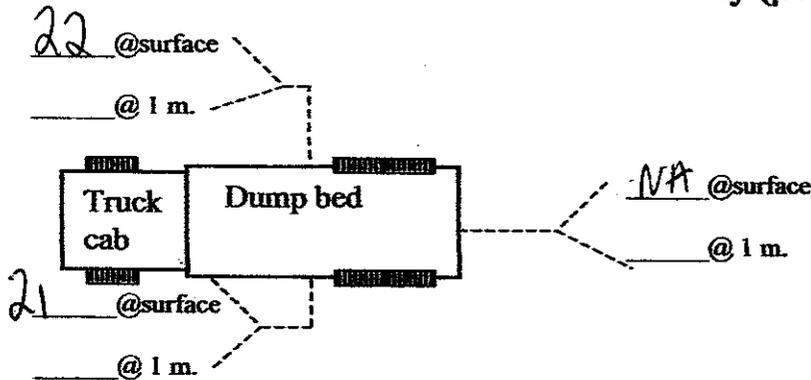
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/09 0822 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

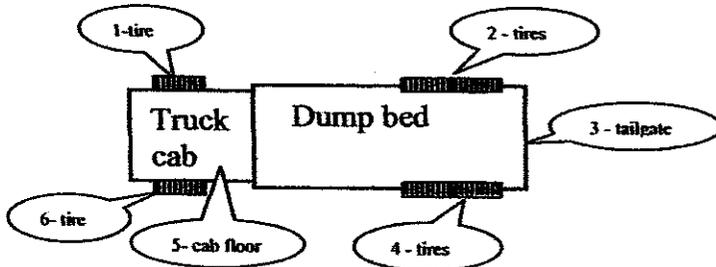
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

96  
0550967

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8600 Gray St Golden, CO 80401 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit	
a. Norm Soil		CO 167 67006 Y61101E		Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman		<i>[Signature]</i>		1 5 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Lopez		<i>[Signature]</i>		7 5 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

519545

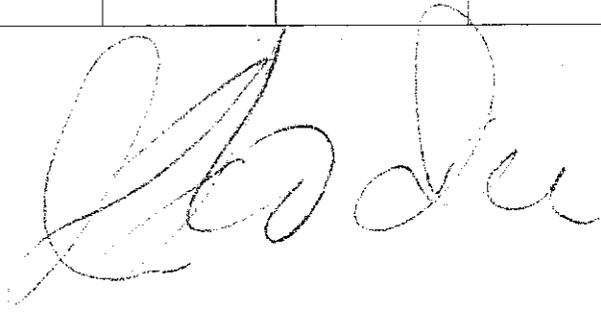
FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
750603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589896	GRID 0000
WEIGHMASTER 8300056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 8:41 am	
DATE OUT 5 September 2007	TIME OUT 3:41 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 550967	ORIGIN	

Gross Weight 75,440.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 38,860.00 lb 19.45 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.45	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_





# NON-HAZARDOUS WASTE MANIFEST

96  
0550967

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1600 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. None		001870700087611315		19. Total Quantity 0 Drums Y-Yards 20. Unit Wt/Vol 0 Gallons Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brubaker		Signature <i>[Signature]</i>		Month Day Year 7 5 04	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Lopez		Signature <i>[Signature]</i>		Month Day Year 7 15 04	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Steve Brubaker		Signature <i>[Signature]</i>		Month Day Year 7 17	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

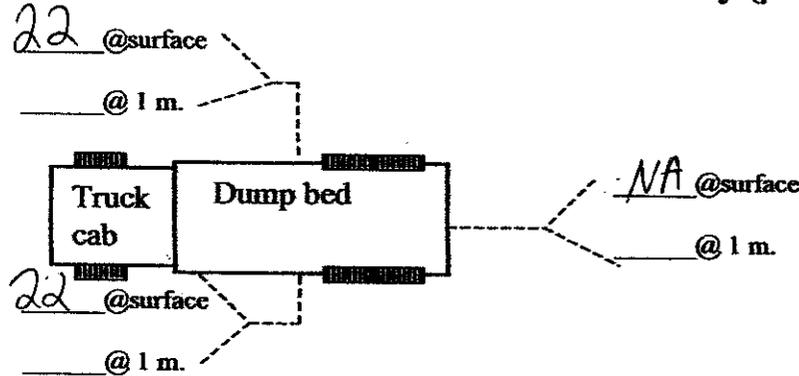
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0839 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no./state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

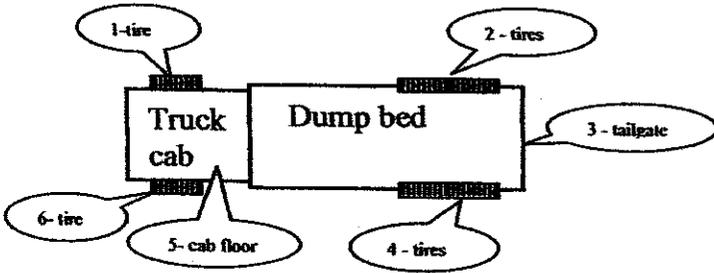
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



NON-HAZARDOUS WASTE MANIFEST

0550368

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1500 Illinois St Golden, CO 80401 303-273-0098				5. Generating Location (if different): School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-0098	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: #300 Hwy 80 Golden, CO ACCOUNT # 000003 (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		CO LGT 070008 VS 1845			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benham		Signature:		Month: 7	Day: 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name: MARK SHEWAN		Signature:	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name:		Signature:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month:	Day:

GENERATOR

TRANSPORTER

T/S/D FACILITY

510585

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
800609  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 587906	GRID 0000
WEIGHMASTER 000006 Barbara Jo S		
DATE IN 5 September 2007		TIME IN 8:58 am
DATE OUT 5 September 2007		TIME OUT 9:58 am
VEHICLE YE11915		ROLL OFF
REFERENCE 0580968	ORIGIN	

00 Gross Weight 81,800.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 46,700.00 lb 23.35 TN Inbound ~

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.35	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550368

23

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ACQUINTE 7 BRUNNEN (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Harm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070903 1011016		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 7 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Shelton		Signature <i>[Signature]</i>		Month Day Year 9 5 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year 7 5 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

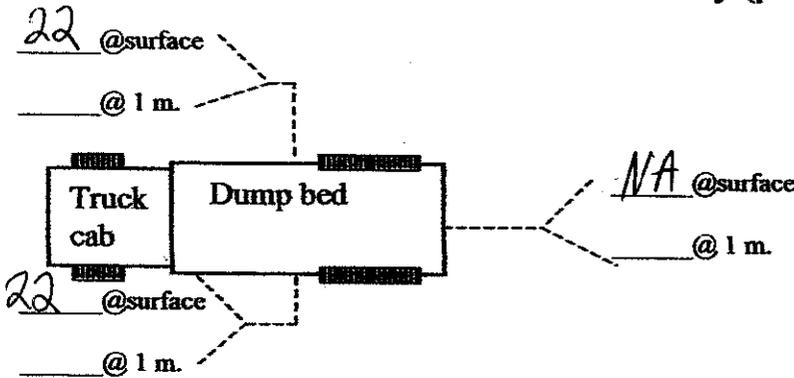
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0847 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

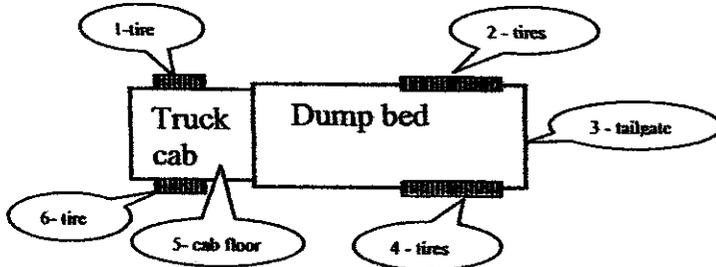
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0

24 519580

FOOTHILLS LANDFILL  
 8900 HIGHWAY 50  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401  
 Contracts YE1191B

SITE 01	TICKET 589711	GRID 0000
WEIGHMASTER 0500056 Barbers Jo S		
DATE IN 5 September 2007	TIME IN 7:03 am	
DATE OUT 5 September 2007	TIME OUT 7:03 am	
VEHICLE Y51191B	ROLL OFF	
REFERENCE 0580750	ORIGIN	

00 Gross Weight 84,720.00 lb  
 Tare Weight 37,200.00 lb Inbound  
 Net Weight 47,520.00 lb 23.76 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.76	TN	SU-CONT SOIL				
1.00	LR	ENVIRONMENTAL FEE				
1.00	LR	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kent*



24

# NON-HAZARDOUS WASTE MANIFEST

## 0550950

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-270-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-270-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8300 Hwy 95 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 187 07036/1511919		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Bergman</i>		Signature <i>[Signature]</i>		Month	Day
				1	5
					02
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Shannon</i>		Signature <i>[Signature]</i>		Month	Day
				09	05
					07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

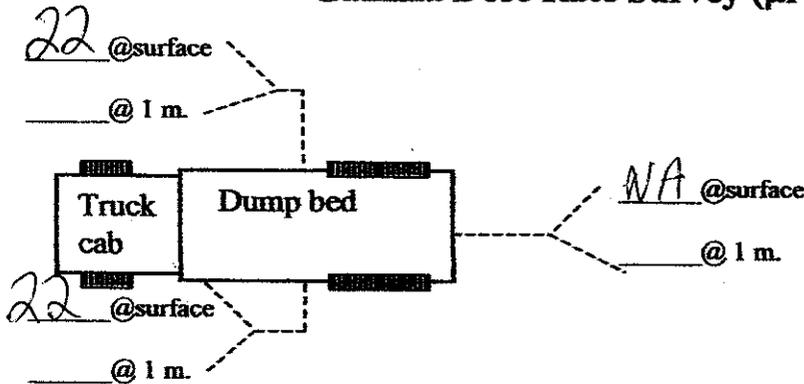
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0859 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

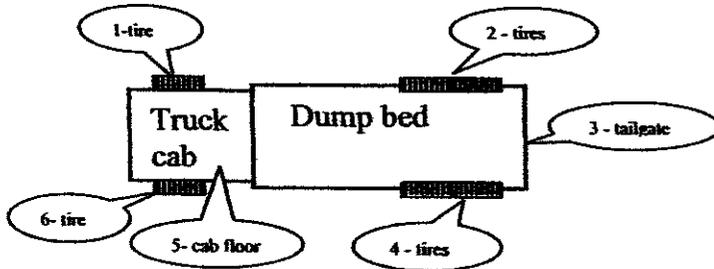
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2200				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

12  
0550951

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3990				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dirch St Golden, CO 80401 303-273-3990	
4. Phone ( )				6. Phone ( )	
7. Transporter #1 Company Name Blue Trucking #112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facility Location 3000 Hwy 91 Golden, CO COLORADO SCHOOL OF MINES (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Harm Sol		17. Allied Waste Approval # and Exp. Date CO 167 070908 511916		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 7	Day 5
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

518588 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 92  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y011915

SITE 01	TICKET 539919	GRID 0000
WEIGHMASTER BSCOWE Barbara Jo S		
DATE IN 5 September 2007	TIME IN 7:17 am	
DATE OUT 5 September 2007	TIME OUT 9:17 am	
VEHICLE Y011915	ROLL OFF	
REFERENCE 0050751	ORIGIN	

Gross Weight 85,130.00 lb  
 Tare Weight 37,700.00 lb      Inbound -  
 net Weight 47,430.00 lb 23.71 TW

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.71	TW	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0550951

Please print or type

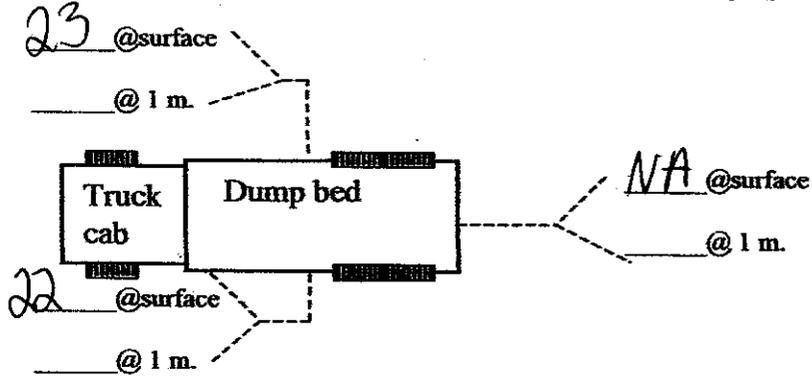
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Dove Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 80 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 0016707008 1511915		18. Containers No. Type	19. Total Quantity Ct. Tons
b.				18	7 Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 9 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month Day Year 9 5 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0905 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grievue Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

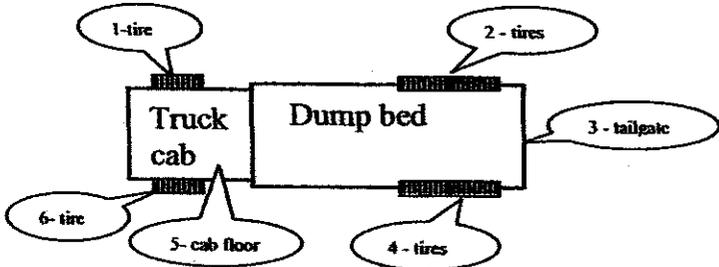
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

0550952

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1500 Winona St Golden, CO 80401 303-273-3060			5. Generating Location (if different): School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: 1800 Hwy 80 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description: a. None Sent		17. Allied Waste Approval # and Exp. Date: CO 187 070909 10-10-15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman			Signature:		Month Day Year: 7 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Chuck Foy			Signature:		Month Day Year: 09 05 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

310576

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589921	GRID 0000
WEIGHMASTER 2500056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 7:20 AM	
DATE OUT 8 September 2007	TIME OUT 7:20 AM	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0350952	ORIGIN	

Gross Weight 84,500.00 lb  
Tare Weight 56,540.00 lb  
Net Weight 27,960.00 lb 23.98 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.98	TN	30-CENT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0550052

8

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Coronado School of Mines Research Institute 1500 Lincoln St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Coronado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2330 May St Golden, CO 80401 (Coronado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO1A7170900 VS11015		18. Containers	
				No.	Type
				18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brantner			Signature 		Month   Day   Year 1   5   07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature 		Month   Day   Year 09   05   07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month   Day   Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Steve Brantner			Signature 		Month   Day   Year 1   5   07

GENERATOR

TRANSPORTER

T/S/D FACILITY

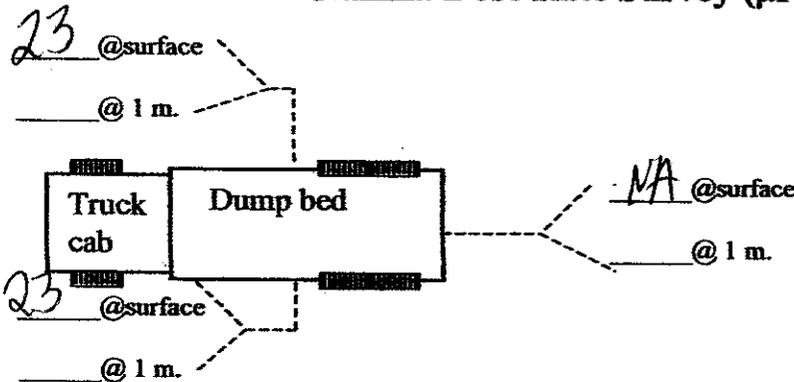
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/09 0914 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

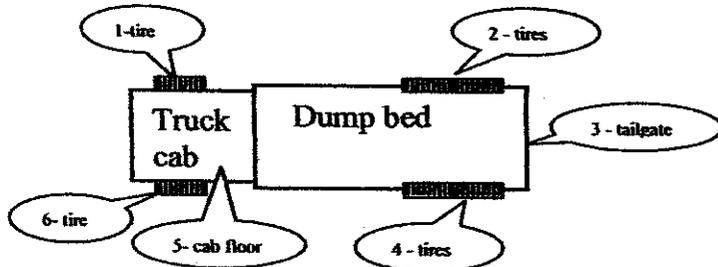
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



13

# NON-HAZARDOUS WASTE MANIFEST

## 0550953

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Minner St Golden, CO 80401 303-273-3996			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Poudre Lockup 6000 Hwy 91 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Storm Soil		CO1670709081511815		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin		Signature <i>[Signature]</i>		Month 7	Day Year 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rodolfo Collazo Lopez		Signature <i>[Signature]</i>		Month 09	Day Year 05 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

310578

FOOTVILLE LANDFILL  
 2500 WILSHAW RD  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 839927	GRID 0000
WEIGHMASTER 0500055 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 9:33 am	
DATE OUT 5 September 2007	TIME OUT 9:03 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550953	ORIGIN	

Gross Weight 81,920.00 lb  
 Tare Weight 35,700.00 lb      Inbound -  
 Net Weight 46,220.00 lb 23.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.11	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



13

# NON-HAZARDOUS WASTE MANIFEST

## 0550953

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3896			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3896		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facilities Location 8900 Hwy 97 Golden, CO ADDRESSES & SERVICES (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		CO18717396 1511915		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin		Signature <i>[Signature]</i>		Month	Day Year
				1	5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rodolfo Collazo Lopez		Signature <i>[Signature]</i>		Month	Day Year
				09	05 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

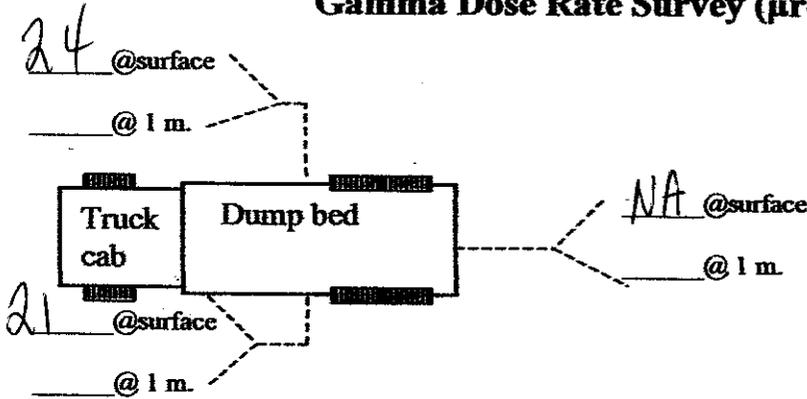
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0920 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

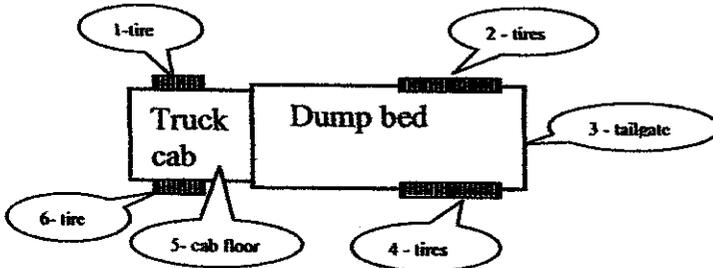
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25 mrem)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

0550054

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Wilson St Golden, CO 80401 303-373-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3990		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez Hwy 60 Golden, CO ACCOUNT # 06870 (Contact School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Warm Soil		17. Allied Waste Approval # and Exp. Date CO 187 070308 / 511015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bender			Signature 		Month Day Year 7 2 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Linda ...			Signature 		Month Day Year 7 2 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY





NON-HAZARDOUS WASTE MANIFEST

0550904

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3090			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3090		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ADOTC (M) J-154-403 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Hazard		17. Allied Waste Approval # and Exp. Date CO 187 07000 05/19/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benham			Signature: [Signature]		Month: 8 Day: 27 Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]			Signature: [Signature]		Month: 7 Day: 27 Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

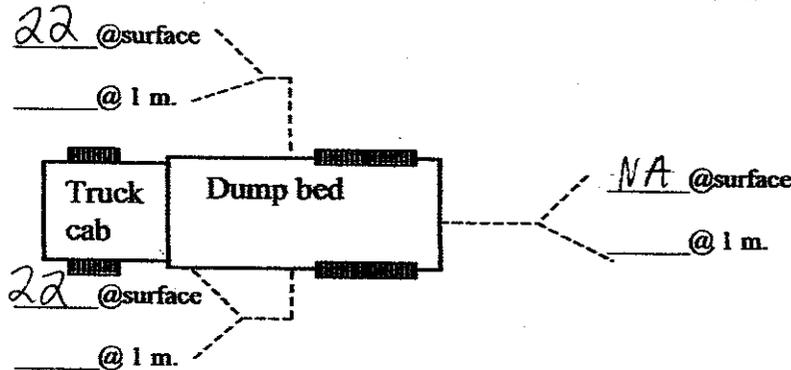
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/09 0926 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

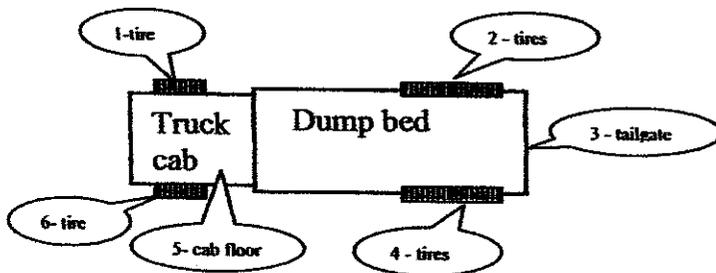
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



NON-HAZARDOUS WASTE MANIFEST

0550955

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-773-0066			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-0000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Front Range 8000 Hwy 20 Golden, CO 80401 # 1511915 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Front Range		CO 167-070008 1511915		Y-Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day 3
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark [unclear]		Signature 		Month 1	Day 11
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

319538

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 889937	GRID 0000
WEIGHMASTER 850056 Barbara Jo G		
DATE IN 5 September 2007	TIME IN 9:45 am	
DATE OUT 5 September 2007	TIME OUT 9:45 am	
VEHICLE YE11915	ROLL OFF	
REFERENCE 085095	ORIGIN	

00 Gross Weight 78,280.00 lb  
 Tare Weight 36,980.00 lb Inbound -  
 Net Weight 41,300.00 lb 30.65 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.65	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0550955

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1530 Illinois St Golden, CO 80401 303-273-3000				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Football Landfill Rock Hill, CO Golden, CO ACCOUNT # 981913 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. None Sent			17. Allied Waste Approval # and Exp. Date COLEP 070000 0611915		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	D-Drums	G-Gallons
b.					18	Yards	Tons	
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Steve Brinkman			Signature: [Signature]			Month: 8	Day: 5	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name: [Signature]			Signature: [Signature]			Month: 7	Day: 11	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name:			Signature:			Month:	Day:	Year:
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name:			Signature:			Month:	Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

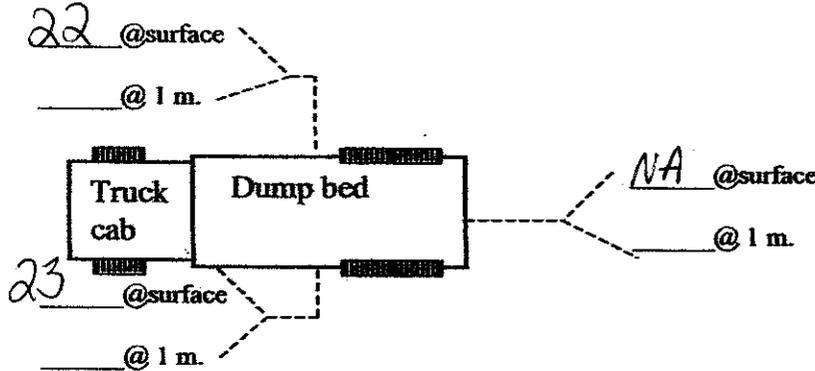
CCM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/09 0932 Surveyed by: J. Mattson C. Hicks

Trucking Company: Grieve Truck license plate no. /state: JD04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

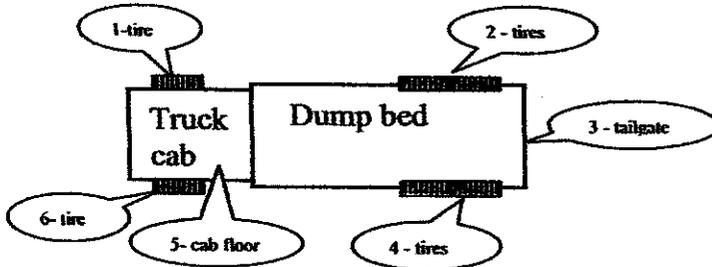
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25 mrem)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	554.0



# NON-HAZARDOUS WASTE MANIFEST

04  
0550356

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Pueblo Area 5900 Hwy 10 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Man: Sol		CO 617 670306 Y611015		19. Total Quantity 0 Drums Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas			Signature 		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519591

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 569942	GRID 0000
WEIGHMASTER K600056 Barbara Jo S		
DATE IN 5 September 2007		TIME IN 9:49 am
DATE OUT 5 September 2007		TIME OUT 9:49 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0550956	ORIGIN	

GC Gross Weight 77,140.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 41,500.00 lb 20.75 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.75	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]* 9-5-07



# NON-HAZARDOUS WASTE MANIFEST

04  
0550956

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Elmore St Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 8200 Hwy 93 Golden, CO		17. Allied Waste Approval # and Exp. Date 00157-070908/611915		19. Total Quantity 18 Yards	
16. Waste Shipping Name and Description a. Norm Soil		18. Containers No. Type		20. Unit Wt/Vol Tons	
b.		c.		d.	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman		Signature:		Month Day Year: 3 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Santiago Vargas		Signature:		Month Day Year: 3 5 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month Day Year: 3 5 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

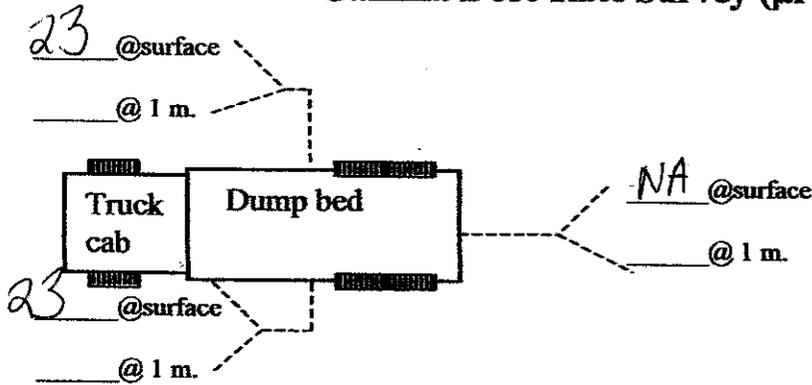
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0939 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

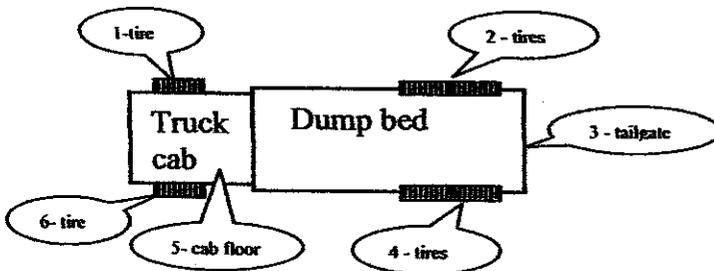
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	554.0



513585

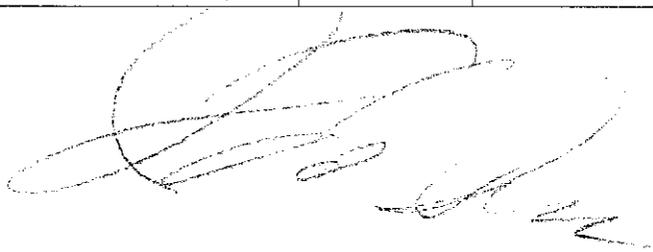
FOOTHILL LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80605  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract# YE11915

SITE 01	TICKET 869946	GRID 0000
WEIGHMASTER 600056 Barbara Jo S		
DATE IN 5 September 2007		TIME IN 7:55 am
DATE OUT 5 September 2007		TIME OUT 9:55 am
VEHICLE YE11915		ROLL OFF
REFERENCE 0500959	ORIGIN	

Gross Weight 80,660.00 lb  
Tare Weight 36,580.00 lb      Inbound --  
Net Weight 44,080.00 lb 22.04 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.04	TN	SW-COFT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550959

96

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3599			6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401 ACCOUNT # 180000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Storm Soil		CO LW 87002 1511915		15	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Smith		<i>[Signature]</i>		7	5 23
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Fernando Luna		<i>[Signature]</i>		7	5 23
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
		<i>[Signature]</i>			

GENERATOR

TRANSPORTER

T/S/D FACILITY

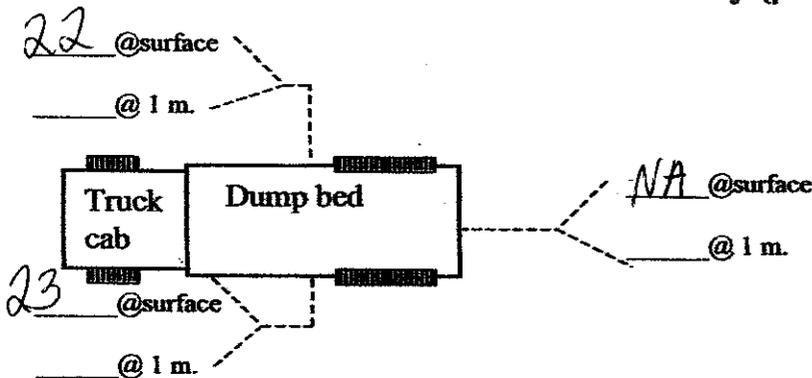
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0945 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

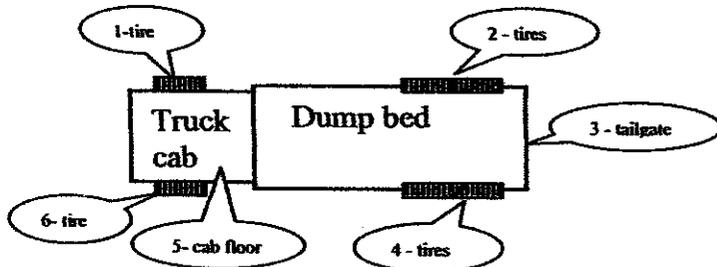
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	



# NON-HAZARDOUS WASTE MANIFEST

0550958

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1500 Illinois St Golden, CO 80401 303-273-3696				5. Generating Location (if different): School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3696	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: 1500 Illinois St Golden, CO 80401 # (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 167 070908 Y511915		Y-Yards	Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: <i>Steve Beaman</i>		Signature: <i>[Signature]</i>		Month: 1	Day: 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name: <i>MARK PULAN</i>		Signature: <i>[Signature]</i>	Month: 9   Day: 5   Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name:		Signature:	Month:   Day:   Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month:	Day:

GENERATOR

TRANSPORTER

T/S/D FACILITY

519801

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 959952	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 10:01 am	
DATE OUT 5 September 2007	TIME OUT 10:01 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0520958	ORIGIN	

Gross Weight 84,980.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 51,980.00 lb 25.94 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
25.94	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550958

23

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address BGRX11 Hwy 93 Golden, CO ACCOUNT # 187878 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		CC 107 07/06/06 YS11915		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benkman		Signature:		Month: 7	Day: 5
Year: 07					
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: MARK PELAN		Signature:		Month: 9	Day: 3
Year: 07					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month:	Day:
Year:					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month:	Day:
Year: 07					

GENERATOR

TRANSPORTER

T/S/D FACILITY

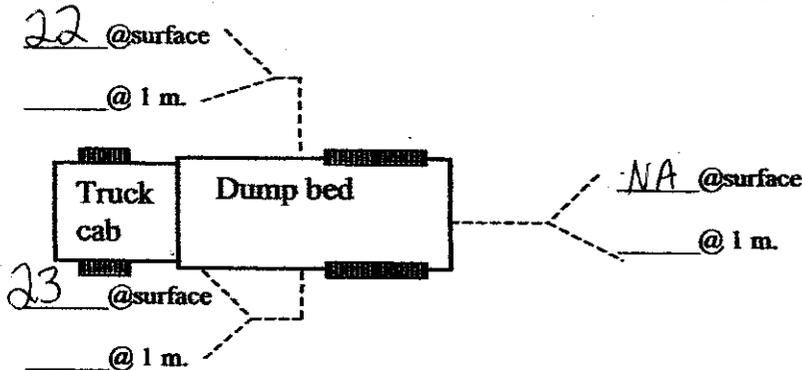
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/5/07 0955 Surveyed by: J. Mattson C. Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

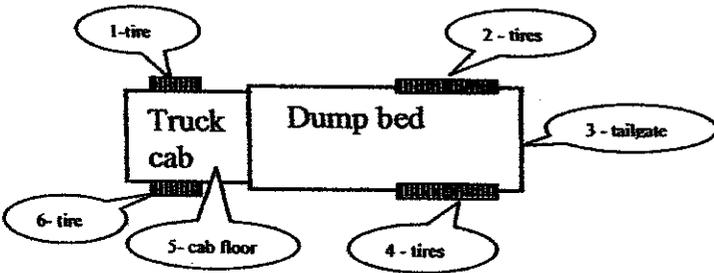
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17.0 $\mu\text{rem/hr}$	0.0 $\alpha$	253.0 $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	554.0	

FOOTHILLS LANDFILL  
 2900 HIGHWAY 73  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 7511915

24

519811

SITE 01	TICKET 089942	GRID 0000
WEIGHMASTER 500056 Barbara Jo S		
DATE IN 5 September 2007	TIME IN 10:13 am	
DATE OUT 5 September 2007	TIME OUT 10:13 am	
VEHICLE 7511915	ROLL OFF	
REFERENCE 05E0457	ORIGIN	

Gross Weight 89,700.00 lb  
 Tare Weight 37,200.00 lb      Inbound -  
 Net Weight 46,500.00 lb 23.25 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.25	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*KCAS*

SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550957

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3998		
4. Phone ( ) 303-773-3998			6. Phone ( )		
7. Transporter #1 Company Name Joe's Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date CO 157 070900 1511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brannon			Signature: [Signature]		Month Day Year 1 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Ken Skarner			Signature: [Signature]		Month Day Year 1 0 1 0 5 0 7
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

9/4/07

## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Grieve 24	9/4/07	1225	1238	18
Collazo 13		1235	1255	
Marguez 961		1305	1315	
Ruiz 95		1310	1320	
Grieve 23		1315	1327	
Grieve 8		1320	1332	
<del>JD</del> JD 04		1325	1339	
Marguez 96		1330	1345	
Grieve 12		1335	1351	
Grieve 24		1340	1358	
Collazo 13		1345	1403	
Marguez 961		1355	1415	
Ruiz 95		1430	1432	
Grieve 23		1430	1440	
Grieve 8		1440	1450	
JD 04		1445	1457	
Marguez 96		1450	1506	
Grieve 12		1455	1514	
Grieve 24		1500	1527	
Collazo 13	✓	1510	1535	✓

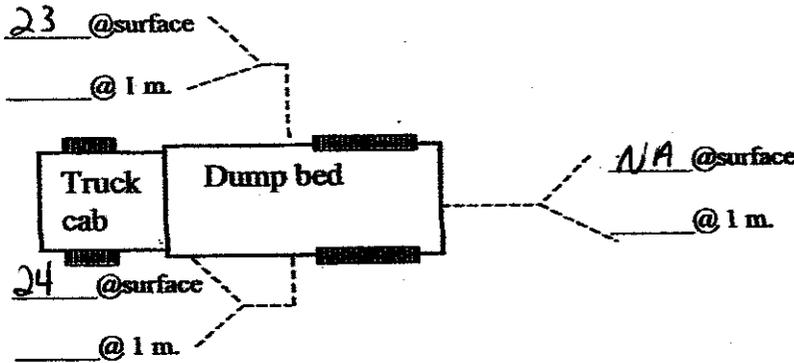
87.9  
81.2  
82.7  
87.9  
76.1  
80.5  
83.9

60 total for day

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1238 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grewe Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

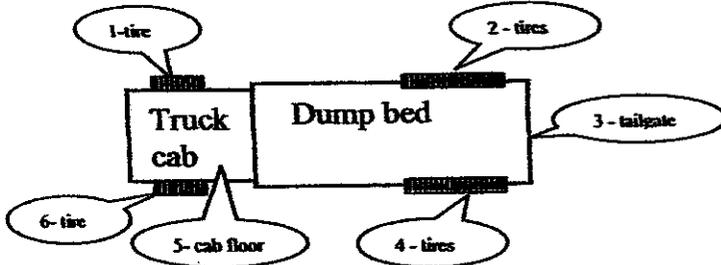
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm

24

519323

FOOTHILLS LANDFILL  
 8900 HIGHWAY 98  
 GOLDER  
 CO  
 803400  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDER, CO 80401

SITE	TICKET	GRID
01	529679	0001
WEIGHMASTER		
FC00060 CINA C		
DATE IN	TIME IN	
4 September 2007	12:55 pm	
DATE OUT	TIME OUT	
4 September 2007	12:55 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0530960		

Contract: Y511915

OS Gross Weight 83,300.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 46,100.00 lb 23.05 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.05	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



24

# NON-HAZARDOUS WASTE MANIFEST

0550980

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3906			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3906		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name SOE GRIEVE TRUCKING		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2000 Hwy 30 Golden, CO COLORADO SCHOOL OF MINES		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 187 070308 1811915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bickman			Signature <i>[Signature]</i>		Month Day Year 10 04 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Keri Shannon			Signature <i>[Signature]</i>		Month Day Year 01 04 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

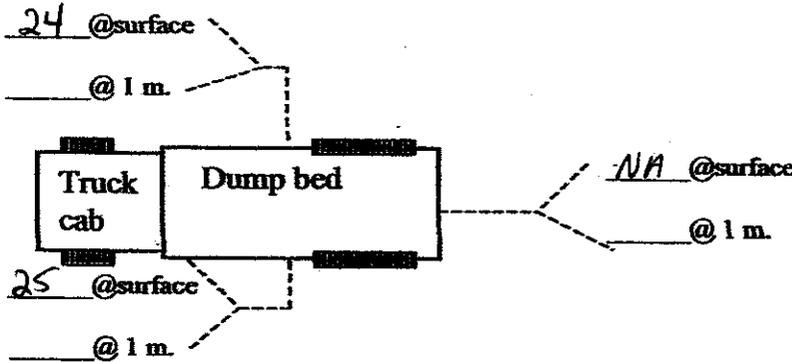
GENERATOR'S COPY

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1255 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

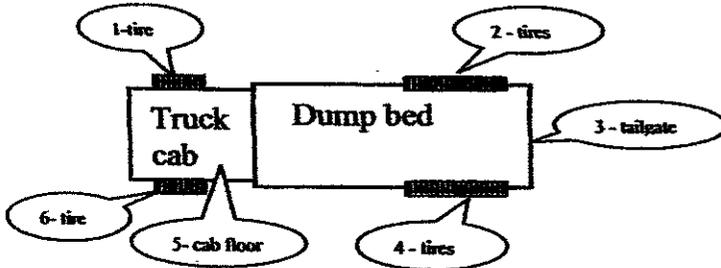
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0550981

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3994			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3994		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Hill St Golden, CO 80401 ACXCR 001 # 000000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Harm Slud		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 07 01 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Helen Alvord		Signature <i>[Signature]</i>		Month Day Year 07 01 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

318335

FOOTHILLE LANDFILL  
 8900 HIGHWAY 70  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1300 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	559291	0000
WEIGHMASTER		
R000080 BINA C		
DATE IN	TIME IN	
4 September 2007	1:12 PM	
DATE OUT	TIME OUT	
4 September 2007	1:12 PM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0550981		

Gross Weight 84,500.00 lb  
 Tare Weight 35,700.00 lb  
 net Weight 48,800.00 lb 24.40 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.40	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0550981

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 7 South Hills Lane 8900 Hwy 90 Golden, CO 80401 ADULT # 180003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO L07 070608 1:01:15:15		18. Containers	
				No.	Type
a. Non Sol				18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benner		Signature		Month	Day Year
				8	01 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Dale Thompson		Signature		Month	Day Year
				07	04 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name L. [unclear]		Signature		Month	Day Year
					06

GENERATOR

TRANSPORTER

T/S/D FACILITY

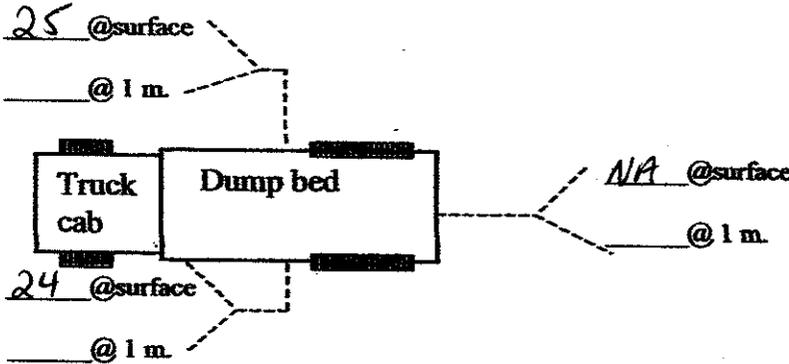
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1315 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

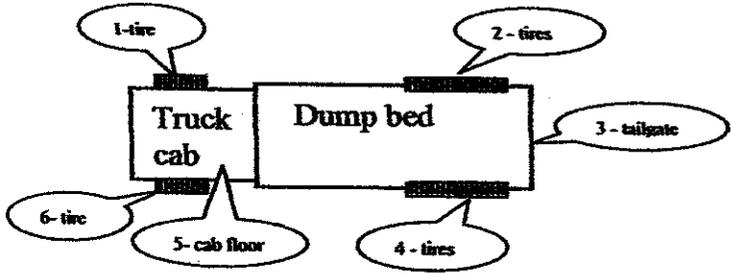
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0550982

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3948			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3948		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address FACILITY NAME ADDRESS CITY, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity D. Drums	
				20. Unit Wt/Vol G. Gallons	
a. Norm Soil		20167 073008 Y5/1915		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature 		Month Day Year 7 1 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Almond			Signature 		Month Day Year 7 1 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033





# NON-HAZARDOUS WASTE MANIFEST

0550982

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Allied Waste 8000 Hwy 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 107 07000 1511915		19. Total Quantity D-Drums E-Gallons	
				20. Unit WT/Vol G-Gallons	
				Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature 		Month Day Year 1 2 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Allan J. ...			Signature 		Month Day Year 1 2 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 1 2 97

GENERATOR

TRANSPORTER

T/S/D FACILITY

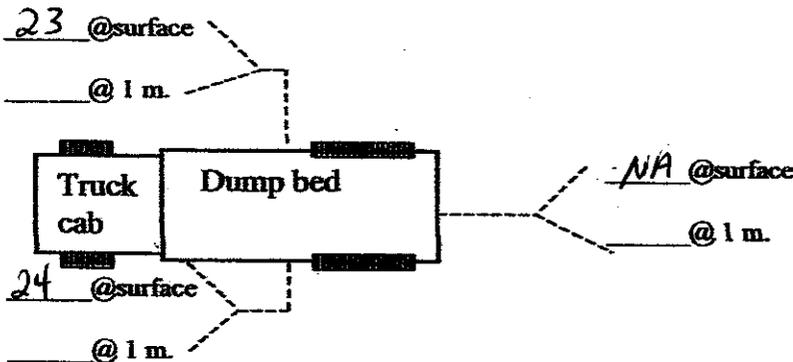
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1320 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

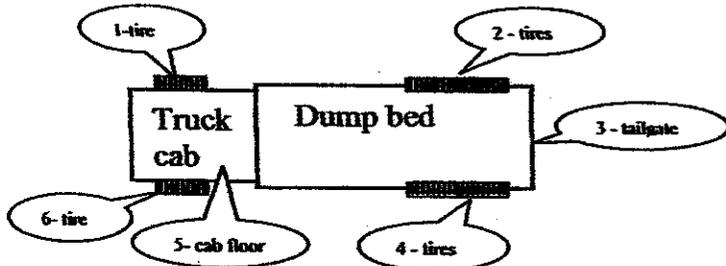
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550983

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3666			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3666		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facility Location 3000 Hwy 92 Golden, CO ACCOUNT # 366666 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 167 070208 VS11915		Y-Yards	Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Binkov			Signature: [Signature]		Month Day Year: 7 1 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]			Signature: [Signature]		Month Day Year: 7 1 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519356

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
980603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	587712	0000
WEIGHMASTER		
4000060 SINA C		
DATE IN	TIME IN	
4 September 2007	1:36 pm	
DATE OUT	TIME OUT	
4 September 2007	1:38 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	

G3 Gross Weight 81,160.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 44,180.00 lb 22.09 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.09	TN	BU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



  
 SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550983

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1570 Birch St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3008		
4. Phone ( ) 303-273-3008			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fossilite Landfill 8870 Hwy 30 Golden, CO ACCOUNT # 140913 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date CO187 070908 Y511915		18. Containers	
				No.	Type
b.				10 Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman		Signature: <i>[Signature]</i>		Month: 8	Day: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: <i>[Signature]</i>		Signature: <i>[Signature]</i>		Month: 1	Day: 11
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month:	Day:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name: <i>[Signature]</i>		Signature: <i>[Signature]</i>		Month:	Day:

GENERATOR

TRANSPORTER

T/S/D FACILITY

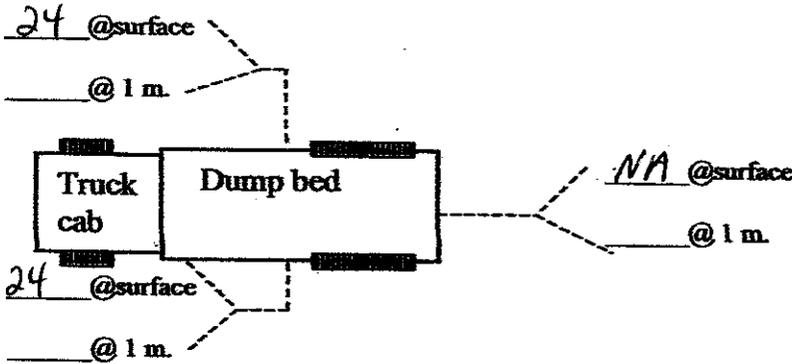
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1327 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

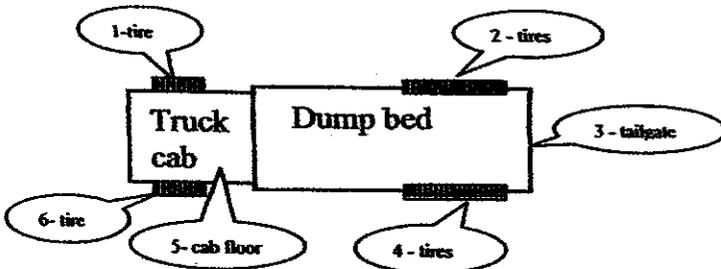
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

# 0550984

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Blake St Golden, CO 80401 303-273-3850			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3850		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8300 Hwy 27 Golden, CO 80401 (School of Mines Research Institute)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		CO L67E70018 1511915		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Scott Beaman			Signature <i>[Signature]</i>		Month Day Year 7 4 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan			Signature <i>[Signature]</i>		Month Day Year 9 4 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519362

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	Y511915	0000
WEIGHMASTER		
PC000080 GINA C		
DATE IN	TIME IN	
4 September 2007	1:42 pm	
DATE OUT	TIME OUT	
4 September 2007	1:42 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0350784		

Gross Weight 32,740.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 47,840.00 lb 23.82 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.82	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0550984

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 167 (03908) 1511915		19. Total Quantity 20. Unit Y-Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bergman		Signature		Month Day Year 8/4/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHILAN		Signature		Month Day Year 9/4/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

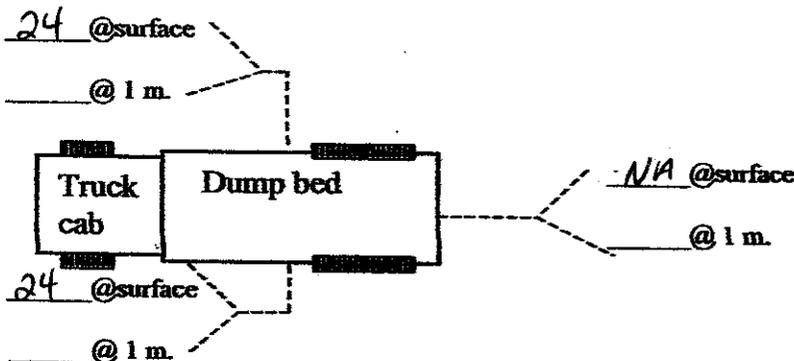
TRANSPORTER #1

COM000035

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1332 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

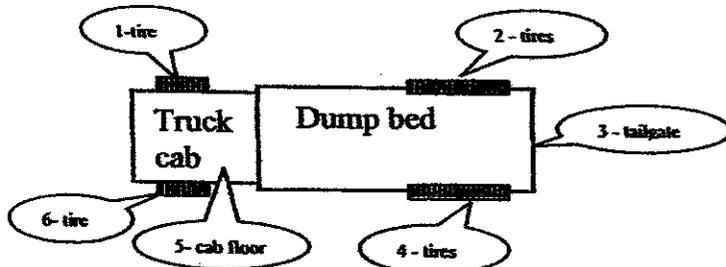
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0550985

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3098				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3098			
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Columbia Energy 3370 1st St SE Golden, CO 80401 (Allied Waste # 000006 (Colorado School of Mines))		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity D-Drums	20. Unit Wt/Vol G-Gallons
a. Harm. Sol		CO 187 073003 05/16/15		18	4	Y-racks	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman				Signature		Month Day Year 1 1 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Foy				Signature		Month Day Year 07 01 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

519366

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 720606  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589722	GRID 0000
WEIGHMASTER		
#000080 BINA C		
DATE IN 4 September 2007		TIME IN 1:48 am
DATE OUT 4 September 2007		TIME OUT 1:48 am
VEHICLE 7511915		ROLL OFF
REFERENCE 000080	ORIGIN	

03 Gross Weight 35,380.00 lb  
 Tare Weight 30,540.00 lb      Inbound -  
 Net Weight 4,840.00 lb 23.42 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.42	TN	SW-DONT SOL.				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

## 0550985

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 100 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Darts St Golden, CO 80401 303-273-3898				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Frontline Landfill 1900 Hwy 30 Golden, CO 80401 (Clockwork Storage of Metals)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity Drums	20. Unit Wt/Vol Gallons
				No.	Type		
a. Norm Soil		CO L67 070908 Y511915		18	4	7 Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Brinkman				Signature: <i>[Signature]</i>		Month: 7 Day: 17 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Chuck Foy				Signature: <i>[Signature]</i>		Month: 09 Day: 07 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name:				Signature:		Month: Day: Year:	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:				Signature:		Month: Day: Year:	

GENERATOR

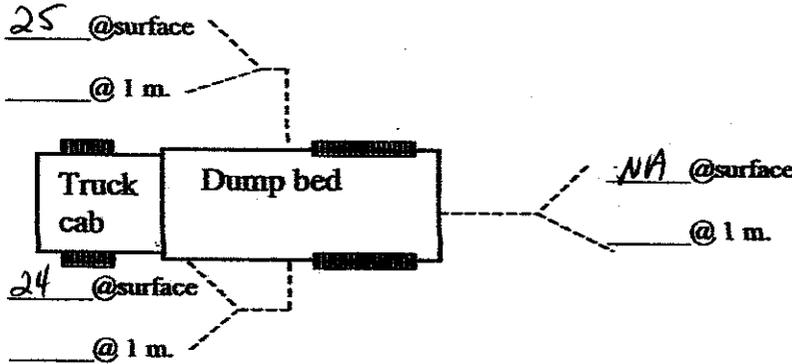
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1339 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

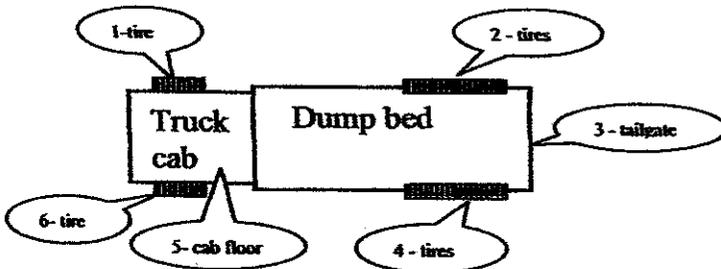
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0530990

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 North St Golden, CO 80401 303-273-3698			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Wash St Golden, CO 80401 303-273-3698		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ACCOUNT # 120000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 087 (7/1/90) Y511015		18. Containers	
				No.	Type
a. Harm Soil				Y-Yards -Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beatty			Signature		Month Day Year 9 . 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santion Voytas			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519371

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589727	GRID 0000
WEIGHMASTER RC00080 GINA C		
DATE IN 4 September 2007	TIME IN 1:58 pm	
DATE OUT 4 September 2007	TIME OUT 1:58 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550990	ORIGIN	

CG Gross Weight 76,120.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 40,480.00 lb 20.24 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-11-07



# NON-HAZARDOUS WASTE MANIFEST

0550990

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3698			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Broadway Golden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Allied Waste 3500 Hwy. 93 Golden, CO ACCOUNT # 991610 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 167 070808 1511015		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brubaker		Signature		Month 9	Day 27
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name SANTANA VARGAS		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

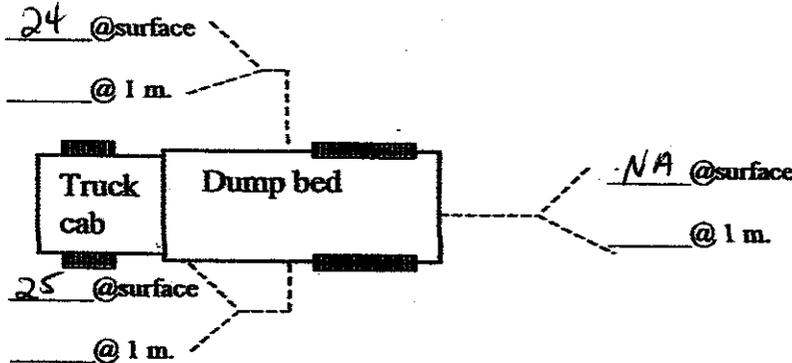
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1345 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

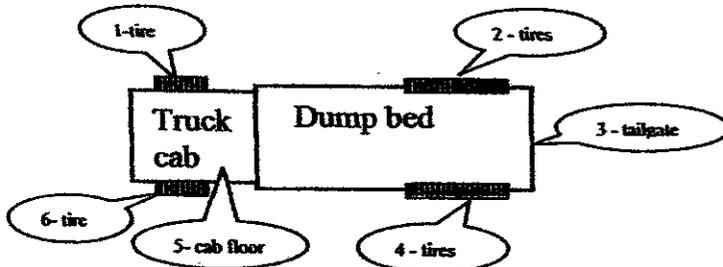
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550908

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-3999			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3999				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 9500 Hwy 30 Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 0016797098 0511915		18. Containers		19. Total Quantity 0.000000 Yards	20. Unit Wt/Vol Tons
				No.	Type		
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Blum				Signature <i>[Signature]</i>		Month Day Year 7/11/97	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Fernando Perra				Signature <i>[Signature]</i>		Month Day Year 7/11/97	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

313378

FOOTHILLS LANDFILL  
8900 HIGHWAY 97  
GOLDEN  
CO  
730600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y311915

SITE 01	TICKET 587732	GRID 0000
WEIGHMASTER P1000050 GINA C		
DATE IN 4 September 2007		TIME IN 2:03 pm
DATE OUT 4 September 2007		TIME OUT 2:03 pm
VEHICLE Y311915		ROLL OFF
REFERENCE 0550955	ORIGIN	

Gross Weight 80,500.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 43,920.00 lb 21.96 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.96	TN	SU-COMT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550988

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-275-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 9900 Hwy 92 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Nam Sol		CO167 U78148 Y511915		19. Total Quantity 18 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B...		Signature		Month Day Year 7/10/97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando...		Signature		Month Day Year 7/14/97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

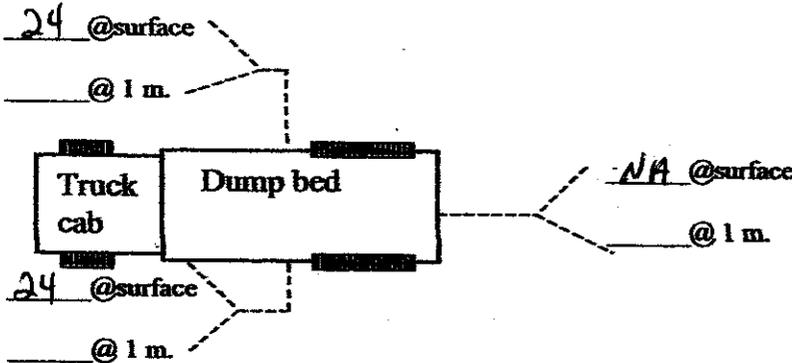
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1351 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

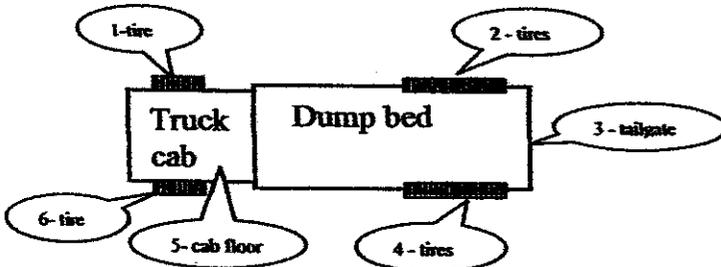
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0550986

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Minor St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Frontiers School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Greene Trucking H/L		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1800 E Hwy 101 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 0018707008 Y511915		18. Containers No. Type	
				19. Total Quantity G-Grams L-Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Schmitt			Signature: [Signature]		Month Day Year 6 5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]			Signature: [Signature]		Month Day Year 6 5 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519381 12

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80400  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract #: Y511915

SITE 01	TICKET 589737	GRID 0000
WEIGHMASTER #000060 GINA C		
DATE IN 4 September 2007		TIME IN 2:06 pm
DATE OUT 4 September 2007		TIME OUT 2:06 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 0550966	ORIGIN	

Gross Weight 80,880.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 43,180.00 lb 23.09 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.09	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550936

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																					
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998																						
4. Phone ( )			6. Phone ( )																						
7. Transporter #1 Company Name <i>Greene Trucking H/L</i>		8. US EPA ID Number		9. Transporter #1's Phone																					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone																					
13. Designated T/S/D Facility Name and Site Address 2401 Hwy 53 Golden, CO		14. US EPA ID Number		15. Facility's Phone																					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																					
a. <i>Non-Haz Sol</i>		<i>02187070508 1511915</i>		<table border="1"> <thead> <tr> <th>No.</th> <th>Type</th> <th>19. Total Quantity Drums</th> <th>20. Unit Wt/Vol Gallons</th> </tr> </thead> <tbody> <tr> <td><i>18</i></td> <td></td> <td><i>Y-Yards</i></td> <td><i>Tons</i></td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		No.	Type	19. Total Quantity Drums	20. Unit Wt/Vol Gallons	<i>18</i>		<i>Y-Yards</i>	<i>Tons</i>	b.				c.				d.			
No.	Type	19. Total Quantity Drums	20. Unit Wt/Vol Gallons																						
<i>18</i>		<i>Y-Yards</i>	<i>Tons</i>																						
b.																									
c.																									
d.																									
21. Additional Descriptions for Materials Listed Above																									
22. Special Handling Instructions and Additional Information																									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																									
Printed/Typed Name <i>Steve Reinhart</i>		Signature <i>[Signature]</i>		Month Day Year <i>1 9 07</i>																					
24. Transporter #1: Acknowledgement of Receipt of Materials																									
Printed/Typed Name <i>[Name]</i>		Signature <i>[Signature]</i>		Month Day Year <i>1 9 07</i>																					
25. Transporter #2: Acknowledgement of Receipt of Materials																									
Printed/Typed Name		Signature		Month Day Year																					
26. Discrepancy Indication Space																									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																									
Printed/Typed Name		Signature		Month Day Year																					

GENERATOR

TRANSPORTER

T/S/D FACILITY

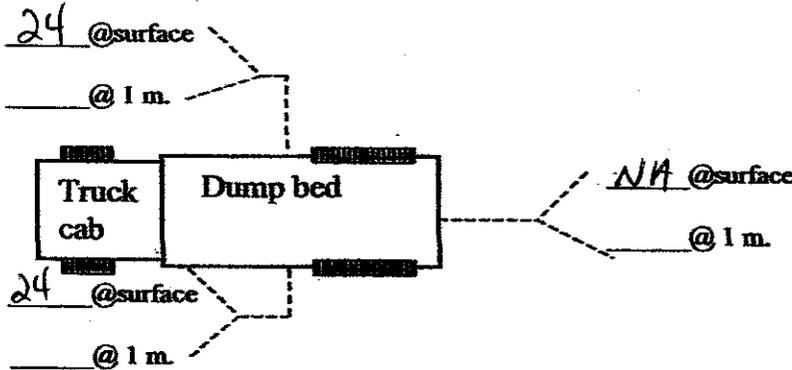
TRANSPORTER #1

COM090036

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1358 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

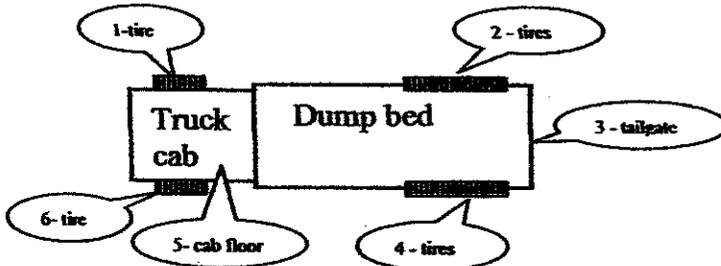
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm

24 519386

FOOTHILLS LANDFILL  
 8900 HIGHWAY 53  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YEL1913

SITE 01	TICKET 588742	GRID 0000
WEIGHMASTER PC00080 SINA C		
DATE IN 4 September 2007		TIME IN 2:15 pm
DATE OUT 4 September 2007		TIME OUT 3:14 pm
VEHICLE YEL1913		ROLL OFF
REFERENCE 0550967	ORIGIN	

00 Gross Weight 83,020.00 lb  
 Tare Weight 37,200.00 lb      Inbound -  
 Net Weight 45,820.00 lb 22.91 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.91	TN	SW-COFT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *K. E. S.*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

0550987

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3666				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698	
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Subervey Trucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401 SCHOOL OF MINES RESEARCH INSTITUTE (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. None Sent		CU 107 070001 15-11-915		19. Total Quantity 18 Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 7/1/97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name RUSKOR		Signature <i>[Signature]</i>		Month Day Year 07/01/97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

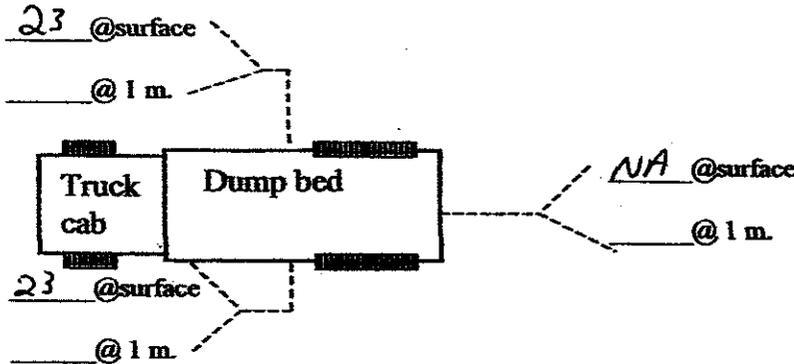
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1403 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

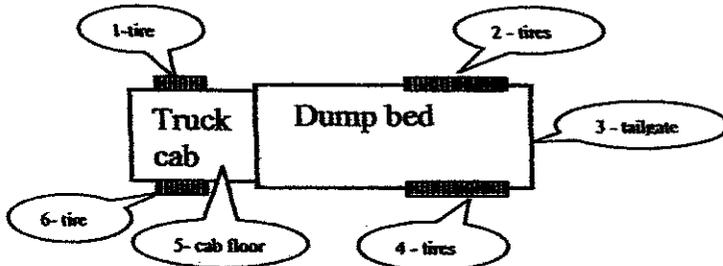
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550970

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1600 Illinois St. Golden, CO 80401 303-273-3698			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Ditch St. Golden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Admiral's (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date 0016707003 10/19/15		18. Containers	
				No.	Type
				18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin		Signature 		Month	Day Year
				1	4 15
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Robert Colleen Lopez		Signature 		Month	Day Year
				09	04 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

519395

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET DBP7E1	GRID 0000
WEIGHMASTER		
ADDC080 Bina C		
DATE IN 4 September 2007		TIME IN 2:32 pm
DATE OUT 4 September 2007		TIME OUT 2:32 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 0550470	ORIGIN	

GG Gross Weight 81,100.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 45,400.00 lb 22.70 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.70	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0550970

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1501 Illinois St Golden, CO 80401 303-273-3938			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Girard St Golden, CO 80401 303-273-3938		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1501 Illinois St Golden, CO 80401 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 157 0701A - 12/15/15		18. Containers	
				No.	Type
				18 Y-Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benken			Signature <i>[Signature]</i>		Month Day Year 1 4 17
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Robert Colton Lopez			Signature <i>[Signature]</i>		Month Day Year 09 01 17
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 1 4 17

GENERATOR

TRANSPORTER

T/S/D FACILITY

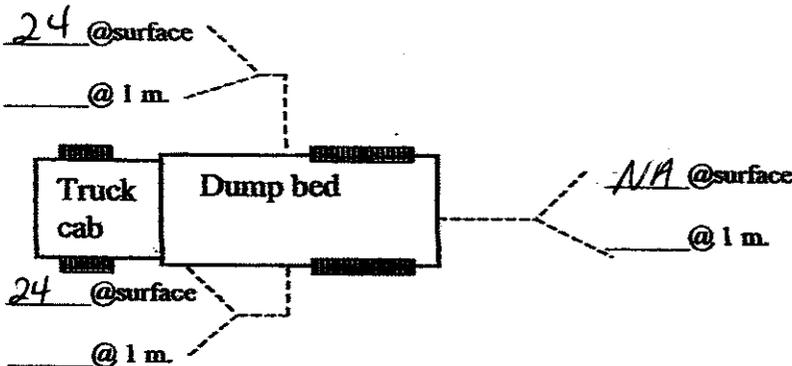
TRANSPORTER #1

COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1415 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grove Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

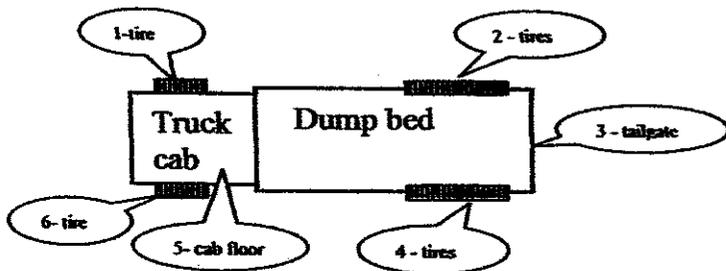
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

101  
0550971

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401 ACCORDANCE # 000000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 18707938 11/19/15		18. Containers	
				No.	Type
a. Asm Soil					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B... ..			Signature 		Month Day Year 7 7 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name ... ..			Signature 		Month Day Year ... ..
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519405

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YB11915

SITE 01	TICKET 88976E	GRID 0000
WEIGHMASTER R000090 GIMA C		
DATE IN 4 September 2007		TIME IN 2:41 pm
DATE OUT 4 September 2007		TIME OUT 2:43 pm
VEHICLE YB11915		ROLL OFF
REFERENCE 7530971	ORIGIN	

CB Gross Weight 33,540.00 lb  
 Tare Weight 34,400.00 lb      Inbound --  
 Net Weight 49,140.00 lb 24.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.57	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0550971

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( ) 303-273-3908		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Asym Sol		2018/07/07/2008 Y511915		1 Drum	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Blum			Signature:		Month: 7 Day: 12 Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: 7 Day: 12 Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

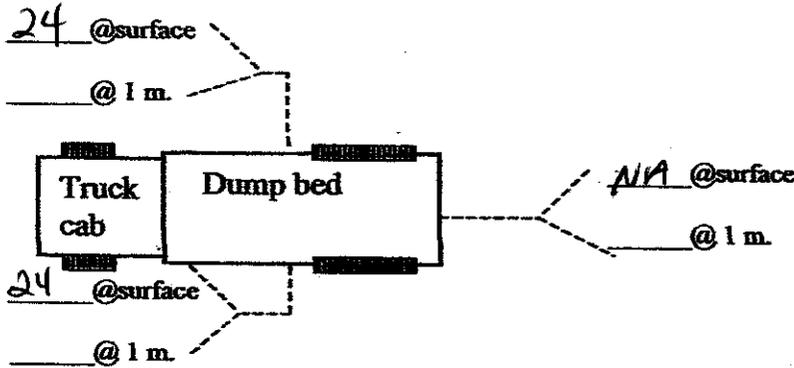
GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1432 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

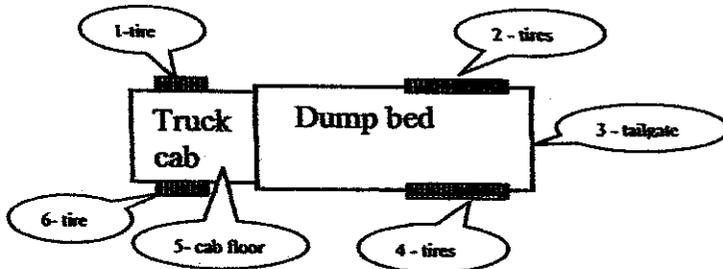
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550972

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1600 Wilson St Golden, CO 80401 303-270-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-270-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6000 Hwy 93 Golden CO ACCOUNT # 100970 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				No.	
				Type	
				C-Drums	
				D-Drums	
a. Non Soil		CC 157 0709 07611015		Y Yards	
b.				T Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman				Signature	
				Month Day Year 7 4 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark				Signature	
				Month Day Year 7 1 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

GENERATOR'S COPY

COM000633

519410

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80503  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	587767	0000
WEIGHMASTER		
H000050 SINA C		
DATE IN	TIME IN	
4 September 2007	2:49 pm	
DATE OUT	TIME OUT	
4 September 2007	2:49 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0850872		

03 Gross Weight 82,600.00 lb  
 Tare Weight 36,780.00 lb  
 Net Weight 45,820.00 lb 22.81 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.81	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0550972

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Normal Soil		20157170906 Y511015		19. Total Quantity 18 Yards	
b.				20. Unit C. Drums D. Casks E. Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman		Signature		Month Day Year 7/4/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name M... ..		Signature		Month Day Year 7/7/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

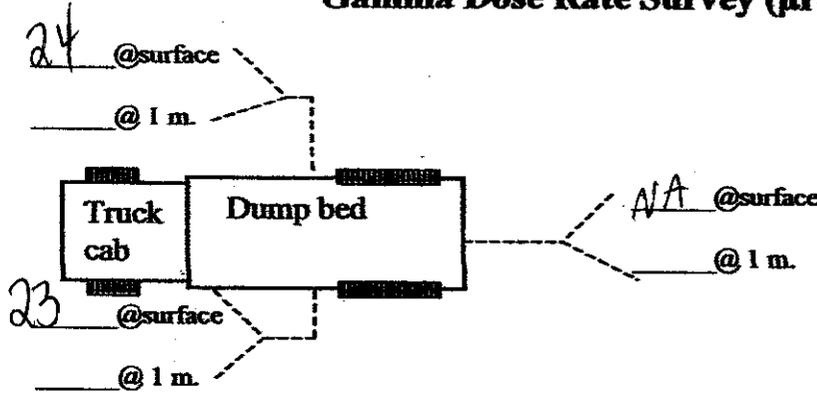
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1440 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

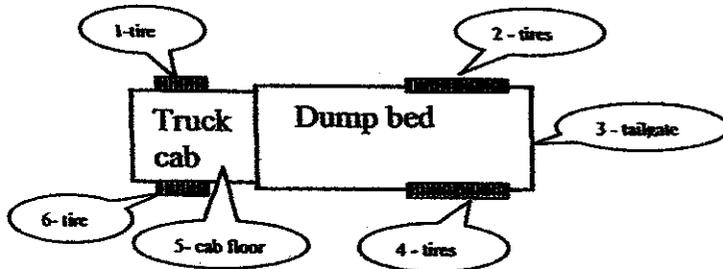
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0550979

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 6000 Mary Ave Golden, CO ACCIDENT # 100000 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit Wt/Vol	
a. Norm Soil		001670700037511015		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 1 4 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN			Signature		Month Day Year 9 11 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

513413

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1540 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	529770	0000
WEIGHMASTER		
R000080 BIN# C		
DATE IN	TIME IN	
4 September 2007	2:54 pm	
DATE OUT	TIME OUT	
4 September 2007	2:56 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0550979		

Gross Weight 85,900.00 lb  
 Tare Weight 35,100.00 lb      Inboard  
 Net Weight 48,800.00 lb 24.40 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.40	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE



# NON-HAZARDOUS WASTE MANIFEST

# 0550979

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3000				
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Allied Waste 6070 Hwy 50 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	Drums	Cases	
a. Non-Hazardous		001187073627-11315		7	13	Yards	Trucks	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Steve Beckman				Signature:		Month: 9	Day: 4	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name: MARK PHILAN				Signature:		Month: 9	Day: 17	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name:				Signature:		Month:	Day:	Year:
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name:				Signature:		Month:	Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

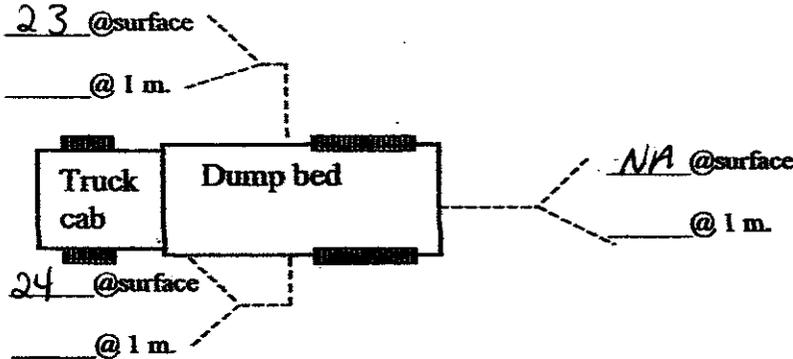
COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1450 Surveyed by: CHicks, J Mathson

Trucking Company: Greene Truck license plate no. /state: 8

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

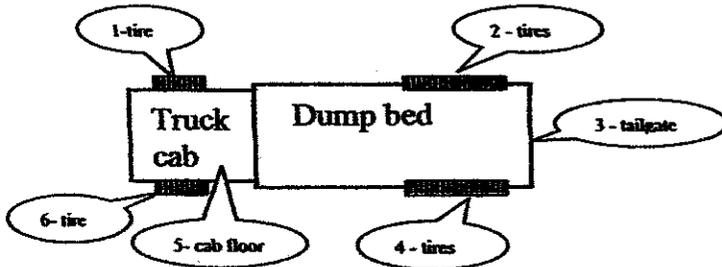
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550978

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Research Institute 1570 Minor St Golden, CO 80401 303-275-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ACCOUNT # 400003 / Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		00167070908 Y511915		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman		Signature 		Month	Day Year
				7	4 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature 		Month	Day Year
				1	9 01 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519417

FOOTHILL LANDFILL  
 8700 HIGHWAY 78  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y311915

SITE 01	TICKET 58774	GRID 0000
WEIGHMASTER RODOLFO GIRA C		
DATE IN 4 September 2007		TIME IN 3:07 pm
DATE OUT 4 September 2007		TIME OUT 3:07 pm
VEHICLE Y311915		ROLL OFF
REFERENCE 0550908	ORIGIN	

GR Gross Weight 55,250.00 LB  
 Tare Weight 36,590.00 LB  
 Net Weight 18,660.00 LB 23.56 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.56	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0550970

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Blake St Golden, CO 80401 303-273-3098			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol Tons	
16. Waste Shipping Name and Description Iron Sulf		18. Containers		19. Total Quantity	
		No. Type		Drums	
a.		10 L67 070208 Y511515		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 2 4 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Fox		Signature <i>[Signature]</i>		Month Day Year 1 9 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

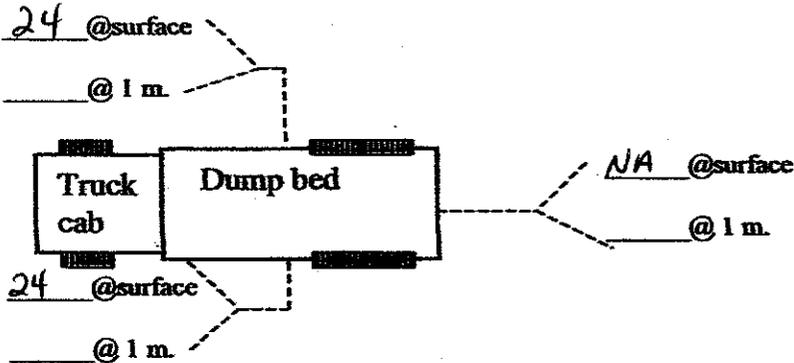
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/4/07 1457 Surveyed by: CHicks, J Mattson

Trucking Company: Greene Truck license plate no. /state: 04

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

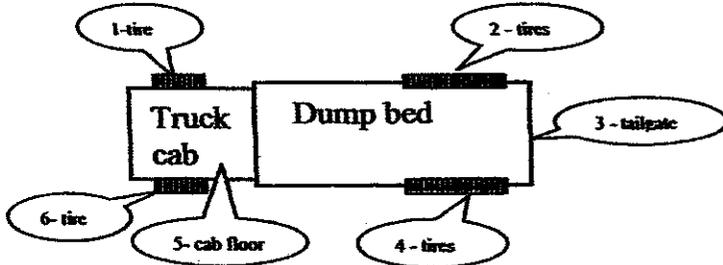
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0550977

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Black St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Black St Golden, CO 80401 (407) # 303-273-3998 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Sol		CO 067 070600 1511015		Y-Yards	Trucks
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beaman</i>				Signature <i>[Signature]</i>	
				Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Scott Hago Vargas</i>				Signature <i>[Signature]</i>	
				Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519422

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 800608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589777	0000
WEIGHMASTER		
000080 DINA C		
DATE IN	TIME IN	
4 September 2007	8:15 pm	
DATE OUT	TIME OUT	
4 September 2007	8:15 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0580977		

OS Gross Weight 80,060.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 44,420.00 lb 22.21 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.21	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-11-07



# NON-HAZARDOUS WASTE MANIFEST

0550977

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( ) 303-273-3998			6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8350 Hwy 36 Golden, CO 80401 # 1000001 # 1000001 (School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 167 (70908) Y511915		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	Drums	Gallons	
b.						15	Yards	
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Reinman				Signature 		Month 1	Day 11	Year 99
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Santibago Vargas				Signature 		Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name [Signature]				Signature [Signature]		Month 10	Day 11	Year 97

GENERATOR

TRANSPORTER

T/S/D FACILITY

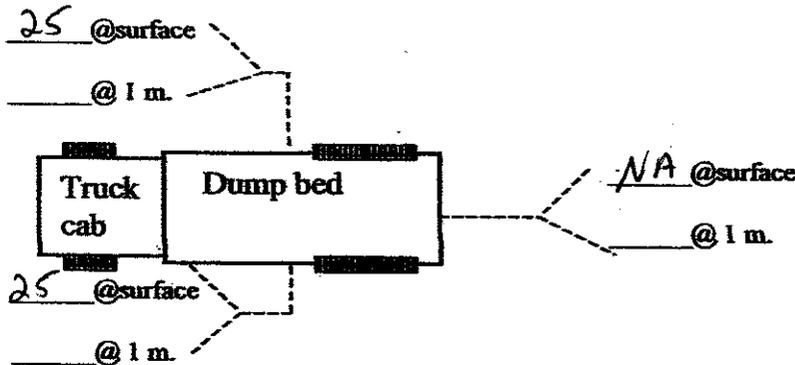
TRANSPORTER #1

COM0003

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1506 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

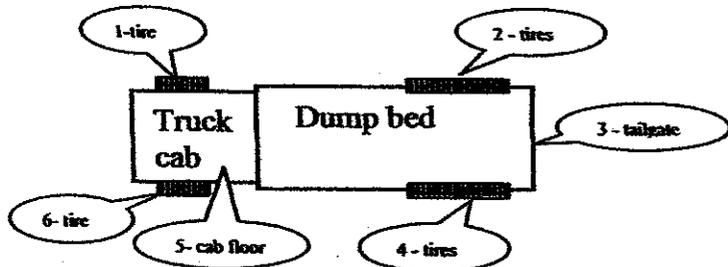
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	1.7 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



76

# NON-HAZARDOUS WASTE MANIFEST

## 0550976

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3896			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3896		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 30th Hwy 03 Golden, CO ACCOUNT # 00000 (Contract School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Atom Seal		CO 157 076008 VS 1101E			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Bergman				9	11
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Fernando Lopez				9	11
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

519425

FOOTHILLS LANDFILL  
 8500 HIGHWAY 90  
 GOLDEN  
 CO  
 806608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	389782	6000
WEIGHMASTER		
PC000080 GINA C		
DATE IN		TIME IN
4 September 2007		3:21 pm
DATE OUT		TIME OUT
4 September 2007		3:21 pm
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
0550776		

02 Gross Weight 21,260.00 lb  
 Tare Weight 34,580.00 lb Inbound -  
 Net Weight 44,690.00 lb 22.34 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.34	TN	SW-COAT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550978

76

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines 1500 Illinois St Golden, CO 80401 (Contract School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		30187070908 1511915			7 Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman			Signature:		Month: 7 Day: 11 Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando Lopez			Signature:		Month: 7 Day: 18 Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

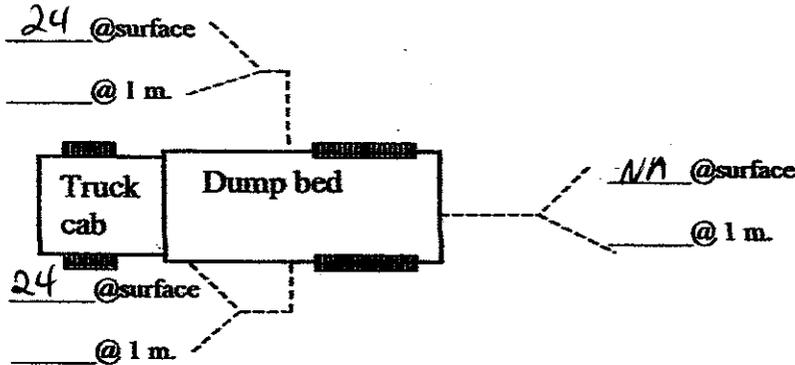
TRANSPORTER #1

DM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1514 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grewe Truck license plate no./state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

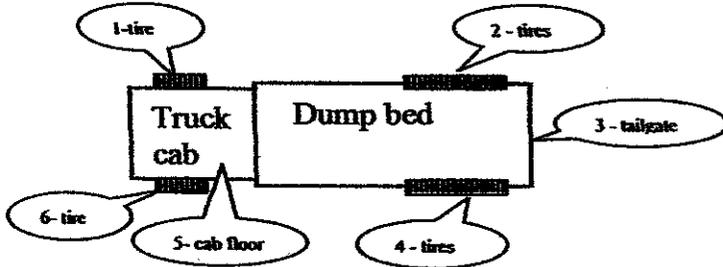
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550975

12

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3906			6. Phone ( ) 303-273-3906		
7. Transporter #1 Company Name G... ..		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 8000 Hwy 20 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Sol		CO 057 07000 15 11915		1	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month Day Year 6 19 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature 		Month Day Year 7 1 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

510427

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
926603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	559784	0000
WEIGHMASTER		
PC000050 OINA C		
DATE IN	TIME IN	
4 September 2007	3:27 PM	
DATE OUT	TIME OUT	
4 September 2007	3:27 PM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0550975		

G3 Gross Weight 24,150.00 lb  
 Tare Weight 37,700.00 lb      Inbound -  
 Net Weight 66,450.00 lb 23.24 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

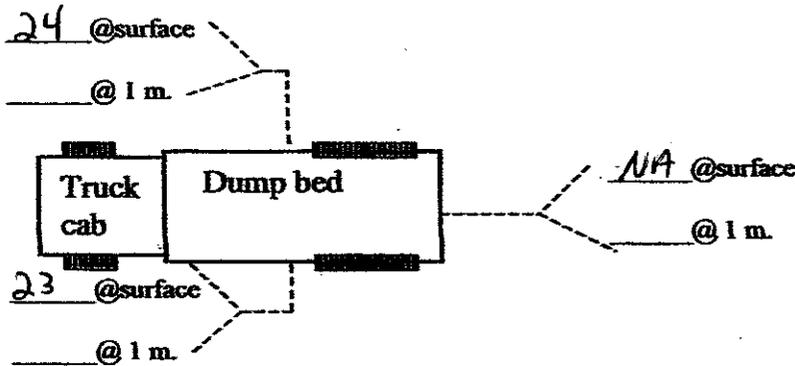


**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/4/07 1527 Surveyed by: CHicks, J Mattson

Trucking Company: Greve Truck license plate no./state: 24

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

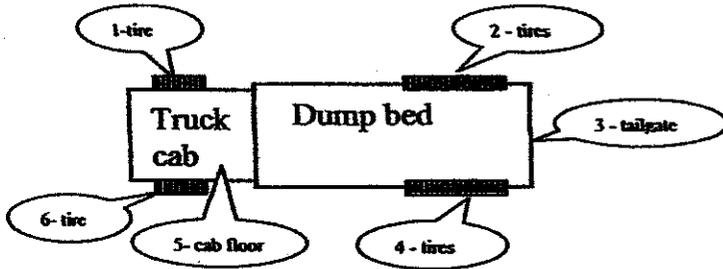
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	

24 519434

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589791	GRID 0000
WEIGHMASTER R000080 SINA C		
DATE IN 4 September 2007		TIME IN 3:42 pm
DATE OUT 4 September 2007		TIME OUT 3:42 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 0550973	ORIGIN	

GS Gross Weight 87,100.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 49,900.00 lb 24.95 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.95	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE Kear

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0550973

Please print or type.

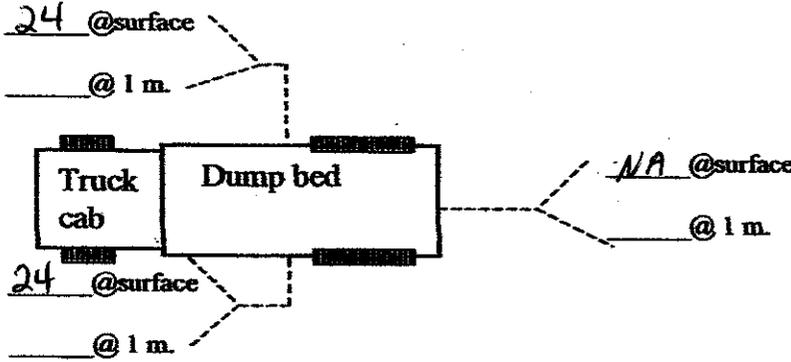
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3988			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3988		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name <i>Joe Grievetrucking</i>		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
a. Iron Ore		CO 07 070003 1511815		Y Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 7 14 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Shannon</i>			Signature <i>[Signature]</i>		Month Day Year 09 14 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/4/07 1535 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

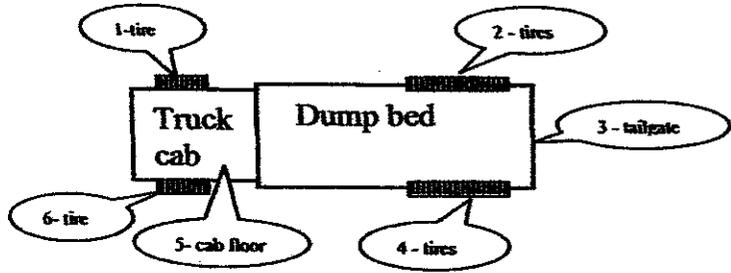
**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)  
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0550874

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1600 Blake St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6900 Hwy 30 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Haz		C0187 G00081-511915		19. Total Quantity 18 Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benayman		Signature 		Month Day Year 7 4 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Tranuel Colazo Lopez		Signature 		Month Day Year 07 04 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

019440

FOOTHILLS LANDFILL  
8900 HIGHWAY 90  
GOLDEN  
CO  
940600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	589797	0000
WEIGHMASTER		
R000080 SINA C		
DATE IN	TIME IN	
4 September 2007	3:52 pm	
DATE OUT	TIME OUT	
4 September 2007	3:52 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0550774		

Contract: YE11915

Gross Weight 64,760.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 49,060.00 lb 24.53 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.53	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550874

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Garden, CO 80401 303-273-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Broad St Garden, CO 80401 303-273-3098		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Heavy Soil		17. Allied Waste Approval # and Exp. Date 20167 07/08/07 - 5/1/915		18. Containers	
				No.	Type
b.				18	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman			Signature:		Month Day Year 7 4 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Rafael Colazo Lopez			Signature:		Month Day Year 07 04 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000003

9/4/07

## Truck Departure Record Form

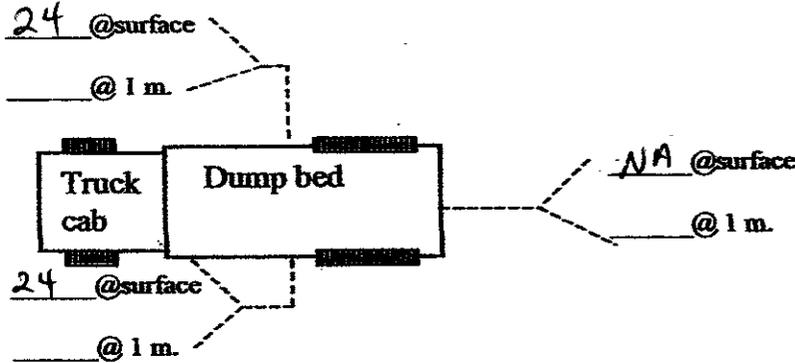
Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Grieve 8	9/4/07	0945	0958	18	82.9
Grieve 12		0950	1004		86.8
Grieve 24		0955	1010		87.2
Collazo 13		1015	1029		81.8
Marguez 961		1035	1045		79.2
Ruiz 95		1035	1049		77.6
JD 04		1050	1055		83.1
Grieve 23		1050	1059		82.8
Marguez 96		1055	1105		83.8
Grieve 8		1100	1111		77.6
Grieve 12		1105	1116		83.6
Grieve 24		1110	1121		83.8
Collazo 13		1130	1143		81.3
Marguez 961		1140	1200		78.1
Ruiz 95		1145	1203		80.8
JD 04		1200	1209		80.2
Grieve 23		1205	1214		76.0
Grieve 8		1210	1221		79.7
Grieve 12		1215	1227		83.6
Marguez 96		1220	1232		84.5

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0958 Surveyed by: CHicks, J Mattson

Trucking Company: Greve Truck license plate no./state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

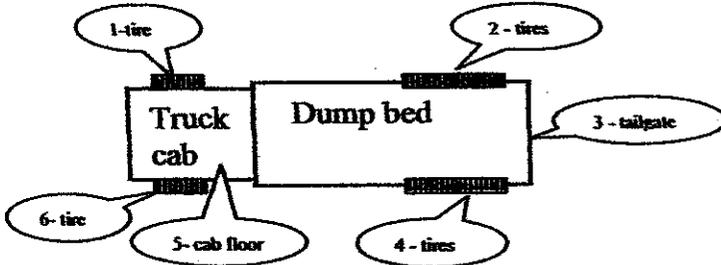
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

## 0554501

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-3540			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Birch St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date 0318707002 051915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Johnson		Signature <i>[Signature]</i>		Month	Day Year
24. Transporter #1: Acknowledgment of Receipt of Materials		Signature <i>[Signature]</i>		Month	Day Year
Printed/Typed Name Chuck Foy				07	01 07
25. Transporter #2: Acknowledgment of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

519185

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 229508	GRID 0000
WEIGHMASTER		
R000080 GINA C		
DATE IN 4 September 2007	TIME IN 10:17 am	
DATE OUT 4 September 2007	TIME OUT 10:17 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0534501	ORIGIN	

CG Gross Weight 82,900.00 lb  
 Tare Weight 38,540.00 lb  
 Net Weight 44,360.00 lb 23.18 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.18	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0554501

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Bruce St. Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Bruce St. Golden, CO 80401 Colorado School of Mines (Golden, School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 107 07/07/06 YR11915		18. Containers	
				19. Total Quantity	
				No. Type	
a. Waste				18 Y Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name			Signature		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year
Printed/Typed Name			Signature		09 04 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

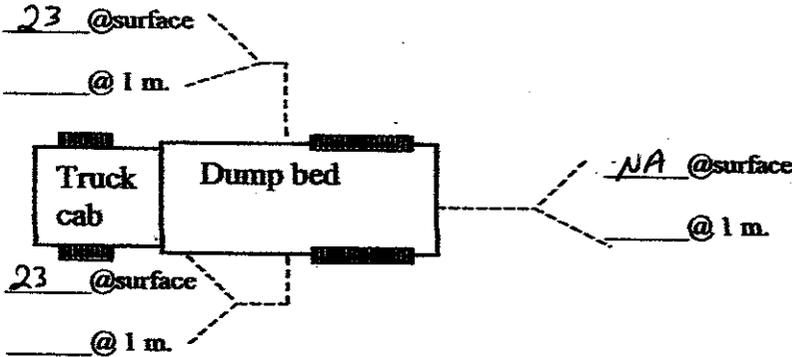
TRANSPORTER #1

CCM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1004 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

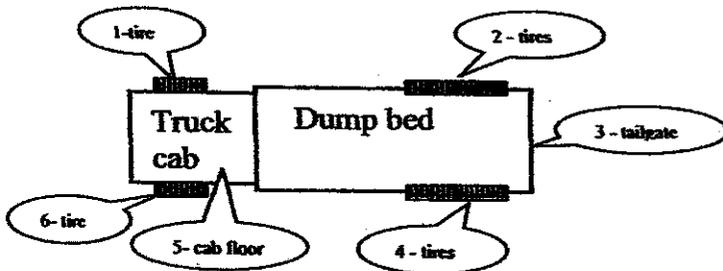
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554502

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3666			5. Generating Location (if different) Clemson School of Mines Research Institute North West of 12th and Birch St Clemson, CO 80401 303-273-3666		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Green Trucking H/D</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Clemson School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <i>Normal Slud</i>		17. Allied Waste Approval # and Exp. Date <i>2017-03-01 12/31/15</i>		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve D. ...</i>			Signature <i>[Signature]</i>		Month Day Year <i>7 21 17</i>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>			Signature <i>[Signature]</i>		Month Day Year <i>7 21 17</i>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519188

12

FOOTHILLE LANDFILL  
 8900 HIGHWAY 99  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191E

SITE	TICKET	GRID
01	589544	0001
WEIGHMASTER		
E000050 GINA W		
DATE IN	TIME IN	
4 September 2007	10:28 am	
DATE OUT	TIME OUT	
4 September 2007	10:27 am	
VEHICLE	ROLL OFF	
Y51191E		
REFERENCE	ORIGIN	
0554502		

CG Gross Weight 56,800.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 19,100.00 lb 24.55 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.55	TN	EM-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554502

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1300 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Green Trucking, LLC		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2010 Hwy 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm 504		17. Allied Waste Approval # and Exp. Date CO 607070006 11/15/15		18. Containers	19. Total Quantity
				No.	Type
					Drums
					Gallons
					Tons
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature		Month Day Year 7 27 11	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Tom Cline		Signature		Month Day Year 7 29 11	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

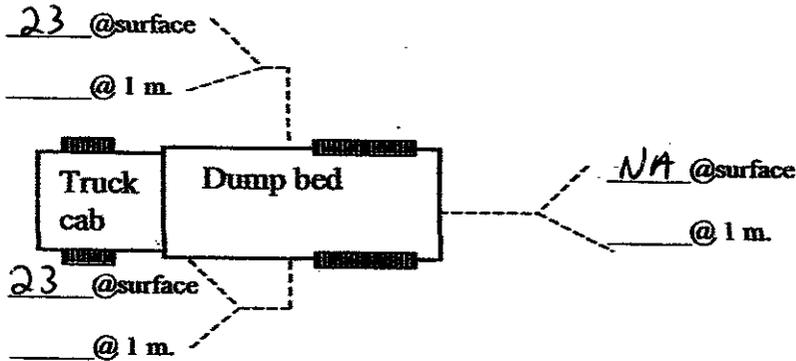
TRANSPORTER #1

00000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1010 Surveyed by: Chiles, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

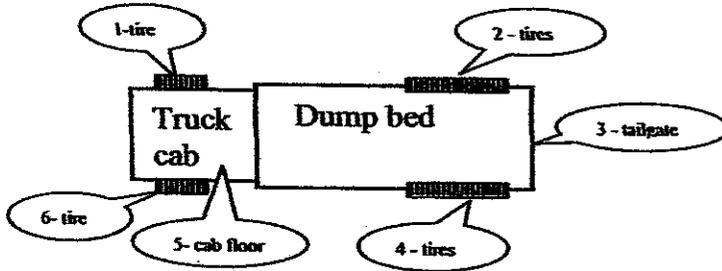
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	

24 519136

FOOTHILLS LANDFILL  
 8700 HIGHWAY 70  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE 01	TICKET 589531	GRID 0000
WEIGHMASTER		
R000050 BINA C		
DATE IN 4 September 2007	TIME IN 10:31 am	
DATE OUT 4 September 2007	TIME OUT 10:33 am	
VEHICLE YS11915	ROLL OFF	
REFERENCE 0554508	ORIGIN	

GS Gross Weight 83,160.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 45,960.00 lb 22.98 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.98	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kens*



# NON-HAZARDOUS WASTE MANIFEST

0554503

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-5308			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-5008		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Joe Grieve Trucking		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address 8070 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Burn Vol		20167020803 1/5/1915		19. Total Quantity 18 Y Y-Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B...			Signature		Month Day Year 1 2 15
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name KENS KARNON			Signature		Month Day Year 01 10 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

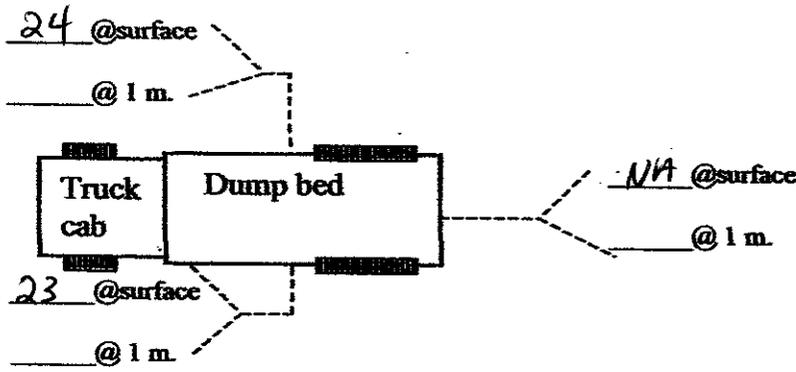
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1029 Surveyed by: CHicks, J Mattson

Trucking Company: Greene Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

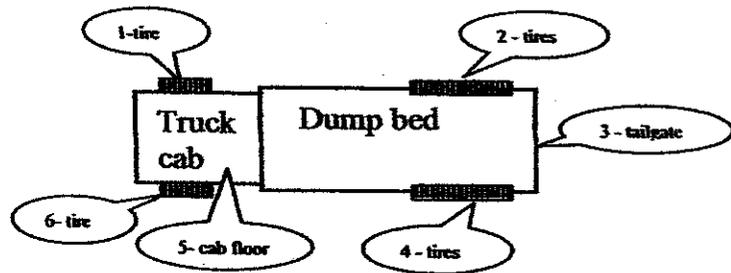
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



13

# NON-HAZARDOUS WASTE MANIFEST

0554504

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Bluffs St. Golden, CO 80401 303-273-3936				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Plover St. Golden, CO 80401 303-273-3936	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6001 Hwy 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Sol		17. Allied Waste Approval # and Exp. Date CO 167 070004 Y511015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Br...			Signature 		Month Day Year 1 1 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name David Colero Lopez			Signature 		Month Day Year 09 09 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

604600083

513224

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
80401  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589570	GRID 0000
WEIGHMASTER P000080 GINA C		
DATE IN 4 September 2007	TIME IN 10:50 am	
DATE OUT 4 September 2007	TIME OUT 10:50 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0524504	ORIGIN	

Gross Weight 88,020.00 lb  
 Tare Weight 35,700.00 lb  
 Net weight 52,320.00 lb 23.66 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.66	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



ALLIED WASTE

SIGNATURE *[Signature]*



13

# NON-HAZARDOUS WASTE MANIFEST

## 0554504

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3956			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Footh St Golden, CO 80401 303-273-3956		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 5500 May St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Normal Soil		CO 107 07007 511915		19. Total Quantity 20. Unit Wt/Vol	
				18 Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brainerd			Signature: [Signature]		Month Day Year: 07 09 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Norman Colero Lopez			Signature: [Signature]		Month Day Year: 07 09 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

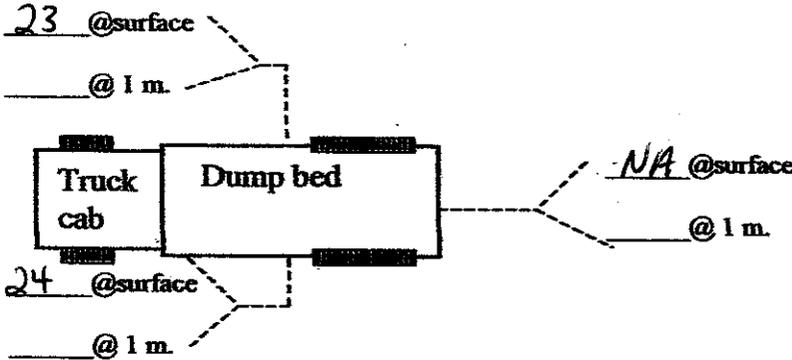
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1045 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

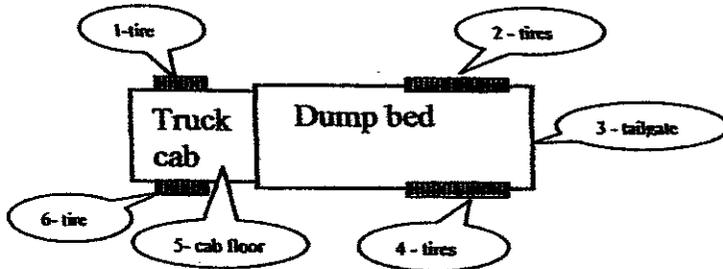
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	1.7 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

901  
0554505

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 Illinois Ct Golden, CO 80401 303-273-1000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-1000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8500 Mary St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 05107 03000 12-1-1915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Seaman		Signature		Month	Day
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

519129

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
740602  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: 7511915

SITE	TICKET	GRID
01	587585	0000
WEIGHMASTER		
R000050 Site C		
DATE IN	TIME IN	
4 September 2007	11:05 am	
DATE OUT	TIME OUT	
4 September 2007	11:06 am	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
0554505		

GS Gross Weight 31,780.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 47,380.00 lb 23.67 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.67	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE J. H.



# NON-HAZARDOUS WASTE MANIFEST

0554505

761

Change print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mine Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ACQUA WASTE # 0000010 (University School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		000167 070908 1511215		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: <i>Steve S. ...</i>			Signature: <i>[Signature]</i>		Month: <i>1</i> Day: <i>1</i> Year: <i>05</i>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: <i>[Name]</i>			Signature: <i>[Signature]</i>		Month: <i>1</i> Day: <i>1</i> Year: <i>05</i>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

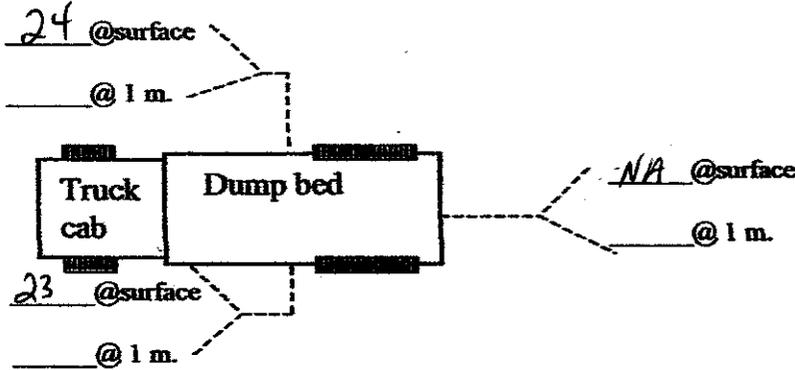
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9/4/07 1049 Surveyed by: CHicks, J Mathson  
 Trucking Company: Greene Truck license plate no. /state: 95

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

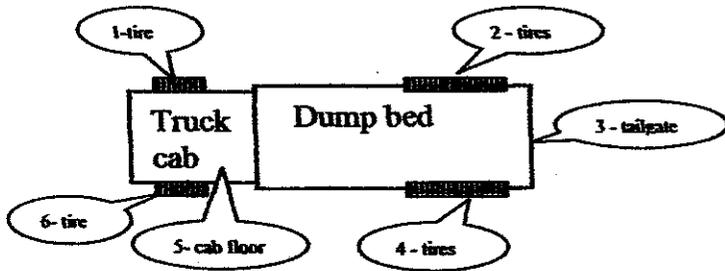
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0554506

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3006			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3006		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3200 Hwy 30 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO-LE7-070000-15-1915		7	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve S. [Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 7 2 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Mark [Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 7 1 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

CCM00033

518234

FOOT HILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589590	GRID 0000
WEIGHMASTER		
SEC0080 BINA C		
DATE IN 4 September 2007	TIME IN 11:11 am	
DATE OUT 4 September 2007	TIME OUT 11:11 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 055450a	ORIGIN	

GS Gross Weight 77,200.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 40,220.00 lb 21.11 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.11	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554506

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1600 Illinois St Golden, CO 80401 303-273-3306			5. Generating Location (if different from 3) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3306		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Heavy Sol		CO 147 073003 1511015		19. Total Quantity 2 Drums	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]		Signature [Signature]		Month Day Year 2 21 99	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Signature]		Signature [Signature]		Month Day Year 2 21 99	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

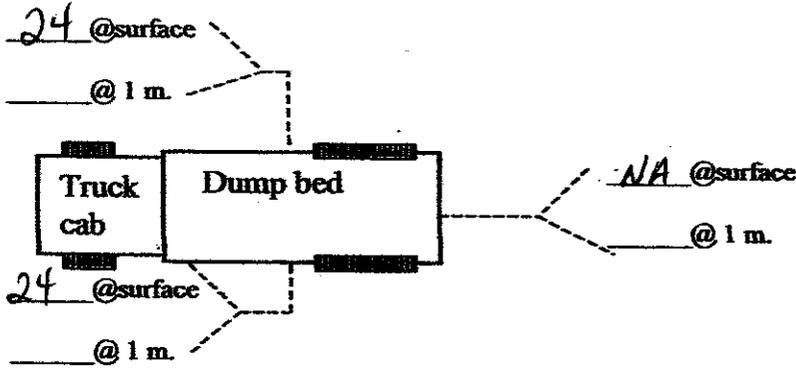
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1055 Surveyed by: CHicks, J Mathson

Trucking Company: Greene Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

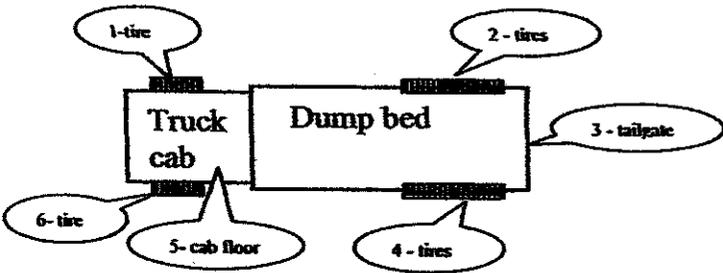
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0554507

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Maple St Golden, CO 80401 303-273-3988				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3988			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address School of Mines 1500 Maple St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 0018707000751191F		18. Containers			
				19. Total Quantity		20. Unit	
				No.	Type	Drums	Galons
						Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brown		Signature 		Month 7	Day 27		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Santiago Vargas		Signature 		Month	Day		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

801000033

523224

FOOTHILLE LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	889574	0000
WEIGHMASTER		
RECORDED GINA C		
DATE IN	TIME IN	
4 September 2007	11:14 am	
DATE OUT	TIME OUT	
4 September 2007	11:14 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0554307		

Gross Weight 77,600.00 lb  
Tare Weight 35,640.00 lb  
Net Weight 41,960.00 lb 20.98 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.98	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-4-07



# NON-HAZARDOUS WASTE MANIFEST

# 0554507

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1700 14th St Golden, CO 80401 303-273-3000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3001 Hill St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Num Soil		CO 18797000 1511011		19. Total Quantity No. Type Y Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature [Signature]	
				Month Day Year 6 27	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santos Vargas				Signature [Signature]	
				Month Day Year 6 27	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

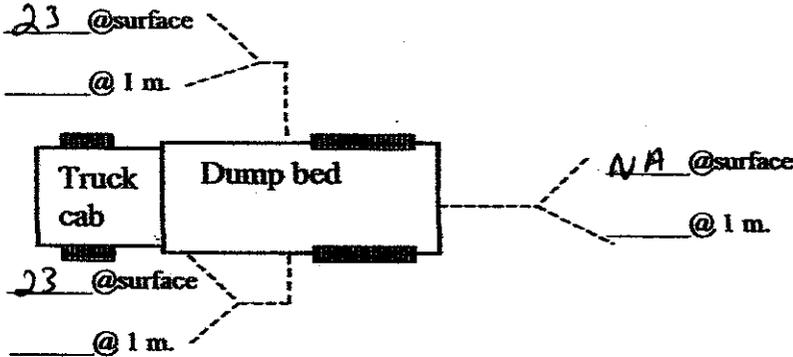
CCM000933

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1059 Surveyed by: CHicks, J Mattson

Trucking Company: Greene Truck license plate no./state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

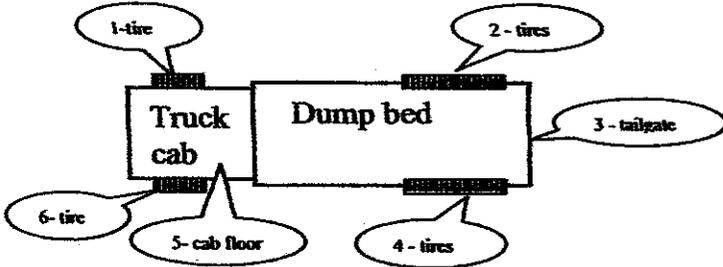
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554508

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address School of Mines Research Institute 1570 Illinois St Golden, CO 80401 303-273-1000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-1000						
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address 8300 Hwy 87 Golden, CO		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. Non Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 05/15/2006 - 05/15/15		18. Containers					
				19. Total Quantity		20. Unit W/Vol			
				No.		Type		Q. Units	
								7-Yards	
								T-Tras	
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Berghman			Signature 		Month Day Year 8 11 07				
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Mark Phelan			Signature 		Month Day Year 9 9 07				
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name			Signature		Month Day Year				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name			Signature		Month Day Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

513242

FOOT-HILLS LANDFILL  
 8700 HIGHWAY 95  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589598	0000
WEIGHMASTER		
R000080 0JNA C		
DATE IN	TIME IN	
4 September 2007	11:16 am	
DATE OUT	TIME OUT	
4 September 2007	11:18 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
08E4508		

Gross Weight 83,080.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 47,980.00 lb 23.99 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.99	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0554508

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																					
3. Generator Name and Mailing Address School of Mines Research Institute 1000 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 120th and Illinois St Golden, CO 80401 303-273-3000																						
4. Phone ( )			6. Phone ( )																						
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone																					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone																					
13. Designated T/S/D Facility Name and Site Address School of Mines Golden, CO		14. US EPA ID Number		15. Facility's Phone																					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																					
a. Irons Soil		055450808 11/9/15		<table border="1"> <thead> <tr> <th>No.</th> <th>Type</th> <th>19. Total Quantity (Drums)</th> <th>20. Unit Wt/Vol (Casks)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>7-Yards</td> <td>1-Tons</td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		No.	Type	19. Total Quantity (Drums)	20. Unit Wt/Vol (Casks)			7-Yards	1-Tons	b.				c.				d.			
No.	Type	19. Total Quantity (Drums)	20. Unit Wt/Vol (Casks)																						
		7-Yards	1-Tons																						
b.																									
c.																									
d.																									
21. Additional Descriptions for Materials Listed Above																									
22. Special Handling Instructions and Additional Information																									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																									
Printed/Typed Name Steve Bergman			Signature 		Month Day Year 8 27 15																				
24. Transporter #1: Acknowledgement of Receipt of Materials																									
Printed/Typed Name Mark Helan			Signature 		Month Day Year 9 9 17																				
25. Transporter #2: Acknowledgement of Receipt of Materials																									
Printed/Typed Name			Signature		Month Day Year																				
26. Discrepancy Indication Space																									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																									
Printed/Typed Name 			Signature 		Month Day Year 9 17																				

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

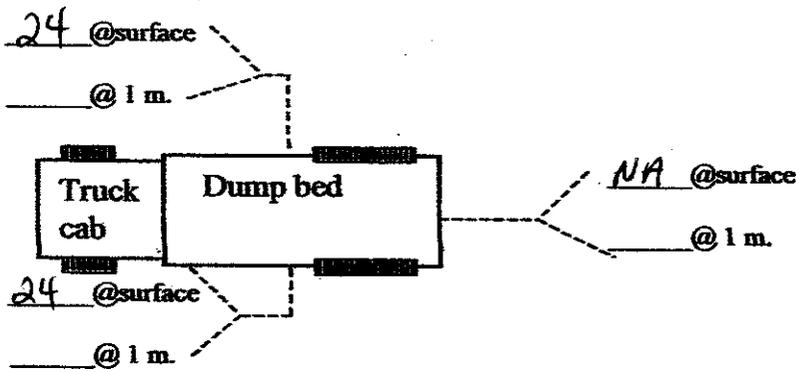
COM000933

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1105 Surveyed by: CHicks, J Mathson

Trucking Company: Greene Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

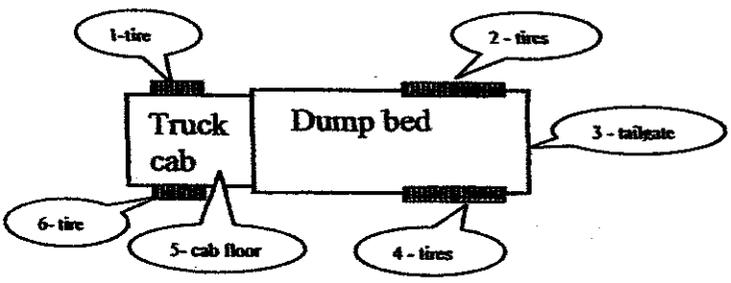
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0554509

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1501 Illinois St Golden, CO 80401 303-773-3336			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3336		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Copper Lake 80701 Hwy 95 Golden, CO 80401 (if not the same as generator's address)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		CO 187 07368 151 1015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkowski				Signature	
				Month	Day Year
				7	31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
				7	31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

FORM 00033

519118

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
804608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589615	0001
WEIGHMASTER		
P.000080 SINA C		
DATE IN	TIME IN	
4 September 2007	11:30 am	
DATE OUT	TIME OUT	
4 September 2007	11:30 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0854209		

Gross Weight 77,660.00 lb  
Tare Weight 36,580.00 lb      Inbound --  
Net Weight 41,080.00 lb 20.54 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.54	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554509

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																									
3. Generator's Name and Mailing Address P.O. Box 21 Golden, CO 80401 303-273-3966				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Bronco Golden, CO 80401 303-273-3966																									
4. Phone ( )		6. Phone ( )																											
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone																									
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone																									
13. Designated T/S/D Facility Name and Site Address P.O. Box 103 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone																									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																									
a. Norm Soil		001870709011541076		<table border="1"> <thead> <tr> <th colspan="2">18. Containers</th> <th>19. Total Quantity</th> <th>20. Unit Wt/Vol</th> </tr> <tr> <th>No.</th> <th>Type</th> <th>0-Drums</th> <th>5-Drums</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>Y-Yards</td> <td>-Tons</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		18. Containers		19. Total Quantity	20. Unit Wt/Vol	No.	Type	0-Drums	5-Drums			Y-Yards	-Tons												
18. Containers		19. Total Quantity	20. Unit Wt/Vol																										
No.	Type	0-Drums	5-Drums																										
		Y-Yards	-Tons																										
b.																													
c.																													
d.																													
21. Additional Descriptions for Materials Listed Above																													
22. Special Handling Instructions and Additional Information																													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																													
Printed/Typed Name: Steve Bertram				Signature: [Signature]																									
				Month: 1 Day: 24 Year: 21																									
24. Transporter #1: Acknowledgement of Receipt of Materials																													
Printed/Typed Name: [Signature]				Signature: [Signature]																									
				Month: 7 Day: 14 Year: 21																									
25. Transporter #2: Acknowledgement of Receipt of Materials																													
Printed/Typed Name:				Signature:																									
				Month: Day: Year:																									
26. Discrepancy Indication Space																													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																													
Printed/Typed Name:				Signature:																									
				Month: Day: Year:																									

GENERATOR

TRANSPORTER

T/S/D FACILITY

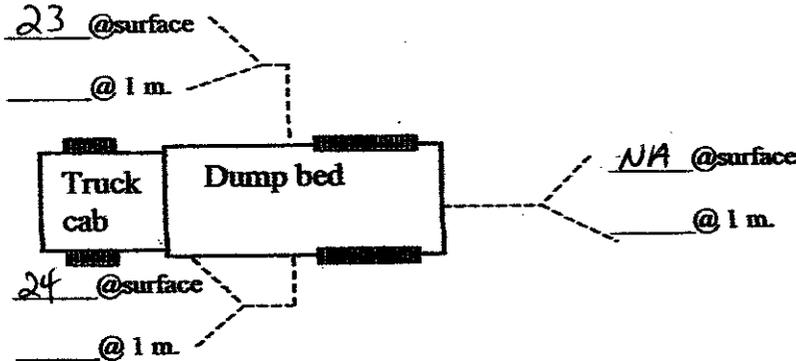
TRANSPORTER #1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1111 Surveyed by: Chicks, J Mathson

Trucking Company: Grove Truck license plate no./state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

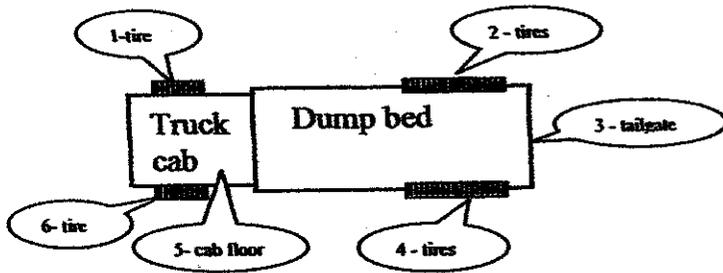
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:  
  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

# 0554510

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of							
3. Generator's Name and Mailing Address 1500 Lincoln St Golden, CO 80401 303-273-3000				5. Generating Location (if different from 3) School of Mines Research Institute North West of 12th and Bond St Golden, CO 80401 303-273-3000							
4. Phone ( )				6. Phone ( )							
7. Transporter #1 Company Name				8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name				11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address 4976 Hwy 20 Golden, CO				14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. Non-Hazardous b. c. d.				17. Allied Waste Approval # and Exp. Date CO 157 071501 12/1/15		18. Containers		19. Total Quantity		20. Unit Wt/Vol	
						No.	Type	Drums		Gallons	
						18	4	Yards		Tons	
21. Additional Descriptions for Materials Listed Above											
22. Special Handling Instructions and Additional Information											
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name: Steve Williams				Signature: [Signature]				Month: 1		Day: 15	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials											
Printed/Typed Name: Chuck Toy				Signature: [Signature]				Month: 09		Day: 04	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials											
Printed/Typed Name:				Signature:				Month:		Day:	Year:
26. Discrepancy Indication Space											
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)											
Printed/Typed Name:				Signature:				Month:		Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

019201

FOOTHILLS LANDFILL  
8900 HIGHWAY 92  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 587203	GRID 0000
WEIGHMASTER		
R000080 BTNA C		
DATE IN 4 September 2007		TIME IN 11:30 am
DATE OUT 4 September 2007		TIME OUT 11:30 am
VEHICLE YE11915		ROLL OFF
REFERENCE 0524510	ORIGIN	

Gross Weight 82,760.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 46,220.00 lb 23.11 TM

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.11	TM	SUB-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0554510

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Black St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and I (East St) Golden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8900 Hwy 10 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Sol		0517117000 0511915		18 4	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beaman</i>			Signature <i>[Signature]</i>		
			Month Day Year <i>1 25 07</i>		
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Chuck Toy</i>			Signature <i>[Signature]</i>		
			Month Day Year <i>01 01 07</i>		
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		
			Month Day Year		
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		
			Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

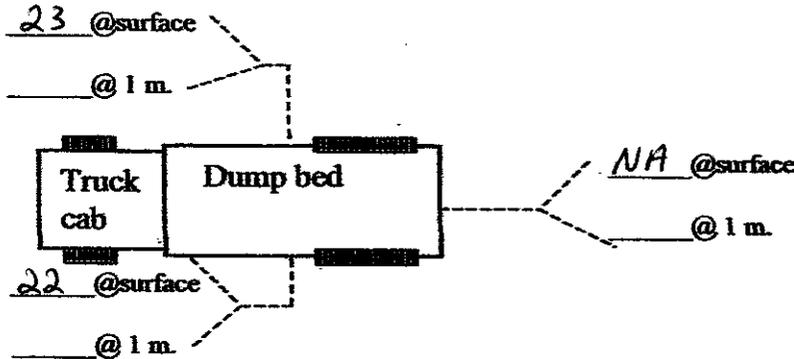
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1116 Surveyed by: CHicks, J Mattson

Trucking Company: Griev Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

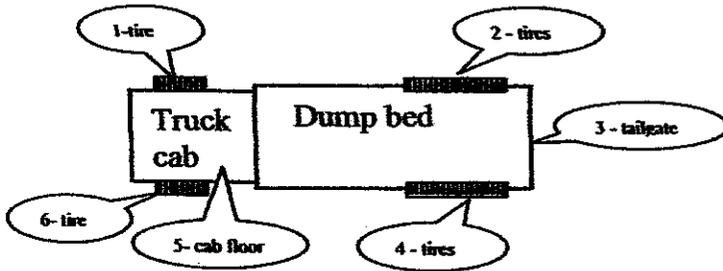
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0554511

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3500			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Ditch St Golden, CO 80401 303-273-2686		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name G-1000C Trucking #17		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address ACAD/FINT # 100000 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
a. Misc Sol		No. Type		D. Drums G. Gallons	
		10 10 07 070000 10 11 10 15		7 Yards 1 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Johnson		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name John J. O'Neil		Signature		9 9 97	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519209

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contractor Y511915

SITE	TICKET	GRID
01	589615	0000
WEIGHMASTER		
P100080 SDNA C		
DATE IN	TIME IN	
4 September 2007	11:35 am	
DATE OUT	TIME OUT	
4 September 2007	11:34 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0554511		

GC Gross Weight 33,840.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 46,140.00 lb 23.07 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.07	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0554511

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1670 Illinois St Golden, CO 80401 303-273-3300			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3300		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name G-700C Trucking #10.		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 25701 W. 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Steam Sulf		20167 07000 7511915		19. Total Quantity No. Type 18	
b.				20. Unit Wt/Vol Yards Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Spitzer				Signature	
24. Transporter #1: Acknowledgement of Receipt of Materials				Month Day Year	
Printed/Typed Name Jim Garcia				Signature	
25. Transporter #2: Acknowledgement of Receipt of Materials				Month Day Year	
Printed/Typed Name				Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

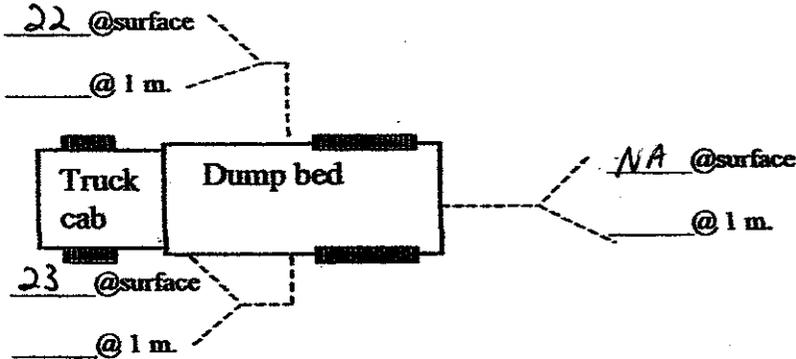
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1121 Surveyed by: C Hicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

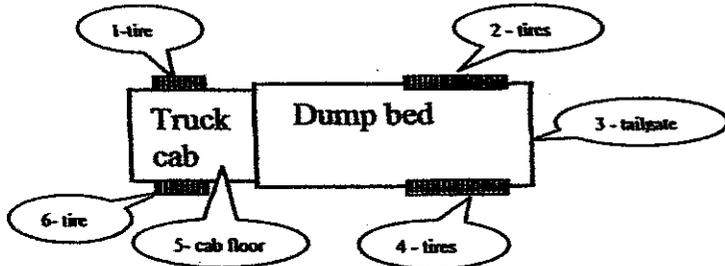
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5 dpm	571.6 dpm	

24 019204

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 800303  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 587620	GRID 0000
WEIGHMASTER PCCOCSO GINA C		
DATE IN 4 September 2007		TIME IN 11:09 am
DATE OUT 4 September 2007		TIME OUT 11:40 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0584512	ORIGIN	

GS Gross Weight 50,620.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 13,420.00 lb 23.21 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.21	TN	SA-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LI	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KENS

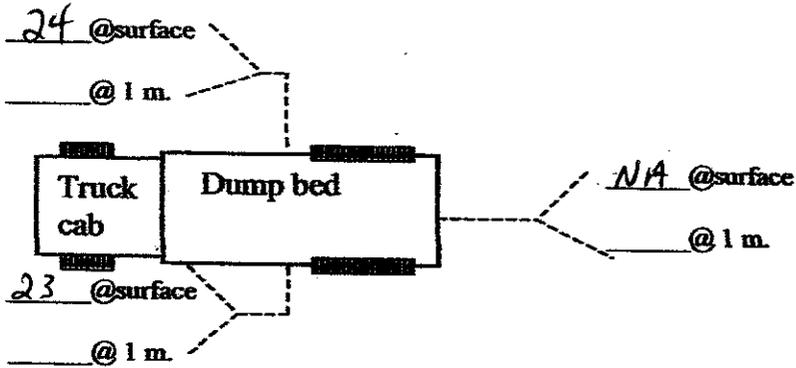


## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1143 Surveyed by: CHicks, J Mattson

Trucking Company: Greene Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

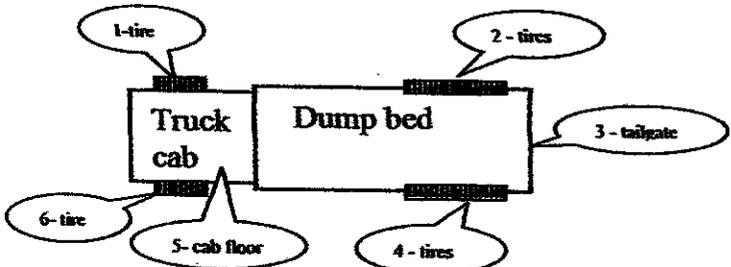
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0554513

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 970-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 970-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 2600 Hwy 102 Golden, CO ADDITIONAL # (PHONE) (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non-Haz		CO 187077300-511815		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Seaton		Signature <i>[Signature]</i>		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name David A. Noe Lopez		Signature <i>[Signature]</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

013201

FOOTHILLS LANDFILL  
8900 HIGHWAY 7E  
GOLDEN  
CO  
720603  
COLORADO SCHOOL OF MINES  
1800 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 529437	GRID 0000
WEIGHMASTER		
PC00089 GINA C		
DATE IN 4 September 2007		TIME IN 11:58 am
DATE OUT 4 September 2007		TIME OUT 11:58 am
VEHICLE 7511915		ROLL OFF
REFERENCE 0554512	ORIGIN	

Contract# Y511915

00 Gross Weight 83,520.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 48,120.00 lb 24.06 TN  
Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0554513

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1500 Illinois St Golden, CO 80401 303-273-3990			5. Generating Location (if different): Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3990		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: Golden, CO Golden, CO Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Non-Sol		CO 157620008 1511915		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve [Signature]		Signature: [Signature]		Month Day Year: 12 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]		Signature: [Signature]		Month Day Year: 09 04 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month Day Year: 1 17	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

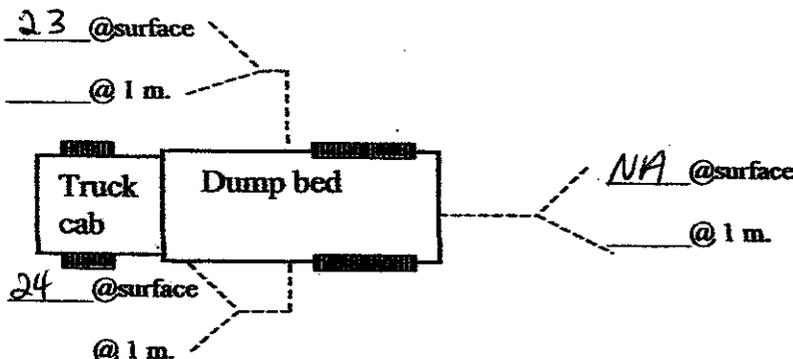
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1200 Surveyed by: CHicks, J Mathson

Trucking Company: Griev Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

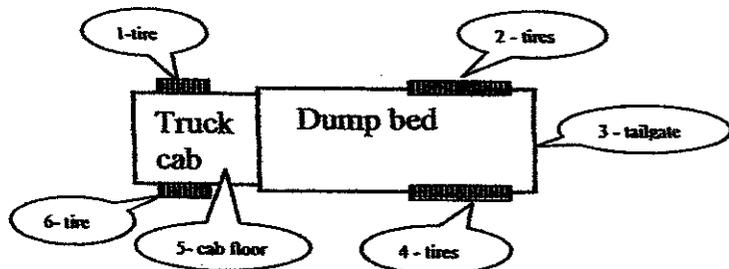
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554514

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-3698			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8801 Hwy 107 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. None Sent		001970700007511215		19. Total Quantity 0 Drums	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve B...</i>			Signature <i>[Signature]</i>		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>			Signature <i>[Signature]</i>		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519297

FOOTHILLS LANDFILL  
 8900 MIDWAY RD  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS1191E

SITE	TICKET	GRID
01	889653	0000
WEIGHMASTER		
P000060 GINA C		
DATE IN	TIME IN	
4 September 2007	12:21 pm	
DATE OUT	TIME OUT	
4 September 2007	12:22 pm	
VEHICLE	ROLL OFF	
YS1191E		
REFERENCE	ORIGIN	
0554814		

Gross Weight 81,300.00 lb  
 Tare Weight 34,400.00 lb Inbound -  
 Net Weight 46,900.00 lb 23.45 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.45	TN	SO-CONT SOIL (				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554514

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Illinois St Golden, CO 80401 303-273-3600			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3600		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1400 Illinois St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date CO-037-02/000-15/1015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

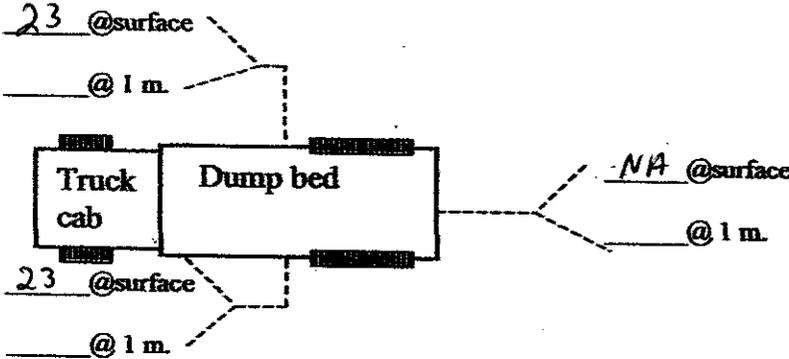
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1203 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

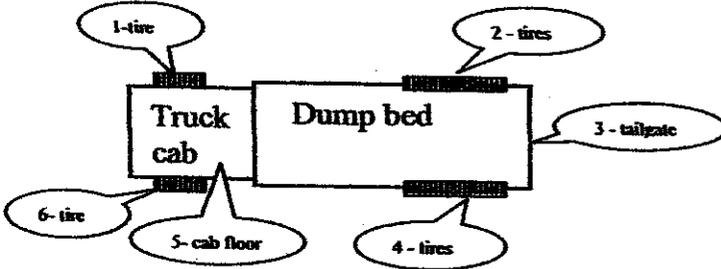
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554515

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 14th St Garden, CO 80401 303-275-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Grant St Garden, CO 80401 303-275-3000		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 5000 Hwy 17 Garden CO		14. US EPA ID Number		16. Waste Shipping Name and Description	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		20187 070600 1511310		19. Total Quantity 0.000000 20. Unit Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>		Signature <i>[Signature]</i>		Month Day Year / /	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month Day Year / /	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year / /	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year / /	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

010200

FOOTHILLS LANDFILL  
8900 HIGHWAY 99  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	589452	0000
WEIGHMASTER		
R000080 GINA C		
DATE IN	TIME IN	
4 September 2007	12:21 pm	
DATE OUT	TIME OUT	
4 September 2007	13:21 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0554515		

Gross Weight 70,100.00 lb  
 Tare Weight 58,980.00 lb  
 Net Weight 11,120.00 lb 20.56 TN  
 Incurred -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.56	TN	SA-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0554515

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1520 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3000 Hwy 57 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date CO 67 07008 03/19/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Seaman		Signature		Month Day Year 1/21/15	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

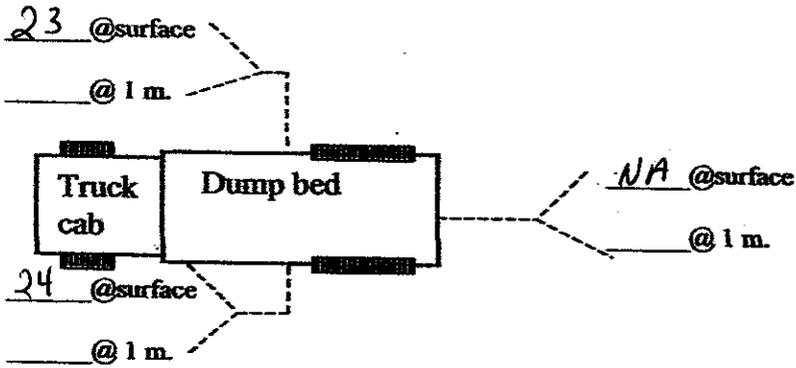
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 /209 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

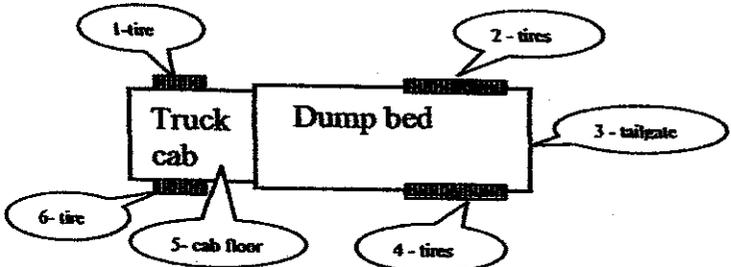
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0554516

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: School of Mines Research Institute 1500 Birch St Golden, CO 80401 303-273-3000			5. Generating Location (if different from 3): School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: ACCOUNT & OPERATIONS - Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description: a. Heavy soil		17. Allied Waste Approval # and Exp. Date: 2018/07/01 15:11:16		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Scott Beaman			Signature: [Signature]		Month: 6 Day: 23 Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Santhiago Vargas			Signature: [Signature]		Month: Day: Year:
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519300

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 509656	GRID 0000
WEIGHMASTER		
F000080 STPA C		
DATE IN 4 September 2007	TIME IN 12:05 pm	
DATE OUT 4 September 2007	TIME OUT 12:27 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0534515	ORIGIN	

GS Gross Weight 76,080.00 lb  
 Tare Weight 35,840.00 lb      Inbound -  
 Net Weight 40,240.00 lb 20.12 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.12	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-4-07



# NON-HAZARDOUS WASTE MANIFEST

# 0554516

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-3698			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3698					
4. Phone ( )			6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address ADDITIONAL SERVICES (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Waste Soil		17. Allied Waste Approval # and Exp. Date CO 167 070008 7511015		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	Drums	Containers	
b.						Y-Yards	Tons	
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beaman				Signature 		Month 6	Day 20	Year 99
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Santia Vargos				Signature 		Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature 		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

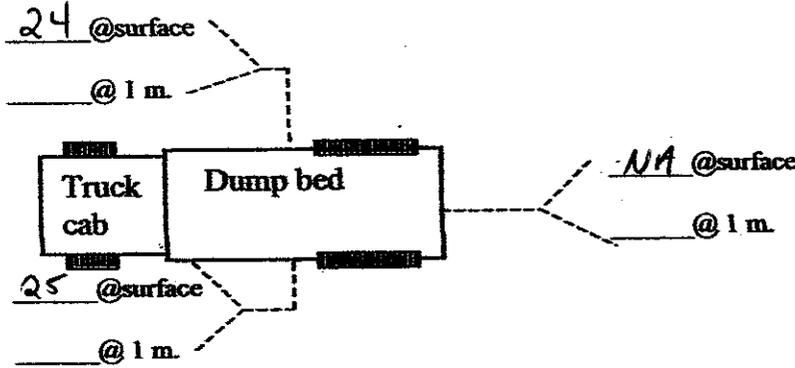
TRANSPORTER #1

COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1214 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gnere Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

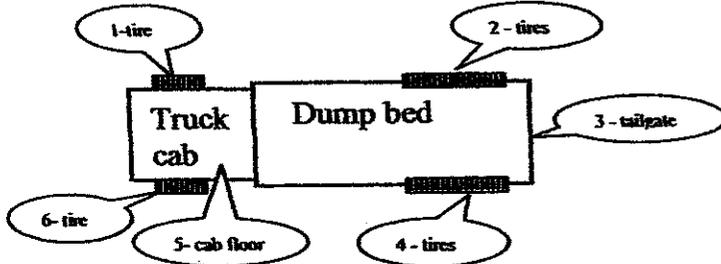
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554517

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Wilson St Golden, CO 80401 303-273-3993			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Duval St Golden, CO 80401 303-273-3993		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Wilson St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Heavy Soil		CO 107 970903 1311015			7-Yards 4-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman		Signature <i>[Signature]</i>		Month 1	Day 1
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan		Signature <i>[Signature]</i>		Month 9	Day 4
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

325300

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960803  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 503657	GRID 0000
WEIGHMASTER PC00080 OINA E		
DATE IN 4 September 2007		TIME IN 12:29 pm
DATE OUT 4 September 2007		TIME OUT 12:29 pm
VEHICLE YE11915		ROLL OFF
REFERENCE 0554517	ORIGIN	

00 Gross Weight 60,760.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 25,660.00 lb 22.64 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.64	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0554517

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-0969			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-0969		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit Wt/Vol	
a. Normal Soil		CO 107-170008 4-511915		2 Drums	
b.				18 Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beaman					
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mark Phelan				9 4 0	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

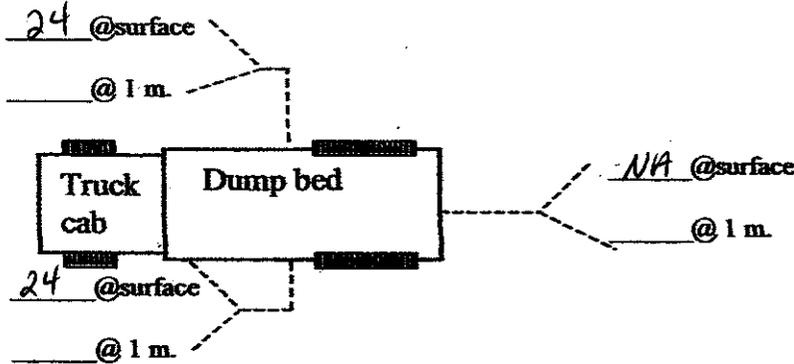
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1221 Surveyed by: CHicks, J Mathson  
 Trucking Company: Greeve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

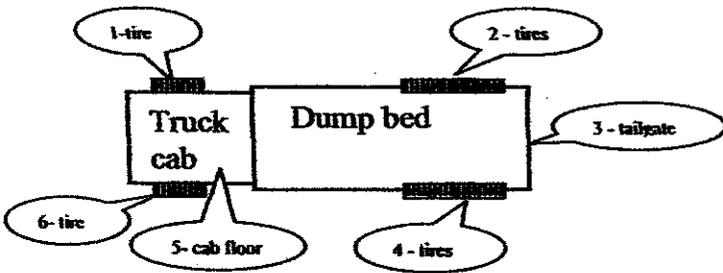
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0554518

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1600 Illinois St Golden, CO 80401 303-273-3868			5. Generating Location (if different): Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3868		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: 3000 Hwy 50 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				Drums	
				Tons	
a. North Sol		CO 167070208 1511915		18 4	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Sean J. Adams				2 0 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				03 01 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

318810

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
780609  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 889666	GRID 000
WEIGHMASTER R200080 STNA C		
DATE IN 4 September 2007		TIME IN 12:37 pm
DATE OUT 6 September 2007		TIME OUT 12:37 pm
VEHICLE 7511915		ROLL OFF
REFERENCE 0554518	ORIGIN	

Contract: 7511915

GG Gross Weight 80,200.00 lb  
 Tare weight 36,540.00 lb  
 net weight 43,660.00 lb 21.83 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.83	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0554518

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Lincoln St Golden, CO 80401 303-275-3668			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3668		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1800 May St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Acryl Sol		CO 157 070808 1511815		18 No. Type 18 4	
b.				19 7 Yards	
c.				20 Tons	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Seaman</i>			Signature <i>[Signature]</i>		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Chuck Foy</i>			Signature <i>[Signature]</i>		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

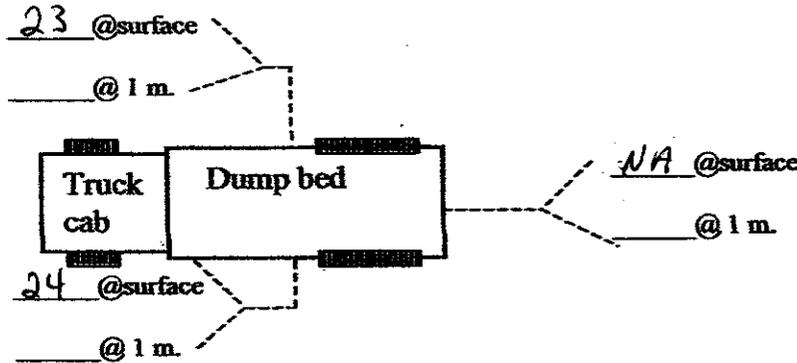
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1227 Surveyed by: CHicks, J Mattson

Trucking Company: Greiner Truck license plate no./state: 12

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

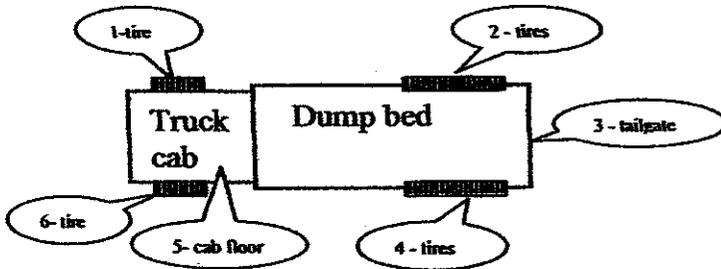
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554519

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1505 Blake St Golden, CO 80401 303-273-3900			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Grave Tanking H/D		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Columbia Laundry 8500 Hwy 60 Golden, CO 80401 (Underground Storage Tank Area)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Sol		17. Allied Waste Approval # and Exp. Date CO 157 07/00A 05/19/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman		Signature		Month 7	Day 2
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 8	Day 4
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

519314

FOOTHILLS LANDFILL  
5700 HIGHWAY 93  
GOLDEN  
CO  
750608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

12

Contract #: Y511915

SITE 01	TICKET 550470	GRID 0000
WEIGHMASTER FC00080 GINA C		
DATE IN 4 September 2007		TIME IN 12:44 pm
DATE OUT 4 September 2007		TIME OUT 12:44 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 0554519	ORIGIN	

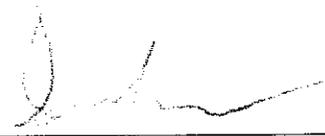
Gross Weight 83,640.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 45,940.00 lb 22.97 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.97	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

# 0554519

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of							
3. Generator's Name and Mailing Address 1570 Black St Golden, CO 80401 303-273-3936				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Black St Golden, CO 80401 303-273-3936							
4. Phone ( )				6. Phone ( )							
7. Transporter #1 Company Name <i>Green Trucking H.O.</i>				8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name				11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address 2500 14th St Golden, CO - ACCOUNT # 964676 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description				17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit		
						No.	Type	Drums	Gallons		
a. None listed				CO 187 07/30/15 15119/15		✓		7 Yards	Tons		
b.											
c.											
d.											
21. Additional Descriptions for Materials Listed Above											
22. Special Handling Instructions and Additional Information											
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name <i>Steve Brannon</i>				Signature <i>[Signature]</i>				Month	Day	Year	
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name <i>[Signature]</i>				Month	Day	Year	
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name				Month	Day	Year	
26. Discrepancy Indication Space											
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)											
Printed/Typed Name				Signature				Month	Day	Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

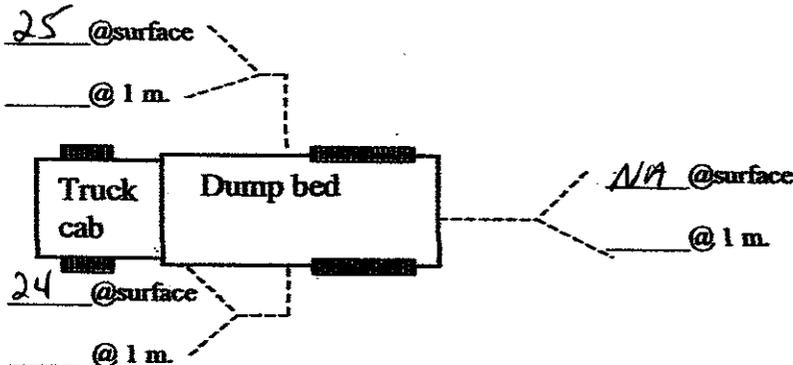
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 1232 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

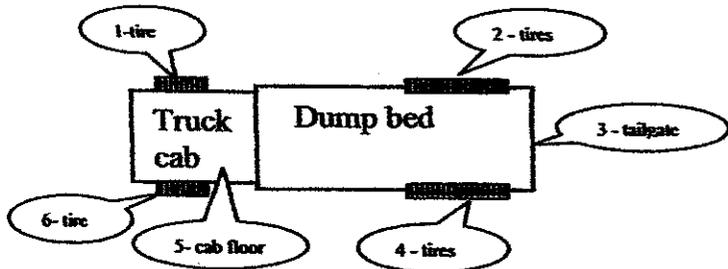
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554520

76

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1-01 Mine St Golden, CO 80401 303-275-3368			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Piner St Golden, CO 80401 303-275-3368		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 8000 N. Hwy 50 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 157 07/31/87 5/1/915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bergman		Signature <i>[Signature]</i>		Month 12	Day 2
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Frank Brown		Signature <i>[Signature]</i>		Month 1	Day 17
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

519320

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y311915

SITE 01	TICKET 58947e	GRID 0000
WEIGHMASTER R000080 SINA C		
DATE IN 4 September 2007		TIME IN 10:50 pm
DATE OUT 4 September 2007		TIME OUT 10:50 pm
VEHICLE Y311915		ROLL OFF
REFERENCE 0554520	ORIGIN	

Gross Weight 79,260.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 42,680.00 lb 21.34 TN  
 Incurred -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.34	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				



*[Handwritten Signature]*  
 SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0554520

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1901 Minnie St Golden, CO 80401 303-271-3698			5. Generating Location (if different from 3) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-271-3698					
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address 30001 Ave 92 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Harm Soil		17. Allied Waste Approval # and Exp. Date CO 107070903 7/31/95		18. Containers		19. Total Quantity	20. Unit	
				No.	Type	D-Drums	20 Gallons	
b.						7-Yards	T-Tons	
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Steve Blomster				Signature:		Month: 7	Day: 2	Year: 95
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name:				Signature:		Month: 7	Day: 11	Year: 95
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name:				Signature:		Month:	Day:	Year:
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name:				Signature:		Month: 7	Day: 17	Year: 95

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

CCM000033

Pile B Sept 4, 2007

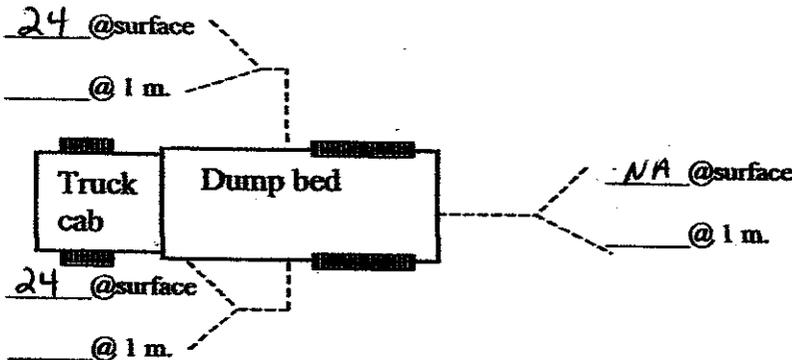
## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Marguez 96	9-4-07	0700	0717	18 cy	77.8
JD 04	-	0700	0724		74.1
Grieve 23	-	0700	0729		83.2
Grieve 8	-	0700	0734		83.0
Grieve 12	-	0715	0740		84.8
Grieve 24	-	0720	0747		84.0
Marguez 961	-	0730	0753		78.8
Collazo 13	-	0745	0758		80.0
Ruiz 95	-	<del>0750</del> 0750	0803		77.7
Marguez 96	-	0820	0829		79.2
JD 04	-	0825	0838		85.0
Grieve 23	-	0830	0843		83.4
Grieve 8	-	0835	0849		83.9
Grieve 12	-	0845	0856		84.2
Grieve 24	-	0850	0901		82.8
Marguez 961	-	0918	0928		83.0
Ruiz 95	-	0920	0932		82.2
JD 04	-	0933	0942		80.3
Marguez 96	-	0935	0948		85.5
Grieve 23	-	0940	0952		78.6

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0717 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grove Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

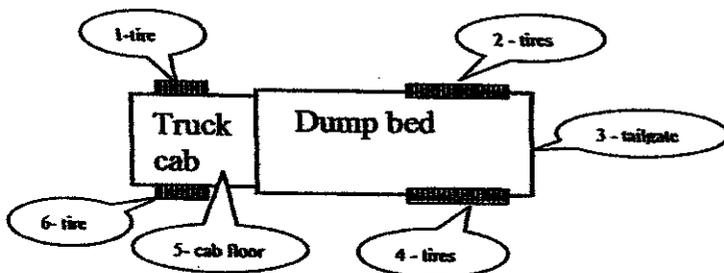
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

96  
0554531

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1510 Blaine St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez, CO 2000 Hwy 163 Golden, CO (Close to Branch of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Horn Box		CO 167 070903 1511815			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Becking		Signature 		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Fernando Hernandez		Signature 	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519057

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 587410	GRID 0000
WEIGHMASTER #000090 BINA C		
DATE IN 4 September 2007		TIME IN 7:37 am
DATE OUT 4 September 2007		TIME OUT 7:37 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0554531	ORIGIN	

Gross Weight 77,780.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 41,200.00 lb 20.60 TH Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.60	TH	SW-CDNT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*

SIGNATURE



# NON-HAZARDOUS WASTE MANIFEST

0554531

76

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1500 Lincoln St Golden, CO 80401 303-273-3998			5. Generating Location (if different): School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		7. Transporter #1 Company Name	
8. US EPA ID Number		9. Transporter #1's Phone		10. Transporter #2 Company Name	
11. US EPA ID Number		12. Transporter #2's Phone		13. Designated T/S/D Facility Name and Site Address: 1500 Lincoln St Golden, CO 80401	
14. US EPA ID Number		15. Facility's Phone		16. Waste Shipping Name and Description: a. Norm Soil	
17. Allied Waste Approval # and Exp. Date: 00157 070906 Y511915		18. Containers		19. Total Quantity	
		No. Type		Drums Yards Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckwith		Signature: [Signature]		Month Day Year: 7/1/98	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando's name		Signature: [Signature]		Month Day Year: 9/1/98	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month Day Year:	

GENERATOR

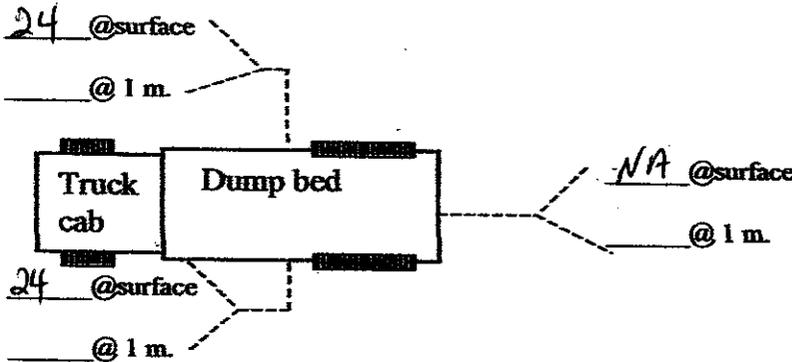
TRANSPORTER

T/S/D FACILITY

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0724 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

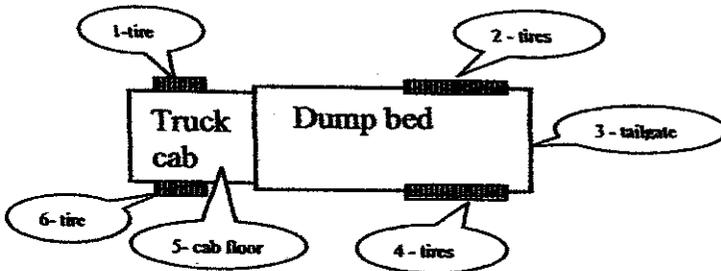
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554532

1004

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 16-10 Blake St Golden, CO 80401 310-273-3608				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 310-273-3608	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8300 Hwy 10 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 137 (120608 Y5) 11/45		19. Total Quantity 0-Drums 7-Yards	
b.				20. Unit Wt/Vol 0-Drums 1-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Schwarz				Signature 	
				Month Day Year 9 21 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas				Signature 	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519062

FOOTHILLS LANDFILL  
 8900 HIGHWAY 92  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589415	0000
WEIGHMASTER		
R000080 GINA E		
DATE IN	TIME IN	
4 September 2007	7:41 am	
DATE OUT	TIME OUT	
4 September 2007	7:43 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0584532		

GS Gross Weight 74,120.00 lb  
 Tare Weight 35,640.00 lb  
 Net weight 38,480.00 lb 19.24 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-4-07



JD04

# NON-HAZARDOUS WASTE MANIFEST

0554532

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Nevada St Golden, CO 80401 (303) 273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm. Soil		CO 157 072808 YE 11915		17 Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

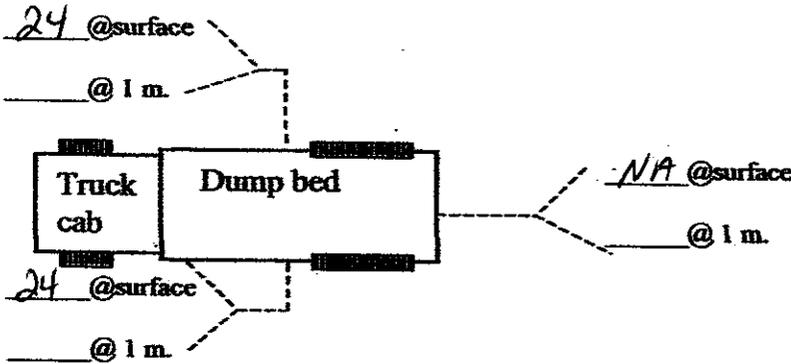
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0729 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

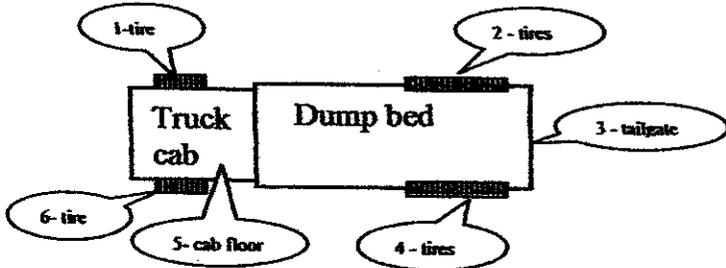
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



23

# NON-HAZARDOUS WASTE MANIFEST

## 0554533

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1200 Illinois St Golden, CO 80401 303-273-0200			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-0200		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 7000 E. Hwy 103 Golden, CO 80401 ACCOUNT 0 810000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 07 070608 1011315		18. Containers	
				No.	Type
a. Norm Soil				Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Braun		Signature 		Month 7	Day 4
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name MARK PHELAN		Signature 	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

319087

FOOTHILLS LANDFILL  
8900 HIGHWAY 98  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	889433	0000
WEIGHMASTER		
FC000080 DINA C		
DATE IN	TIME IN	
4 September 2007	7:17 am	
DATE OUT	TIME OUT	
4 September 2007	7:47 am	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
0884333		

03 Gross Weight 83,320.00 lb  
 Tare Weight 35,100.00 lb Inbound -  
 Net Weight 48,120.00 lb 24.06 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.06	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

## 0554533

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-773-9998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-9998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8000 Hwy 26 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Normal		00167-02008-7511815		18 Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Branson			Signature: [Signature]		Month: 7 Day: 27 Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Mark Phelan			Signature: [Signature]		Month: 9 Day: 7 Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

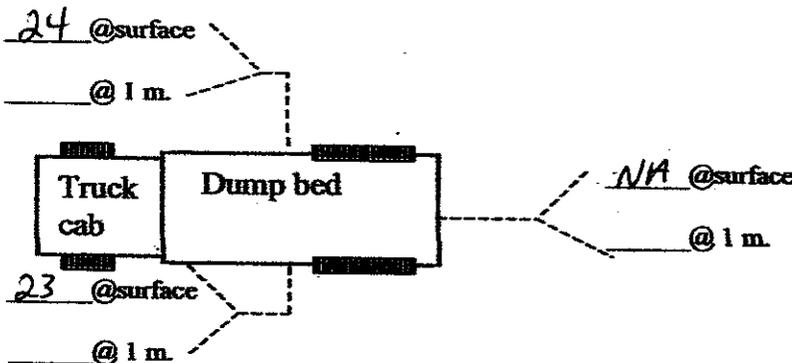
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0734 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

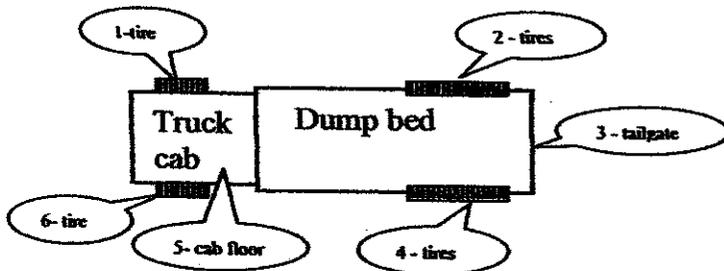
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554534

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Garden, CO 80401 100-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Garden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Haz Sol		CO 187-070908 12/11/15		19. Total Quantity 20. Unit Wt/Vol	
				18. Containers No. Type	
				19. Total Quantity 20. Unit Wt/Vol	
				19. Total Quantity 20. Unit Wt/Vol	
				19. Total Quantity 20. Unit Wt/Vol	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature		Month Day Year 9 27 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature		Month Day Year 09 04 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

510073

FOOTHILLE LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1570 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 5874-03	GRID 0000
WEIGHMASTER		
RECORDED SIGN C		
DATE IN 4 September 2007	TIME IN 7:54 am	
DATE OUT 4 September 2007	TIME OUT 7:54 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0554-034	ORIGIN	

G Gross Weight 83,020.00 lb  
 Tare Weight 36,540.00 lb      Inbound --  
 Net Weight 46,480.00 lb 23.24 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.24	TN	EM-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554534

8

Repeat print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St Golden, CO 80401 303-273-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8334 Hwy 99 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Heavy Soil		CO 157 070906 1511915		19. Total Quantity 18 Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature <i>[Signature]</i>		Month Day Year 7 01 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature <i>[Signature]</i>		Month Day Year 07 04 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

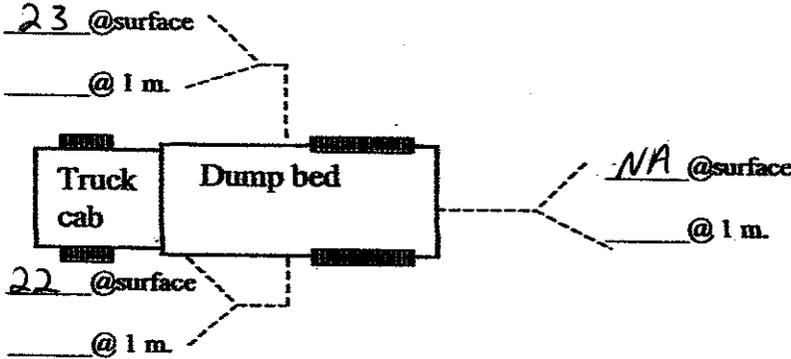
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0740 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gnere Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

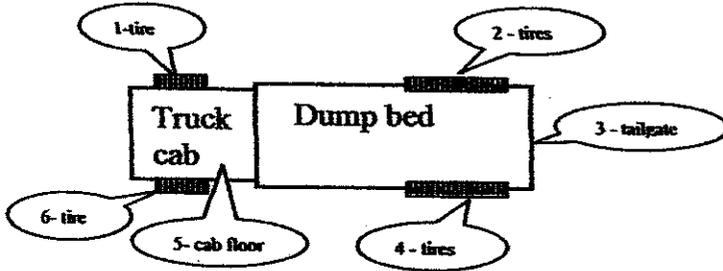
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0554736

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Hilltop St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name Geneve Trucking 1112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1900 Hwy 93 Golden, CO ACCOUNT # 92043 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date CO-027-276300 12-18-15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bestman		Signature 		Month 7	Day 5
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month	Day
Printed/Typed Name Tony Ann		Signature		Year 14	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

513073 12

FOOTHILLS LANDFILL  
 6900 HIGHWAY 75  
 GOLDEN  
 CO  
 800603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589426	0000
WEIGHMASTER		
P000090 GIMA C		
DATE IN	TIME IN	
4 September 2007	7:59 am	
DATE OUT	TIME OUT	
4 September 2007	7:59 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0584266		

Gross Weight 84,760.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 47,060.00 lb 23.53 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.53	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0554536

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1540 Illinois St Golden, CO 80401 303-273-3936			5. Generating Location (if different from 3) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Green Trucking 1112		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address RS&I Hwy 101 Golden, CO ACCOUNT # 140077 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron S-d		17. Allied Waste Approval # and Exp. Date CYLE 7 270000 Y 11015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month 1	Day 9
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 9	Day 11
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature 		Month 10	Day 1

GENERATOR

TRANSPORTER

T/S/D FACILITY

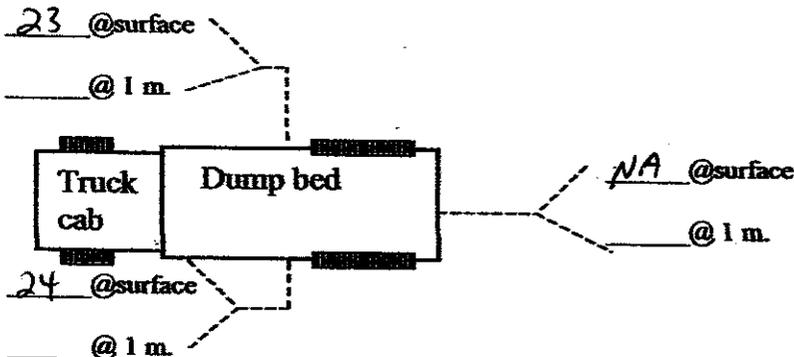
TRANSPORTER #1

COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0747 ~~27~~ Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

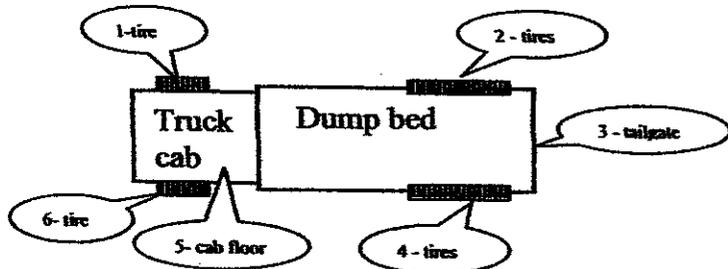
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	

24 519078

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589431	GRID 0000
WEIGHMASTER		
RC00080 GINA C		
DATE IN 4 September 2007		TIME IN 8:07 am
DATE OUT 4 September 2007		TIME OUT 8:07 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0554537	ORIGIN	

Gross Weight 83,960.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 46,760.00 lb 23.38 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.38	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *Kear*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

0554537

24

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Illinois St Golden, CO 80401 303-273-4603			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-4603		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Joe Grevet Trucking		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1501 Day St Golden, CO 80401 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description None Sent		19. Total Quantity 1 Yards		20. Unit Tons	
21. Additional Descriptions for Materials Listed Above		22. Special Handling Instructions and Additional Information		23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.	
Printed/Typed Name Steve Grevet		Signature <i>[Signature]</i>		Month Day Year 11 14 07	
24. Transporter #1: Acknowledgement of Receipt of Materials		25. Transporter #2: Acknowledgement of Receipt of Materials		26. Discrepancy Indication Space	
Printed/Typed Name KENS HANSON		Signature <i>[Signature]</i>		Month Day Year 09 04 07	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)		Printed/Typed Name		Signature	
Month Day Year		Month Day Year		Month Day Year	

GENERATOR

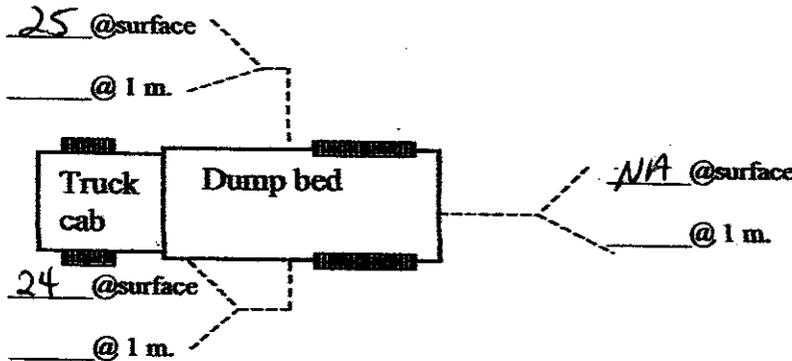
TRANSPORTER

T/S/D FACILITY

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0753 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 961

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

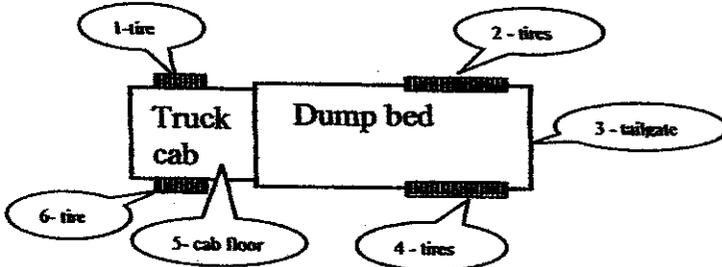
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 1 cpm	β 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



961

# NON-HAZARDOUS WASTE MANIFEST

0554538

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 1st St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address PacifiCorp Landfill 8001 Ing. Rd Golden, CO 80401 # 000000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		001670700001511815		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Benjamin				7	27
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
M. J. ...				7	27
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY





961

# NON-HAZARDOUS WASTE MANIFEST

0554538

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Mines St Golden, CO 80401 303-273-3593			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3593		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6500 Hwy 93 Golden, CO 80401 # 000000 (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date CO 157 073003 1511315		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blahman		Signature		Month 7	Day 2
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month 7	Day 2
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

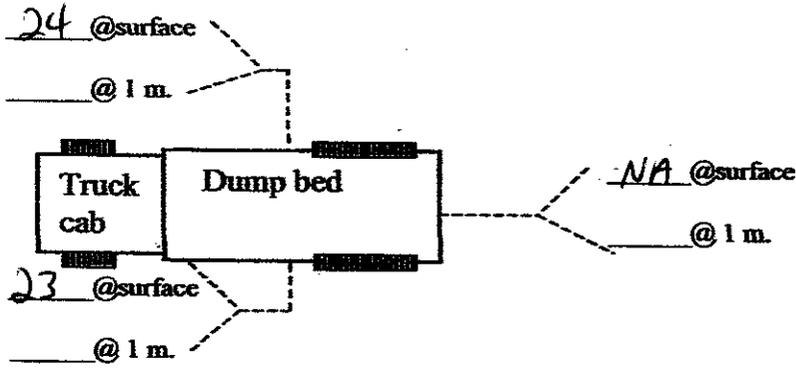
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0758 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greve Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

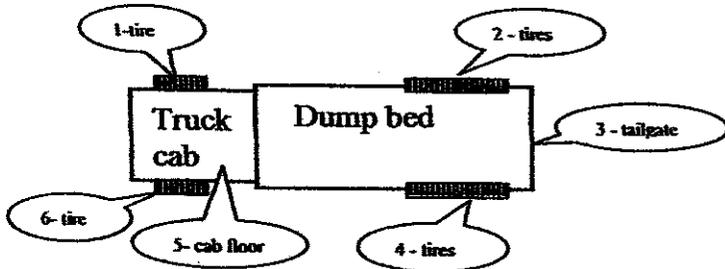
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm

518001

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 589446	GRID 0000
WEIGHMASTER R000080 GINA C		
DATE IN 4 September 2007		TIME IN 8:27 am
DATE OUT 4 September 2007		TIME OUT 8:27 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0554539	ORIGIN	

Gross Weight 32,840.00 lb  
 Tare Weight 35,700.00 lb      Inbound -  
 Net Weight 47,140.00 lb 23.87 TH

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.87	TR	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554539

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Cortez, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Non-Sol b. c. d.		17. Allied Waste Approval # and Exp. Date C0167 07/03/95 1915		18. Containers			
				No.	Type	19. Total Quantity 0 Drums 0 Gallons	20. Unit Wt/Vol 0 Gallons
				18		Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Rookman		Signature		Month 7	Day 31		
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 01	Day 09		
Printed/Typed Name John C. Lopez		Signature		Year 07			
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day		
Printed/Typed Name		Signature		Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		
				Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033



13

# NON-HAZARDOUS WASTE MANIFEST

## 0554539

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3638			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3638		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
a. Iron Sulfide		001870700081511915		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Binkman				9/9/97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Robert Binkman				07/04/97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

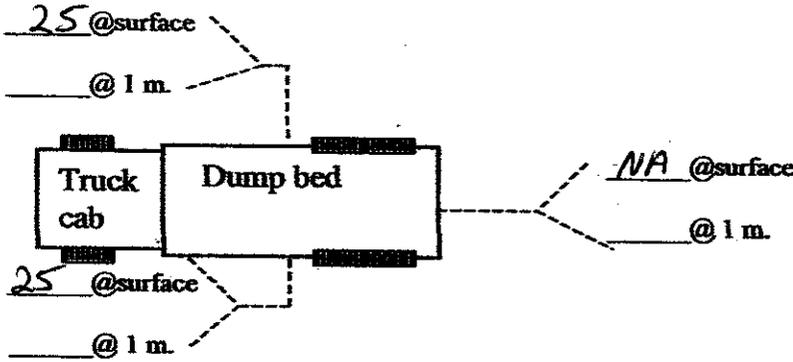
TRANSPORTER #1

COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0803 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

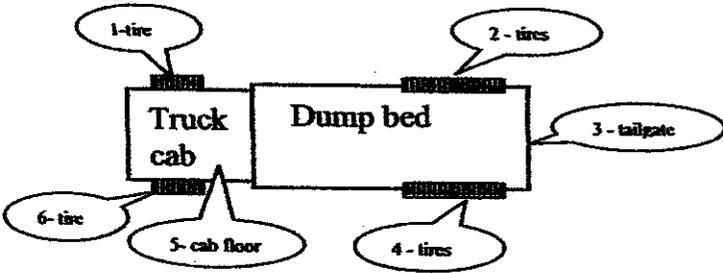
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

95  
0554541

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1000 W. 13th St Golden, CO 80401 303-273-3838			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3838		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1000 W. 13th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz. Sol.		17. Allied Waste Approval # and Exp. Date CO 167 071805 Y61 1015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 9	Day 01
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 09	Day 11
Printed/Typed Name		Signature		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

519087

FOOTHILLS LANDFILL  
 8900 HIGHWAY 78  
 GOLDEN  
 CO  
 80608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	889442	0000
WEIGHMASTER		
FLODOSO GINA C		
DATE IN	TIME IN	
4 September 2007	8:20 am	
DATE OUT	TIME OUT	
4 September 2007	8:25 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0854541		

Gross Weight 79,760.00 lb  
 Tare Weight 06,980.00 lb  
 Net Weight 42,780.00 lb 21.49 TN

Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.49	TN	SU-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



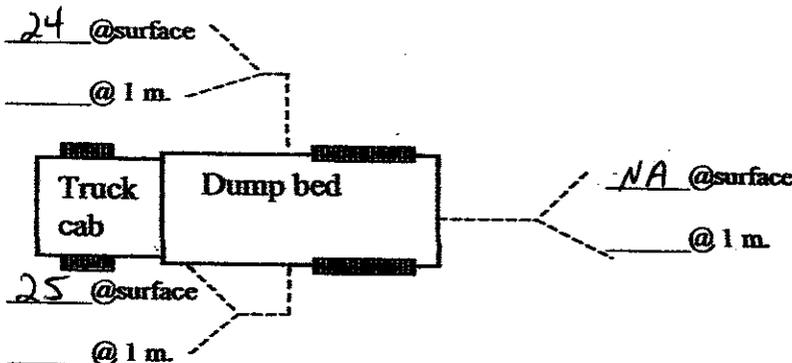
SIGNATURE *[Handwritten Signature]*



# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0829 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

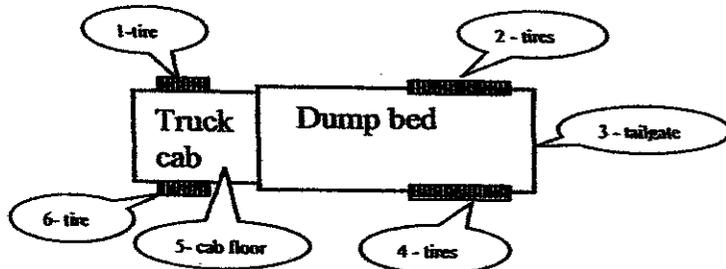
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

96

0554540

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1570 Braman St Golden, CO 80401 303-273-3900				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and DuroSt Golden, CO 80401 303-273-3900					
4. Phone ( )				6. Phone ( )					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 3000 N Hwy 93 Golden, CO 80401 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Biom Sol			17. Allied Waste Approval # and Exp. Date CO LST 070008 4/31/96		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Drums	Gallons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name: Steve B. Brown				Signature: [Signature]			Month: 7	Day: 27	Year: 97
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name: Fernando [Signature]				Signature: [Signature]			Month: 7	Day: 27	Year: 97
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name:				Signature:			Month:	Day:	Year:
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name:				Signature:			Month:	Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

518112

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	587467	0000
WEIGHMASTER		
R000050 GINA C		
DATE IN	TIME IN	
4 September 2007	6:56 am	
DATE OUT	TIME OUT	
4 September 2007	9:00 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0554540		

03 Gross Weight 79,220.00 lb  
 Tare Weight 36,560.00 lb  
 Net Weight 42,660.00 lb 21.32 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.32	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LF	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

*John [Signature]*

SIGNATURE \_\_\_\_\_





96

# NON-HAZARDOUS WASTE MANIFEST

0554540

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Research Institute 1500 Illinois St Golden, CO 80401 303-773-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2000 11th St Golden CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				D Drums	
				3 Gallons	
a. Iron Slag		0000000000 11/19/15		18 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman				7 27 15	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Torres				7 27 15	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

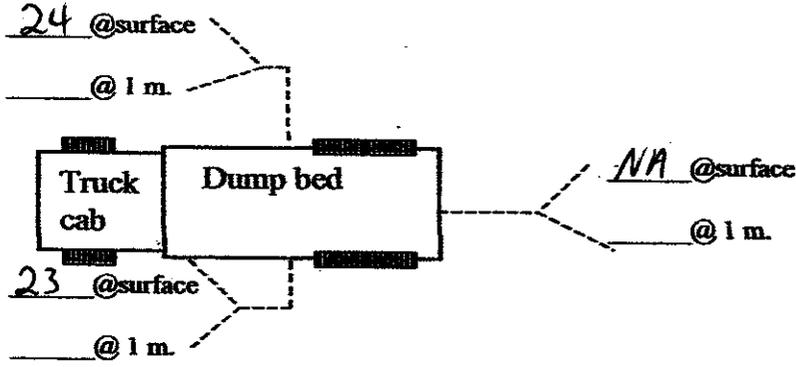
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0838 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

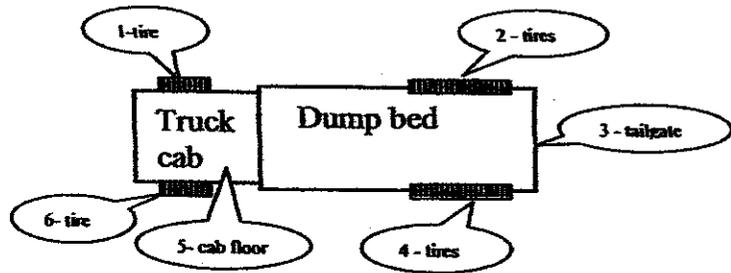
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



JD64

# NON-HAZARDOUS WASTE MANIFEST

0554521

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address BSCG (Bioscience) Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Sol		CO 167-27009-7511010		19. Total Quantity 0.0 Tons	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve [Signature]		[Signature]		. . .	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Santiago Vargas		[Signature]		. . .	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
				. . .	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
				. . .	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

519110

FOOTHILLS LANDFILL  
 8700 HIGHWAY 95  
 GOLDEN  
 CO  
 804600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 389485	GRID 0000
WEIGHMASTER FC00080 GINA C		
DATE IN 4 September 2007		TIME IN 6:57 am
DATE OUT 4 September 2007		TIME OUT 3:37 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0854831	ORIGIN	

GC Gross Weight 77,580.00 lb  
 Tare Weight 35,440.00 lb  
 Net Weight 42,040.00 lb 21.02 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.01	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-11-07



NON-HAZARDOUS WASTE MANIFEST

0554521

JD64

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 10071 Hwy 50 Golden, CO 80401 # 447405 (Colorado State of Address)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				No.	
				Type	
				Drums	
				Yards	
				Tons	
a. Name Soil		001070306 111515			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Sembrano				8 2 00	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Santiago Vargas				8 2 00	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
				8 2 00	

GENERATOR

TRANSPORTER

T/S/D FACILITY

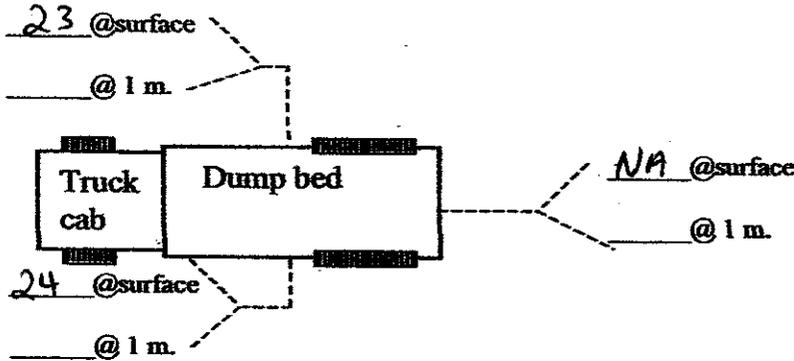
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0843 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no./state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

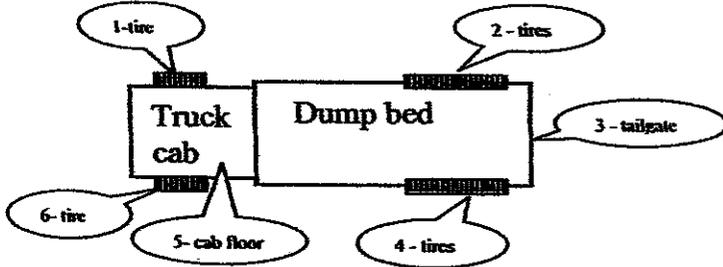
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

23  
0554522

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 10th St Golden, CO 80401 303-273-3656			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3656		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address JIMMY HAY CO Golden, CO		17. Allied Waste Approval # and Exp. Date 00187-00000 12/1/95		20. Unit Wt/Vol Yards Tons	
16. Waste Shipping Name and Description a. Name Slab		18. Containers No. Type		19. Total Quantity 0 Drums 0 Gallons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Gene S. Brown		Signature <i>[Signature]</i>		Month Day Year 1 1 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK THELAN		Signature <i>[Signature]</i>		Month Day Year 9 4 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

519115

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 889470	GRID 0000
WEIGHMASTER #000080 BINA C		
DATE IN 4 September 2007		TIME IN 9:02 am
DATE OUT 4 September 2007		TIME OUT 9:02 am
VEHICLE Y511915		ROLL OFF
REFERENCE 0554832	ORIGIN	

OS Gross weight 84,980.00 lb  
 Tare Weight 35,100.00 lb Inbound -  
 Net Weight 49,880.00 lb 24.9% TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.94	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

0554522

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3598			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3598				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 3000 Hwy 91 Golden, CO ADJACENT to 28th St (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Non-Sol b. c. d.		17. Allied Waste Approval # and Exp. Date AW-63-07-000-1511916		18. Containers			
				No.	Type	19. Total Quantity 2 Drums	20. Unit W/Vol Gallons
					15	Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Simpson		Signature 		Month 7	Day 14		
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name MARK MELAN		Signature 			
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		

GENERATOR

TRANSPORTER

T/S/D FACILITY

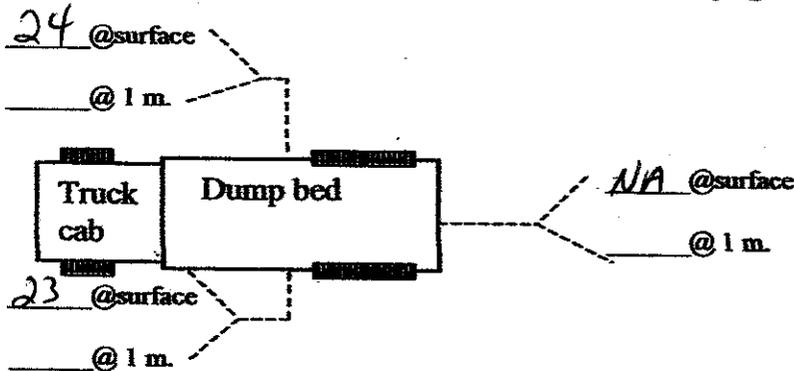
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0849 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gnere Truck license plate no./state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

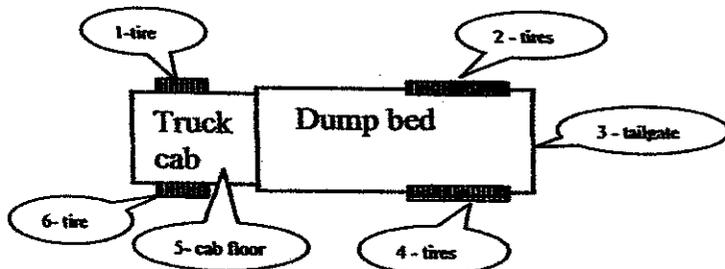
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

# 0554523

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 78th St Golden, CO 80401 303-273-3908			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3000 Hwy 93 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date CO1070700061511010		18. Containers	
				No.	Type
				18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Summers			Signature		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature		Month Day Year 09/01/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519123

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
760608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	529478	0000
WEIGHMASTER		
F0000000 61NA C		
DATE IN	TIME IN	
4 September 2007	9:07 am	
DATE OUT	TIME OUT	
4 September 2007	9:09 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0534523		

OB Gross Weight 83,420.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 46,880.00 lb 23.44 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.44	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

0554523

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3098			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Brock St Golden, CO 80401 303-273-3098		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				D. Drums	
				C. Cans	
a.		0015707008 Y511915		18 Yards	
b.				Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin		Signature		Month Day Year 7 3 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature		Month Day Year 09 01 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

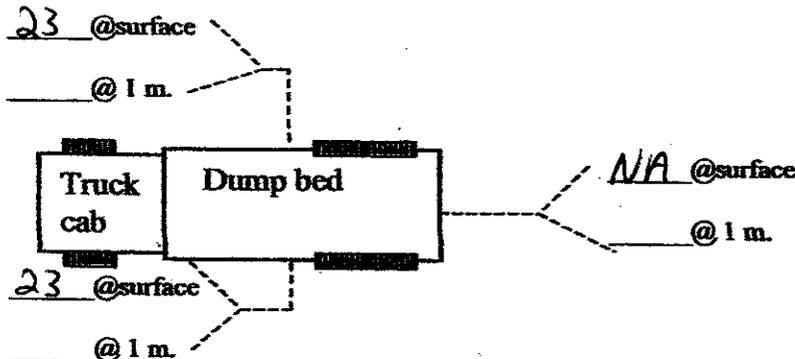
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0856 Surveyed by: Chicks, J Mattson

Trucking Company: Grewe Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

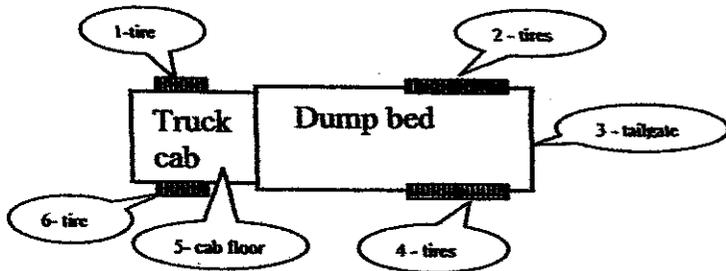
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554524

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address and Facility 1500 Wines St Golden, CO 80401 303-273-3608			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3608		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Green Trucking, LLC</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Wines St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description None Sent		17. Allied Waste Approval # and Exp. Date 001837 070900 151115		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
				D. Drums G. Gallons	
a.				Y Yards T Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>		Signature <i>[Signature]</i>		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name <i>[Signature]</i>		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

518127 *W*

FOOTHILLS LANDFILL  
 3900 HIGHWAY 93  
 GOLDEN  
 CO  
 80405  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 589452	GRID 0000
WEIGHMASTER		
P000060 BINA C		
DATE IN 4 September 2007		TIME IN 9:12 am
DATE OUT 4 September 2007		TIME OUT 9:14 am
VEHICLE YE11915		ROLL OFF
REFERENCE 0589452	ORIGIN	

OS Gross Weight 88,860.00 lb  
 Tare Weight 37,700.00 lb      Inbound --  
 Net Weight 44,160.00 lb 23.08 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.08	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554524

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Wilcox St Golden, CO 80401 303 273 3666			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303 273 3666		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Green Trucking LLC</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 90 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 157070906 05/15/15		18. Containers	
				No.	Type
a. <i>Normal Soil</i>				15	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Binkman</i>			Signature <i>[Signature]</i>		Month Day Year 7 27 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 7 9 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

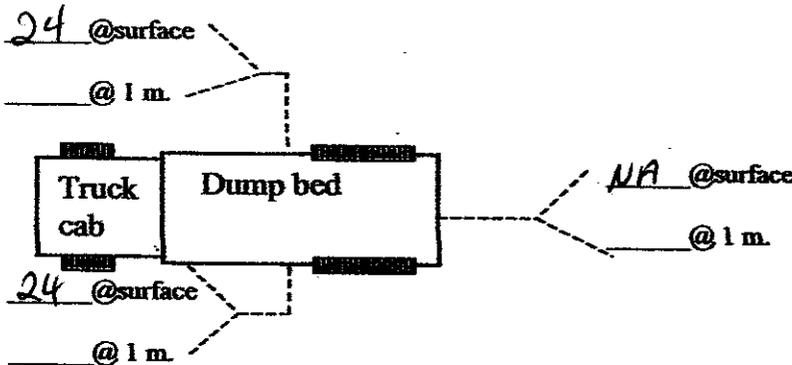
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0901 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

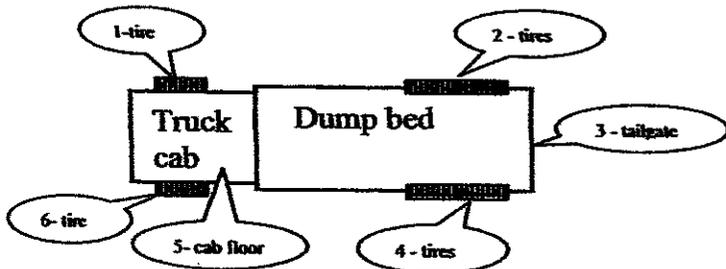
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm

24

513212

FOOTHILLS LANDFILL  
 8900 HIGHWAY 92  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191E

SITE 01	TICKET 789491	GRID 0000
WEIGHMASTER		
F000080 SINA C		
DATE IN 4 September 2007		TIME IN 9:22 am
DATE OUT 4 September 2007		TIME OUT 9:22 am
VEHICLE Y51191E		ROLL OFF
REFERENCE 0524525	ORIGIN	

00 Gross Weight 54,220.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 17,020.00 lb 23.51 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.51	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *Kear*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0554525

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1930 Platte St Golden, CO 80401 303-773-3960			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-773-3960		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name SDE Green Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address APRIL 11th St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date CO 1187 070906 Y511015		18. Containers	
				No.	Type
				18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Shannon		Signature <i>[Signature]</i>		Month 7	Day 2
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name KEN SHANNON		Signature <i>[Signature]</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Month 7	Day 2
26. Discrepancy Indication Space		Signature		Year 07	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
				Year	

GENERATOR

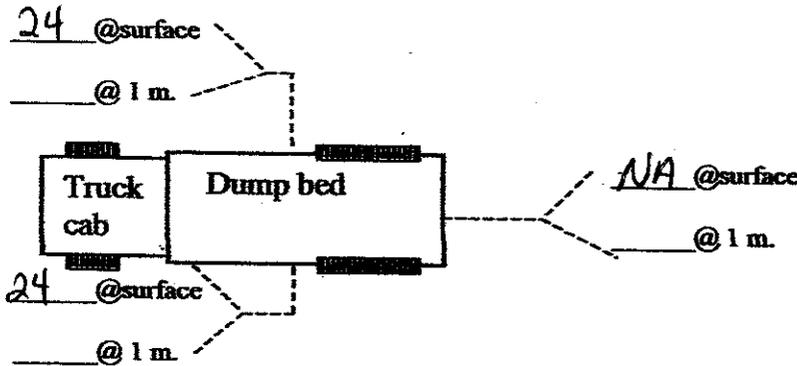
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0928 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grove Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

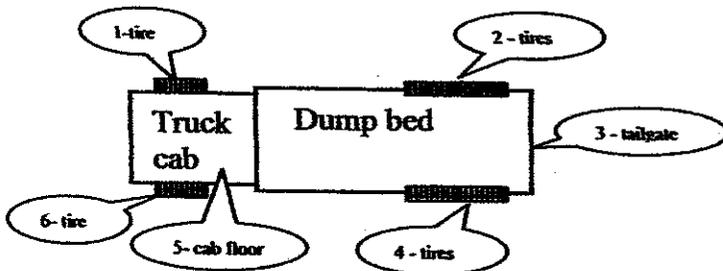
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554526

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3900				5. Generating Location (if different) School of Mines Research Institute North West of 10th and Birch St Golden, CO 80401 303-273-3900	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date CO 167 07000 0611045		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Santomauro		Signature <i>[Signature]</i>		Month 9	Day 27
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

510100

FOOTHILLS LANDFILL  
8900 HIGHWAY 70  
GOLDEN  
CO  
70403  
COLLEGE SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE1191E

SITE	TICKET	GRID
01	58951E	0000
WEIGHMASTER		
R000080 GINA C		
DATE IN	TIME IN	
4 September 2007	7:47 am	
DATE OUT	TIME OUT	
4 September 2007	7:47 am	
VEHICLE	ROLL OFF	
YE1191E		
REFERENCE	ORIGIN	
085452A		

Gross Weight 38,980.00 LB  
Tare Weight 34,400.00 LB      Inbound -  
Net Weight 48,560.00 LB 24.29 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.29	TN	SL-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0554526

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3444			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 167 0 0000 0511015		19. Total Quantity 2 Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Be...			Signature		Month Day Year 8 27 24
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

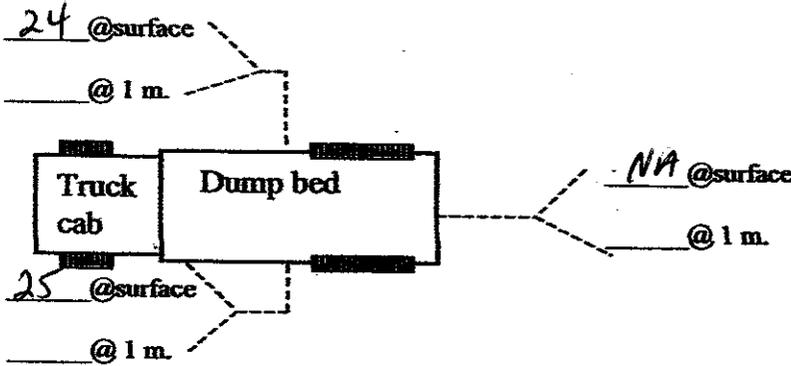
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0932 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

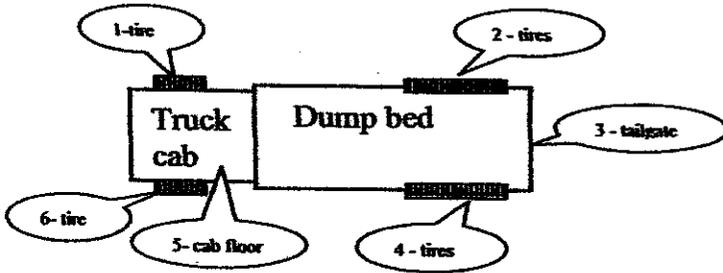
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5 dpm	571.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0554527

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Birch St Golden, CO 80401 303-273-3000				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3000	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Birch St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date CO 127 070300 51-915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve L...		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

519164

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 80408  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 509519	GRID 0000
WEIGHMASTER PC00080 GINA C		
DATE IN 4 September 2007	TIME IN 7:05 am	
DATE OUT 4 September 2007	TIME OUT 9:55 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0554807	ORIGIN	

Gross Weight 38,200.00 lb  
 Tare Weight 34,980.00 lb  
 Net Weight 48,220.00 lb 22.61 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.61	TN	34-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0554527

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 North St Golden, CO 80401 Phone (303) 273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines 1500 North St Golden, CO 80401 (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		CO1670700011511515		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Linker		Signature: [Signature]		Month: 1	Day: 1
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]		Signature: [Signature]		Month: 1	Day: 1
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]		Signature: [Signature]		Month: 1	Day: 1
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name: [Name]		Signature: [Signature]		Month: 1	Day: 1

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

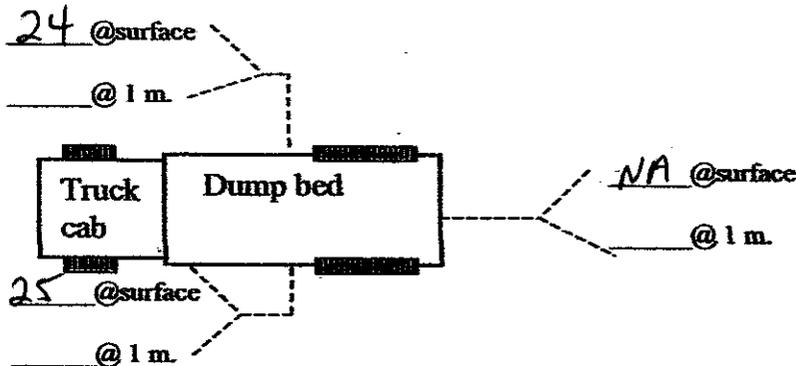
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0942 Surveyed by: CHicks, J Mattson

Trucking Company: Greene Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

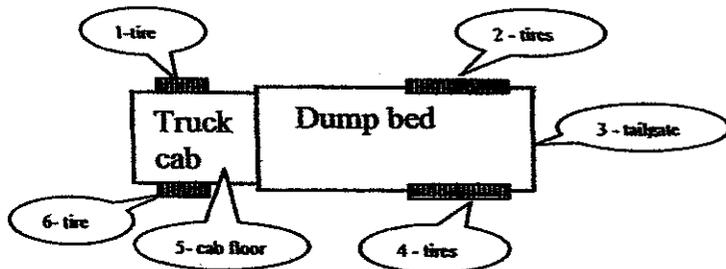
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5 dpm	571.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0554528

4

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-272-3668			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-272-3668		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ADULTERIN # 1000 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. None		CO 157 070310 1511916		7-Yards	1-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Serrano			Signature: [Signature]		Month: 8 Day: 4 Year: 92
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Santiago Vargas			Signature: [Signature]		Month: Day: Year:
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

519139

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80400  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 887534	GRID 0000
WEIGHMASTER		
000080 GINA C		
DATE IN 4 September 2007		TIME IN 10:01 am
DATE OUT 4 September 2007		TIME OUT 10:01 am
VEHICLE YE11915		ROLL OFF
REFERENCE 0854328	ORIGIN	

Gross Weight 80,380.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 44,740.00 lb 22.34 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.34	TN	SW-COAST SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 9-11-07



NON-HAZARDOUS WASTE MANIFEST

0554528

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3008			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3008		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines 1600 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. None Sent		2018773487 7511015		19. Total Quantity 18 Drums 7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Seaman			Signature: [Signature]		Month Day Year 7 7 17
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Scott Vargas			Signature: [Signature]		Month Day Year 7 7 17
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

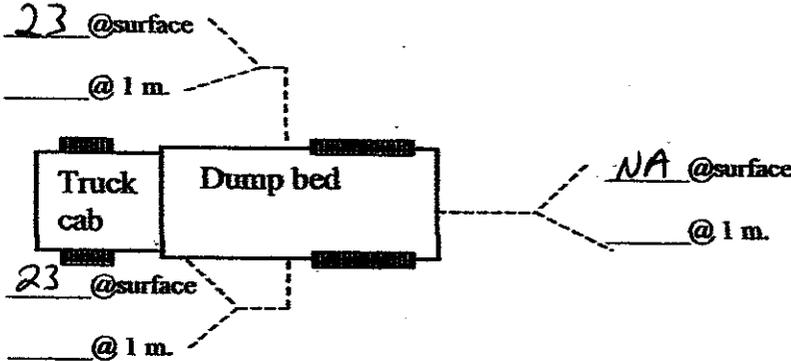
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0948 Surveyed by: Chicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

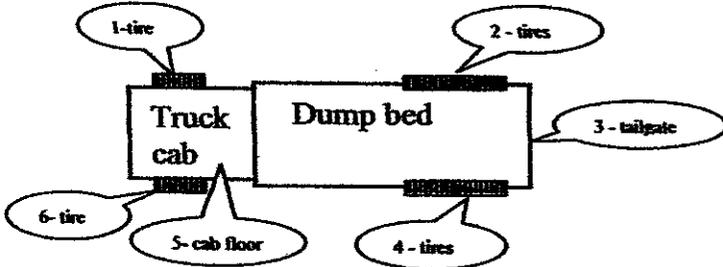
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0554529

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St. Garden, CO 80401 303-273-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Birch St. Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non-Soil		POL 07/0001-011015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Soc. Simon		Signature		Month	Day
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Fernando Torres		Signature	Month
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	Month
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

519180

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80602  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y811915

SITE 01	TICKET 589535	GRID 0000
WEIGHMASTER		
1000080 BINA C		
DATE IN 4 September 2007		TIME IN 10:17 am
DATE OUT 4 September 2007		TIME OUT 10:17 am
VEHICLE Y811915		ROLL OFF
REFERENCE 0534529	ORIGIN	

OS Gross Weight 78,500.00 lb  
 Tare Weight 56,580.00 lb  
 Net Weight 21,920.00 lb 20.99 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.99	TN	SW-CONT SOIL				
1.00	LF	ENVIRONMENTAL FEE				
1.00	LF	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0554528

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1671 Illinois St. Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address ACQUA RINSE ROOMS (Colorado State University)		14. US EPA ID Number		12. Transporter #2's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		15. Facility's Phone	
a. Name Soil		2016707003 (6/10/15)		18. Containers	
				19. Total Quantity	
b.		c.		d.	
21. Additional Descriptions for Materials Listed Above		22. Special Handling Instructions and Additional Information		20. Unit Wt/Vol 7 Yards Tons	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Sick Thomas		Signature		Month Day Year 7 10 02	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Jimenez		Signature		Month Day Year 7 07 02	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year 7 17	

GENERATOR

TRANSPORTER

T/S/D FACILITY

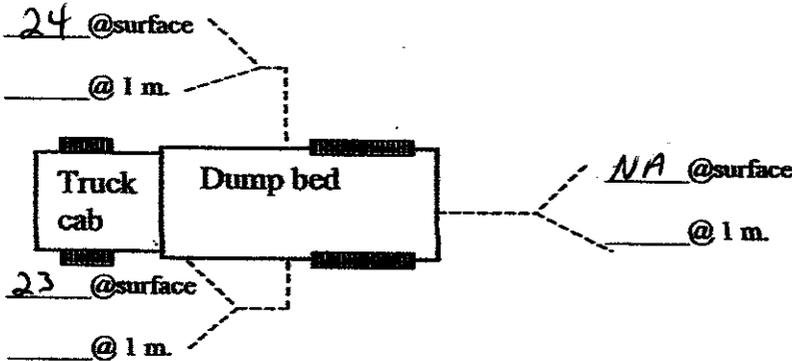
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9/4/07 0952 Surveyed by: CHicks, J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

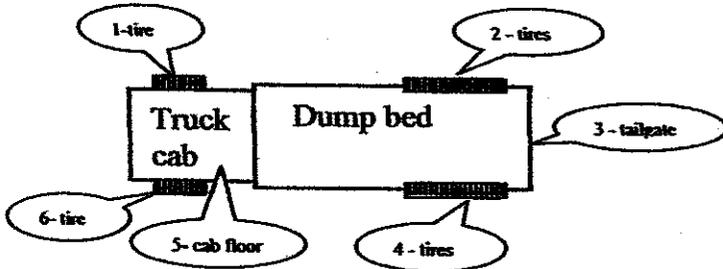
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 270 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5 dpm	571.6 dpm	



23

# NON-HAZARDOUS WASTE MANIFEST

0554530

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3008			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3008		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Non Sol		CO 057070001511015		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaton		Signature 		Month Day Year 7 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHILLAN		Signature 		Month Day Year 9 11 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

519178

FOOTHILLS LANDFILL  
 8700 HIGHWAY 75  
 GOLDEN  
 CO  
 80408  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589531	0000
WEIGHMASTER		
0000000 61M C		
DATE IN	TIME IN	
4 September 2007	10:10 am	
DATE OUT	TIME OUT	
4 September 2007	10:11 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0554530		

GS Gross Weight 85,840.00 lb  
 Tare Weight 35,100.00 lb Inbound -  
 Net Weight 50,440.00 lb 25.22 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
25.22	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



73

# NON-HAZARDOUS WASTE MANIFEST

## 0554530

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Garden, CO 80401 303-273-3698			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Garden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Birch St Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO LOT STORAGE 1514819		18. Containers No. Type	
b.				19. Total Quantity Yards	
c.				20. Unit Wt/Vol Tons	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brennan		Signature		Month Day Year 7 27 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHILAN		Signature		Month Day Year 9 11 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000033

Pile B 8/31/07

## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Marquez 961	8/31/07	0620	0634	18 cy	78.9
JD04		0620	0641		77.5
Collazo 13		0630	0647		81.4 <sup>78.8</sup>
Marquez 96		0630	0652		77
Murray 461		0630	0700		81.4
Grieve 23		0630	0707		80.4
Grieve 8		0640	0712		77.4
Grieve 24		0640	0719		79.9
JD03/01		0650	0723		75.7
Grieve 12		0700	0729		79.9
Ruiz 95		0710	0735		77.4
Marquez 961		0725	0742		80.5
JD 04		0735	0747		76.7
Murray 461		0755	0813		82.4
Grieve 23		0800	0819		84.4
Grieve 8		0800	0829		85.1
Grieve 24		0815	0835		84.5
Callazo 13		0825	0840		84.0
Marquez 96		0830	0848		79.3
JD 01	✓	0830	0852	✓	79.6

Mountain Man Welding + Fabrication

Rick

363-798-6822

8/31/07

## Truck Departure Record Form

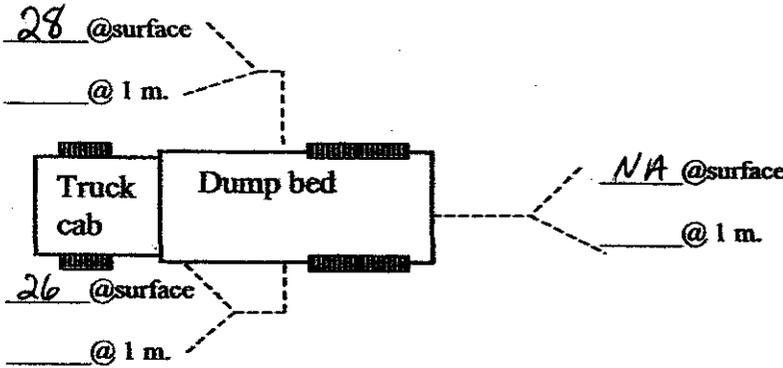
Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Grieve 12	8/31/07	0845	0858	18	85.9
Ruiz 95	-	0850	0903		81.1
Marquez 961	-	0900	0910		82.1
JD 04	-	0905	0915		86.3
Murray 461	-	0915	0926		83.4
Grieve 23	-	0920	0932		87.3
Grieve 8	-	0925	0938		84.6
Grieve 24	-	0930	0944		85.2
Collazo 13	-	0935	0950		84.1
Marquez 96	-	0940	0956		81.5
Grieve 12	-	0945	1002		87.1
JD 01	-	0955	1009		80.6
Ruiz 95	-	0955	1014		82.7
Marquez 961	-	1014	1022		80.4
JD 04	-	1020	1027		78.2
Grieve 23	-	1036	1044		86.0
Grieve 8	-	1037	1051		84.7

37 loads

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 <sup>31</sup> 0634 Surveyed by: Chicks J Mattson  
 Trucking Company: Grievre Truck license plate no./state: 961

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

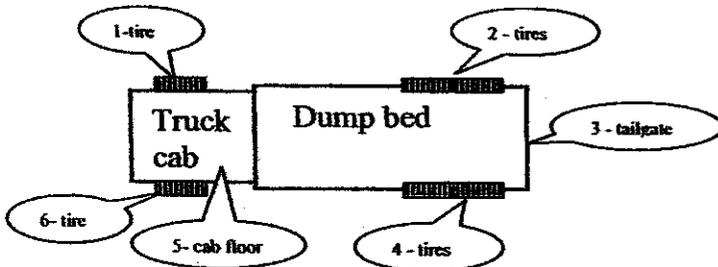
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 µrem/hr	X 0 cpm	β 316 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0592015

961

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 10th St. Ocala, FL 32061 352-375-3300			5. Generating Location (if different) University School of Marine Research Institute North West of 17th and 18th St Ocala, FL 32061 352-375-3300		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 W. 10th St. Ocala, FL 32061		17. Allied Waste Approval # and Exp. Date 00187070008 YS14315		19. Total Quantity 7 Tons	
16. Waste Shipping Name and Description a. Harm Sol		18. Containers		20. Unit Wt/Vol Tons	
		No.		Type	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 03/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name James P. ...			Signature		Month Day Year 03/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

815430

FOOTHILLS LANDFILL  
 2900 HIGHWAY 92  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558333	0000
WEIGHMASTER		
PC00060 SINA C		
DATE IN	TIME IN	
31 August 2007	6:50 am	
DATE OUT	TIME OUT	
31 August 2007	6:50 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592015		

Gross weight 78,940.00 lb  
 Tare weight 34,400.00 lb Inbound -  
 Net weight 44,540.00 lb 22.27 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.27	TN	SU-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE A. B.



NON-HAZARDOUS WASTE MANIFEST

0592015

961

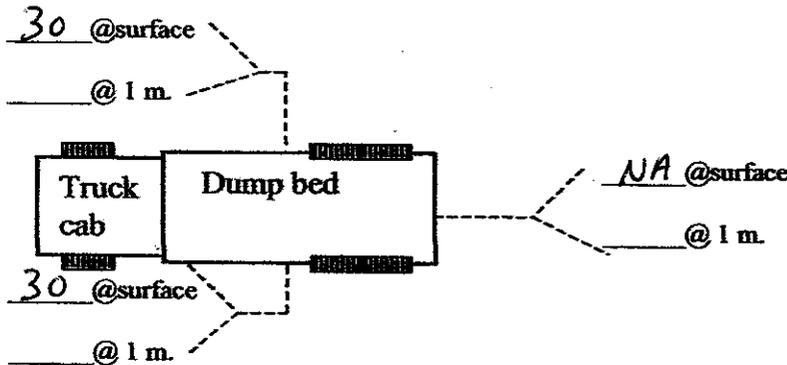
Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Lincoln St. Golden, CO 80401 303-273-3300			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Park St Golden, CO 80401 303-273-3300		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1801 Hwy. 30 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. None		CO 007 07008 1 31 1915		1000 lbs	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman			Signature <i>[Signature]</i>		Month Day Year 8/31/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name James P. [unclear]			Signature <i>[Signature]</i>		Month Day Year 8/31/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name [unclear]			Signature <i>[Signature]</i>		Month Day Year

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/31/07 0641 Surveyed by: Chicks J Matson  
 Trucking Company: Grieve Truck license plate no. /state: JD04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

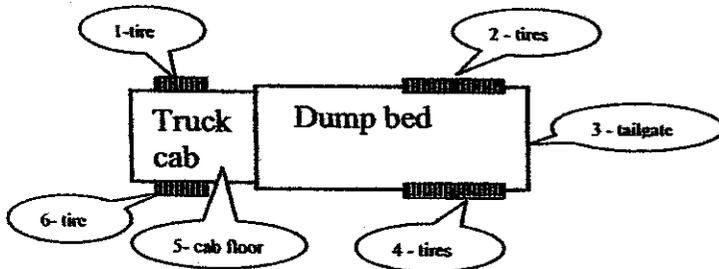
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	X0 cpm	316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

1004  
0643494

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Illinois Golden, CO 80401 303-273-2201			5. Generating Location (if different) North West of 12th and Grand Golden, CO 80401 303-273-0980		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman			Signature: [Signature]		Month Day Year: 8/31/98
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Sonja Vargos			Signature: [Signature]		Month Day Year: [ ]/[ ]/[ ]
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year: [ ]/[ ]/[ ]
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year: [ ]/[ ]/[ ]

GENERATOR

TRANSPORTER

T/S/D FACILITY

315451

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80401  
COLORADO SCHOOL OF NINEIS  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	EB8834	0000
WEIGHMASTER		
E000080 BINA C		
DATE IN	TIME IN	
31 August 2007	6:56 AM	
DATE OUT	TIME OUT	
31 August 2007	6:56 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643474		

Gross Weight 77,460.00 lb  
Tare Weight 35,640.00 lb  
Net Weight 41,820.00 lb 20.91 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.91	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-31-07



# NON-HAZARDOUS WASTE MANIFEST

11004  
0643494

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 S. 1st St Tulsa, OK 74101 360-273-0300				5. Generating Location (if different) 1400 S. 1st St North West of 12th and Drop St Tulsa, OK 74101 360-273-0300	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	19. Total Quantity
				No.	Type
a.					Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brannon			Signature: [Signature]		Month Day Year 8 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Sanjay Varma			Signature: [Signature]		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 6 21 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

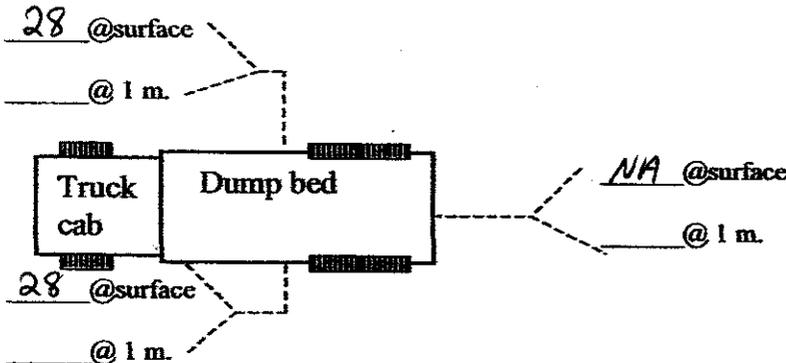
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/31/07 0647 Surveyed by: Chicks J Mattson  
 Trucking Company: Griev Truck license plate no. /state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

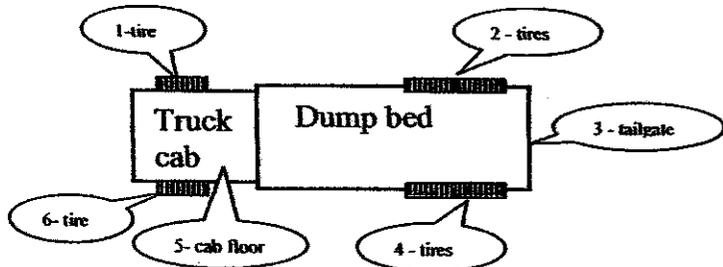
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

13  
0643495

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1500 Bunker Hill Garden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West on 12th and Birch St Garden, CO 80401 303-271-3908				
4. Phone ( ) 303-271-3908				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Toxics Landfill 1500 Bunker Hill Garden, CO 80401			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Stone Bed			17. Allied Waste Approval # and Exp. Date 2017070008 1511916		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Yards	Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Eric Sorenson				Signature <i>[Signature]</i>			Month Day Year 8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Robert O'Hara Lopez				Signature <i>[Signature]</i>			Month Day Year 08/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature			Month Day Year	
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature			Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515454

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
800603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585837	0000
WEIGHMASTER		
R000050 GINA C		
DATE IN	TIME IN	
31 August 2007	7:05 am	
DATE OUT	TIME OUT	
31 August 2007	7:05 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643495		

Gross Weight 79,780.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 44,080.00 lb 22.04 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.04	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0643495

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Main St Garden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 17th and Birch St Garden, CO 80401 303-273-3000		
4. Phone ( ) 303-273-3000			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Lynch & Lowell P.O. Box 100 Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.				18	Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>SIC e...</i>			Signature		Month Day Year 8/31/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Walter Colazo Lopez</i>			Signature		Month Day Year 08/31/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

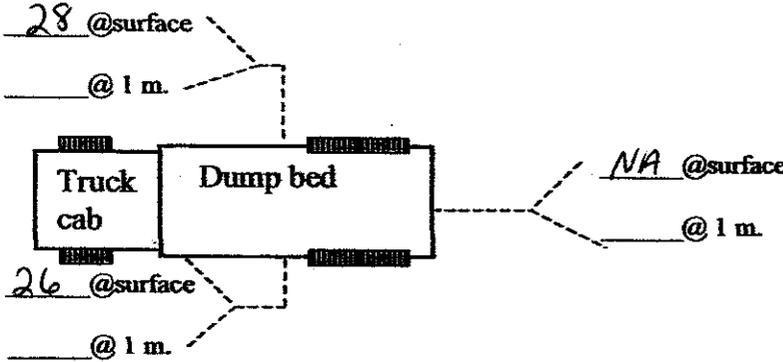
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 <sup>31</sup> 0652 Surveyed by: Chicks J Matson  
 Trucking Company: Grievre Truck license plate no. /state: 96

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

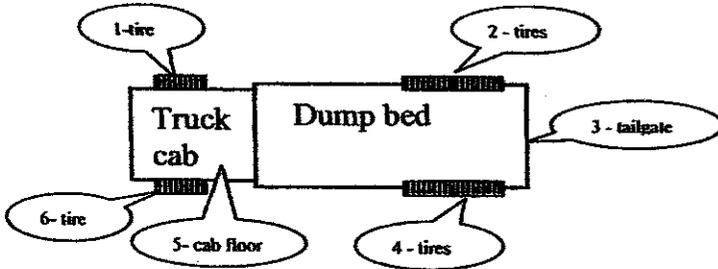
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 µrem/hr	X 0 cpm	β 316 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

16  
0643496

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1710 Lincoln St Golden, CO 80401 303-273-3550			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Grant St. Golden, CO 80401 303-273-3550		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. <i>Asphalt</i>		<i>CO 107 0485 10/1/95</i>		<i>Yards</i>	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: <i>Steve Higgins</i>		Signature: <i>[Signature]</i>		Month Day Year: <i>6/3/02</i>	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: <i>Leann...</i>		Signature: <i>[Signature]</i>		Month Day Year: <i>6/3/02</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515457

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
780603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	588840	0000
WEIGHMASTER		
PC00060 SINA C		
DATE IN	TIME IN	
31 August 2007	7:10 am	
DATE OUT	TIME OUT	
31 August 2007	7:10 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643476		

Gross Weight 76,940.00 lb  
Tare Weight 36,580.00 lb  
Net Weight 40,360.00 lb 20.19 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.19	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*James Duma*  
SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

16  
0643496

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1700 Avenue 21 Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute 17th West of 10th and Grand Golden, CO 80401 303-273-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	19. Total Quantity
				No.	Type
a.		2013774205-12/19/15			20. Unit Wt/Vol
b.					Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Williams			Signature: <i>[Signature]</i>		Month Day Year 8 3 15
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: <i>[Name]</i>			Signature: <i>[Signature]</i>		Month Day Year 8 31 15
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year
26. Emergency Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year 7 7 17

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

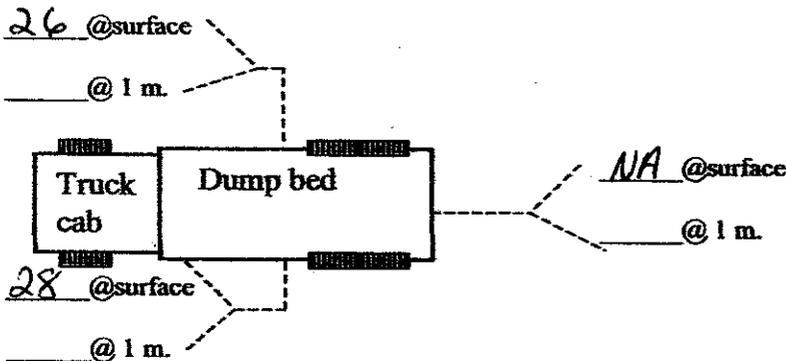
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0700 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

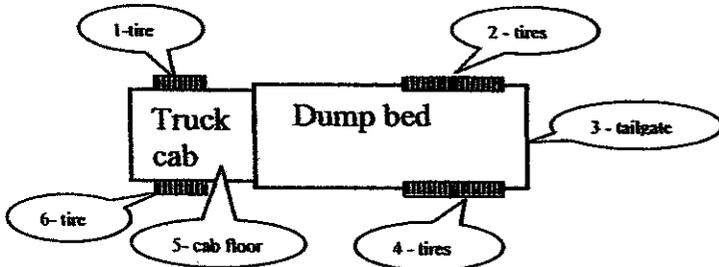
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

461  
0643500

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 14th Street St Golden, CO 80401 303-275-3998			5. Generating Location (if different) Colorado School of Mines Research Institute Ave. West of 12th and Birch St Golden, CO 80401 303-275-3998				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 14th Street St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. None b. c. d.		17. Allied Waste Approval # and Exp. Date CO 00770068 10/15/15		18. Containers			
				No.	Type	19. Total Quantity	20. Unit
						0 Drums	0 Casks
				15	4	0 Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. <b>GENERATOR'S CERTIFICATION:</b> I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Brannon		Signature:		Month Day Year: 8 31 07			
24. <b>Transporter #1:</b> Acknowledgement of Receipt of Materials							
Printed/Typed Name: Mike Murray		Signature:		Month Day Year: 8 31 07			
25. <b>Transporter #2:</b> Acknowledgement of Receipt of Materials							
Printed/Typed Name:		Signature:		Month Day Year:			
26. Discrepancy Indication Space							
27. <b>Facility Owner or Operator:</b> Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:		Signature:		Month Day Year:			

GENERATOR

TRANSPORTER

T/S/D FACILITY

515459

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 780603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	558042	0000
WEIGHMASTER		
PC00060 BINA C		
DATE IN	TIME IN	
31 August 2007	7:16 am	
DATE OUT	TIME OUT	
31 August 2007	7:16 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643500		

Gross Weight 81,400.00 lb  
 Tare Weight 34,260.00 lb      Inbound -  
 Net Weight 47,140.00 lb 23.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.57	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0643500

461

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1600 Science St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-5988			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1600 Science St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Waste Oil		17. Allied Waste Approval # and Exp. Date 101670366-011815		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bowman			Signature		Month Day Year 6 3 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray			Signature		Month Day Year 8 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 11 10 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

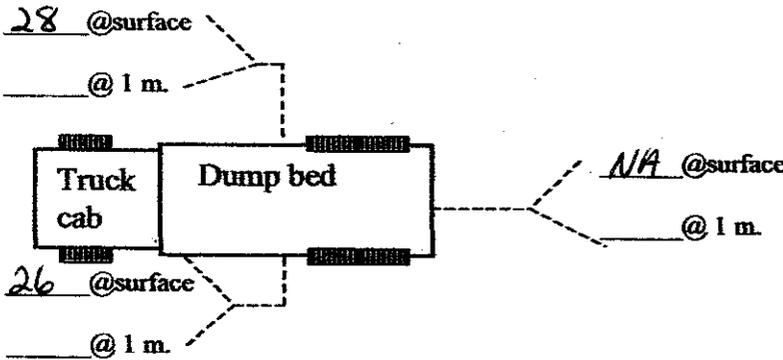
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0707 Surveyed by: Chicks J Mattson  
 Trucking Company: Griev Truck license plate no. /state: 23

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

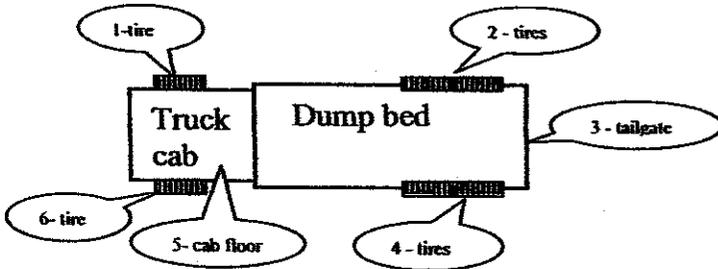
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0643499

23

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Mine St Garden City, MD 21046 4. Phone (301) 273-3400			5. Generating Location (if different) Johns Hopkins School of Mines Research Institute North West of 12th and Barclay St Baltimore, MD 21201 6. Phone (301) 273-3400		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1501 Mine St Garden City, MD 21046		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date 0010707094-011915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]		Signature [Signature]		Month Day Year 8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark [Signature]		Signature [Signature]		Month Day Year 8/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515463

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	533046	0000
WEIGHMASTER		
PC000080 GINA C		
DATE IN	TIME IN	
31 August 2007	7:23 am	
DATE OUT	TIME OUT	
31 August 2007	7:23 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643499		

Gross Weight 30,440.00 lb  
Tare Weight 35,100.00 lb      Inbound -  
Net Weight 45,340.00 lb 22.67 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.67	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

23  
0643499

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1521 Illinois St Golden, CO 80401 303-273-3006			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3006		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 10001 E. 25th Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date 0000000000 01/01/07		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature 		Month 8	Day Year 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan		Signature 		Month 8	Day Year 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year 7

GENERATOR

TRANSPORTER

T/S/D FACILITY

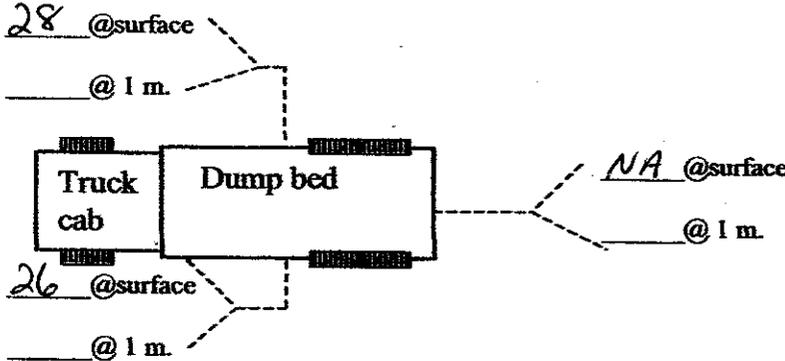
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 <sup>31</sup> 0712 Surveyed by: Chicks J Mattson  
 Trucking Company: Giere Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

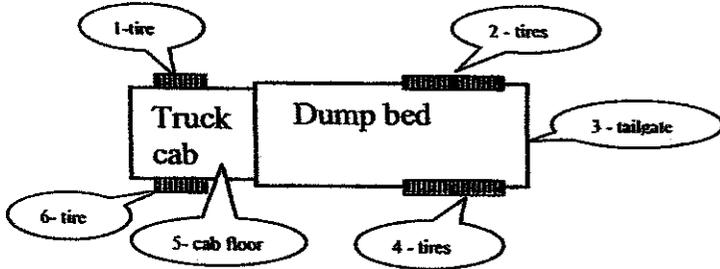
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X0cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0843497

8

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Blingie Rd Cotton, CO 80401 4. Phone ( ) 303-773-3898			5. Generating Location (if different) School of Mines Research Institute North West of 120th and Forest Cotton, CO 80401 6. Phone ( ) 303-773-3898		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Rockwell Landfill 3331 Hwy 80 Cotton, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 501616705032511315		18. Containers	
				No.	Type
a.				18	✓
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name SICRE BERMAN			Signature <i>[Signature]</i>		Month Day Year 08 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>			Signature Chuck Fox		Month Day Year 08 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

523407

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588847	0000
WEIGHMASTER		
R000060 GINA C		
DATE IN	TIME IN	
31 August 2007	7:26 am	
DATE OUT	TIME OUT	
31 August 2007	7:26 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643497		

Gross Weight 77,360.00 lb  
Tare Weight 36,540.00 lb      Inbound -  
Net Weight 40,820.00 lb 20.41 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.41	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0643497

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1101 University Tomball, TX 77480			5. Generating Location (if different) University School of Mines Research Institute North West of 12th and Farwell Tomball, TX 77401 303 273-4008				
4. Phone ( ) 303 273-4008			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Tomball, TX		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description Non-Hazardous		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						Drums	Drums
				18	U	7-Yards	Tons
a.							
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Deaton			Signature 		Month Day Year 08 31 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Fox			Signature 		Month Day Year 08 31 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

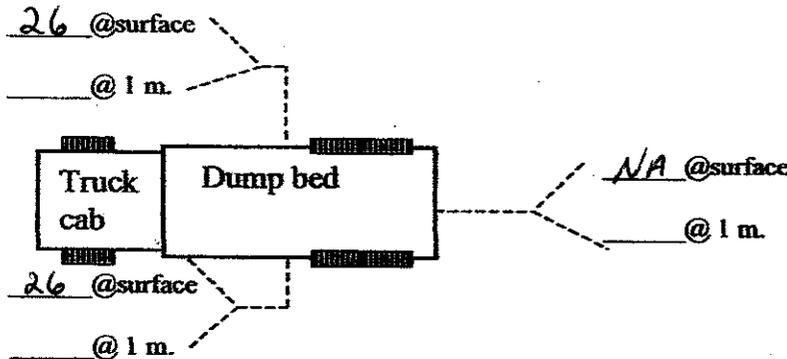
TRANSPORTER #1

COM000039

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0719 Surveyed by: Chicks J Mattson  
 Trucking Company: Giere Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

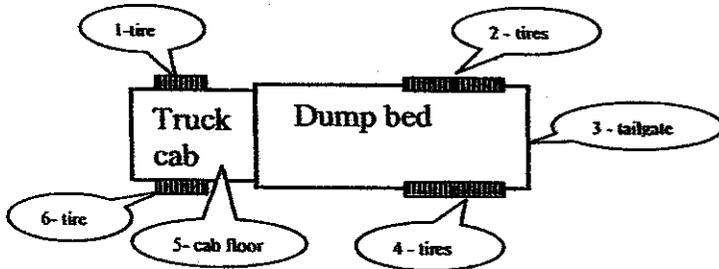
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm

24

515486

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
930603  
COLORADO SCHOOL OF MINES  
1500 ILLINGIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	563547	0000
WEIGHMASTER		
PC00060 GINA C		
DATE IN	TIME IN	
21 August 2007	7:34 am	
DATE OUT	TIME OUT	
21 August 2007	7:34 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0643498		

Gross Weight 79,900.00 lb  
Tare Weight 37,200.00 lb  
Net Weight 42,700.00 lb 21.35 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.35	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*Ken G*



# NON-HAZARDOUS WASTE MANIFEST

24  
0643498

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address School of Mines Research Institute 1900 Illinois St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3198				
4. Phone ( ) 303-773-3198		6. Phone ( )					
7. Transporter #1 Company Name Joe Grieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1900 Hwy 91 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Worm Soil		17. Allied Waste Approval # and Exp. Date 0019700081611915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				18	Y	18 Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Seaton			Signature <i>[Signature]</i>		Month Day Year 07 31 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Ken Shannon			Signature <i>[Signature]</i>		Month Day Year 07 31 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

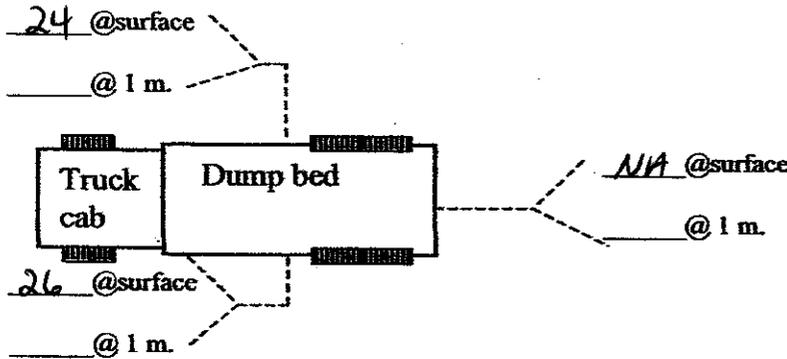
TRANSPORTER

T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30<sup>31</sup>/07 0723 Surveyed by: Chicks J Mattson  
 Trucking Company: Gnere Truck license plate no. /state: J001

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

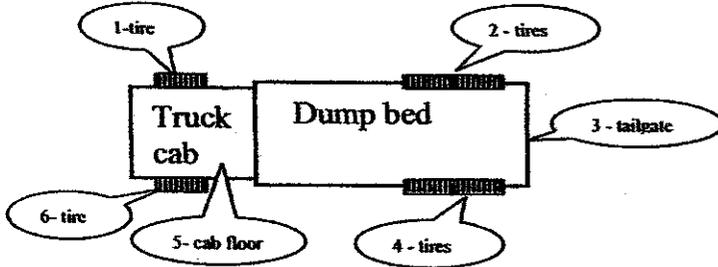
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0643491

JD01

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1900 Birch St Golden, CO 80401			5. Generating Location (if different) University School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-375-3440			6. Phone ( ) 303-375-3440		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 17700 E. 1st St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal		17. Allied Waste Approval # and Exp. Date CO 187070001 VC10815		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				Y-units	
				-Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Berdman			Signature		Month Day Year 1 31 01
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515470

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE		TICKET		GRID	
01		588853		0000	
WEIGHMASTER					
K000000 GINA C					
DATE IN			TIME IN		
31 August 2007			7:38 am		
DATE OUT			TIME OUT		
31 August 2007			7:48 am		
VEHICLE				ROLL OFF	
YS11915					
REFERENCE		ORIGIN			
0843491					

00 Gross Weight 75,700.00 lb  
 Tare Weight 35,140.00 lb  
 Net Weight 40,560.00 lb 20.28 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.28	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643491

J001

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Columbus, OH 43204 Phone (614) 277-3088			5. Generating Location (if different) The Ohio State University North West of 12th and North St Columbus, OH 43210 Phone (614) 772-3985		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

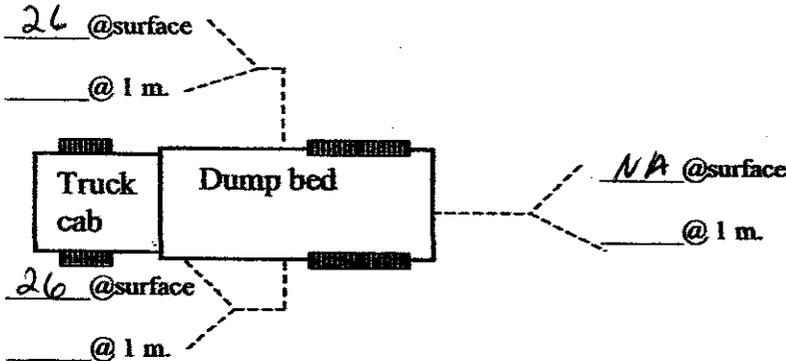
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/31/07 0729 Surveyed by: Chicks J Mattson  
 Trucking Company: Grievre Truck license plate no. /state: 12

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

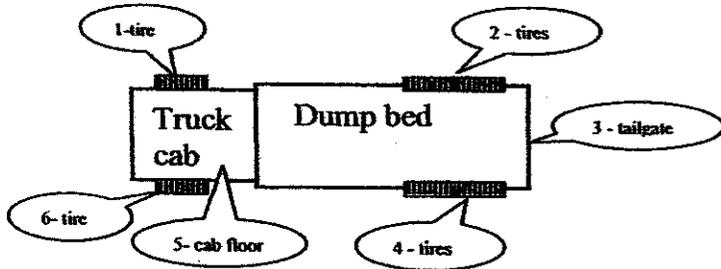
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	X0 cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

12  
0643492

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-0908			5. Generating Location (if different) School of Mines Research Institute West of 12th and Platte Golden, CO 80401 303-273-0908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Grove Trucking 7/11		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines Research Institute		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Harm Sol		17. Allied Waste Approval # and Exp. Date 001670709001011315		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham			Signature <i>[Signature]</i>		Month Day Year 8/31/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name John J. Olson			Signature <i>[Signature]</i>		Month Day Year 8/31/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

12

515480

SITE	TICKET	GRID
01	533252	0000
WEIGHMASTER		
0000000 GINA C		
DATE IN	TIME IN	
31 August 2007	7:47 AM	
DATE OUT	TIME OUT	
31 August 2007	7:47 AM	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0643492		

Gross Weight 79,880.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 42,180.00 lb 21.09 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.09	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0643492

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Lakden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Lakden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Garco Trucking 7/11		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman		Signature		Month Day Year 8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Steve Brinkman		Signature		Month Day Year 8/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

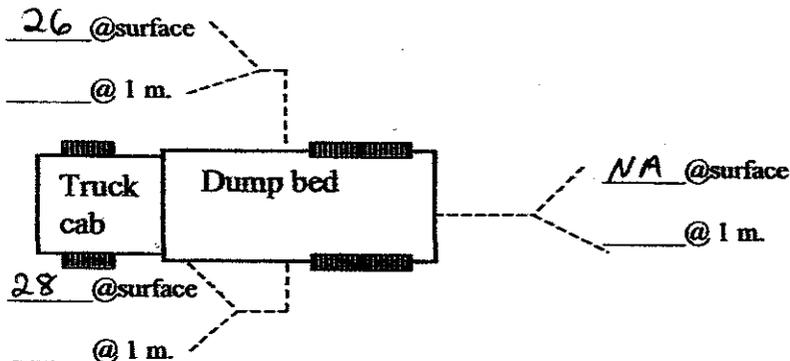
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0735 <sup>31</sup> Surveyed by: Citichs J Matson  
 Trucking Company: Grievre Truck license plate no. /state: 95

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

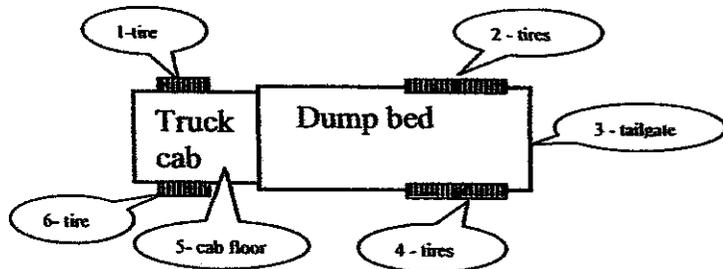
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

95  
0643493

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1575 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3966			6. Phone ( ) 303-273-3966		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontalis Canada 6571 Hwy 81 Golden, CO 80401 (Allied Waste Services, Inc. Facility of Choice)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 0310774304 05/19/16		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. <b>GENERATOR'S CERTIFICATION:</b> I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Gorkman			Signature <i>[Signature]</i>		Month Day Year 8/31/17
24. <b>Transporter #1:</b> Acknowledgement of Receipt of Materials					
Printed/Typed Name [Signature]			Signature <i>[Signature]</i>		Month Day Year 8/31/17
25. <b>Transporter #2:</b> Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. <b>Facility Owner or Operator:</b> Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515475

FOOTHILLS LANDFILL  
3900 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	EGG855	0000
WEIGHMASTER		
FC0000 SNA C		
DATE IN	TIME IN	
31 August 2007	7:52 am	
DATE OUT	TIME OUT	
31 August 2007	7:53 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0643493		

CG Gross Weight 77,460.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 40,480.00 lb 20.24 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

95  
0643493

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Sol		0-1117 07/08-08/11/915		19. Total Quantity 0 Drums	
b.				20. Unit Wt/Vol Drums	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 8/31/97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year 8/31/97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 8/31/97

GENERATOR

TRANSPORTER

T/S/D FACILITY

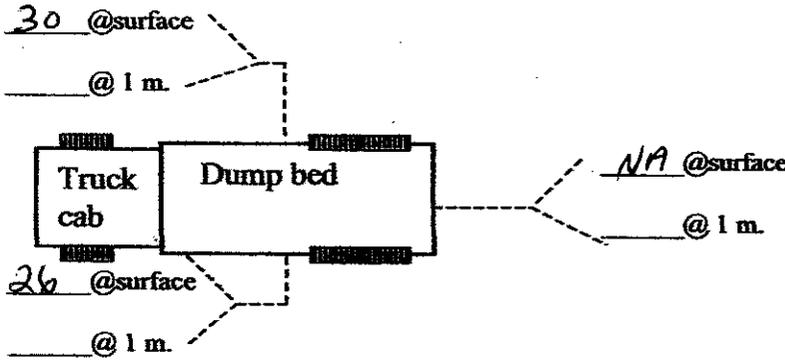
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 <sup>31</sup> 0742 Surveyed by: Citicks J Mattson  
 Trucking Company: Grievre Truck license plate no. /state: 961

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

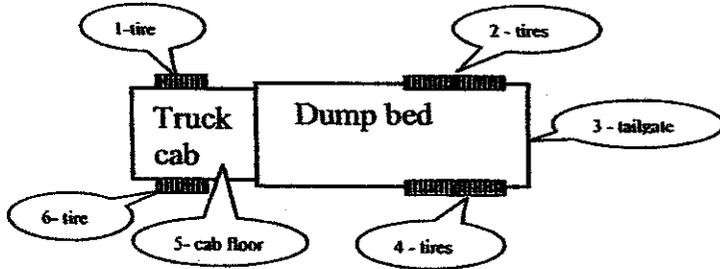
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X0cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0592003

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1700 Illinois St Golden, CO 80401 303-273-3000				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO L87 87000 12/1/15		No. Type	
b.				Quantity	
c.				Wt/Vol	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name				Signature	
24. Transporter #1: Acknowledgement of Receipt of Materials				Month Day Year	
Printed/Typed Name				Signature	
25. Transporter #2: Acknowledgement of Receipt of Materials				Month Day Year	
Printed/Typed Name				Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

518475

FOOTHILLE LANDFILL  
8900 HIGHWAY 92  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	Y5B2357	0000
WEIGHMASTER		
R000060 GINA C		
DATE IN	TIME IN	
31 August 2007	7:53 am	
DATE OUT	TIME OUT	
31 August 2007	7:56 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592003		

03 Gross Weight 80,520.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 46,120.00 lb 23.06 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE A. M.



NON-HAZARDOUS WASTE MANIFEST

0592003

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 10th St Casper, WY 82401 307-273-3333			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Casper, WY 82401 307-273-3333		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cottonwood Landfill 1001 W. Hwy 60 Casper, WY 82401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Soil		17. Allied Waste Approval # and Exp. Date 00157-00008-010010		18. Containers	
				No.	Type
b.				10 Tanks	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mason		Signature <i>[Signature]</i>		Month Day Year 8/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

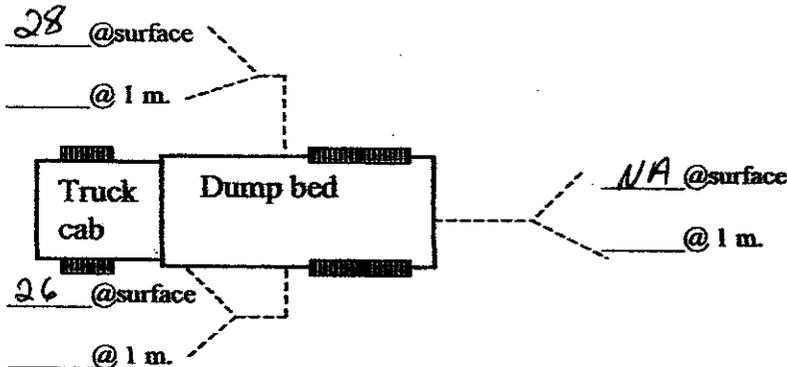
T/S/D FACILITY

TRANSPORTER #1

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0747 Surveyed by: Chicks J Mattson  
 Trucking Company: Grievre Truck license plate no. /state: 04

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

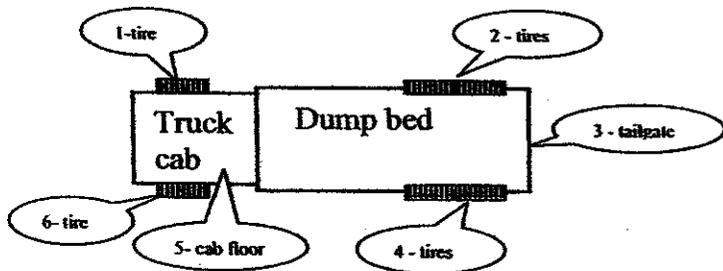
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

J064  
0592004

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 13th St. Golden, CO 80401 303-273-3990				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3990	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 13th St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Farm Soil		0016772002 12/16/16		19. Total Quantity 2 Yards	
b.				20. Unit Wt/Vol 1 Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Reardon				Signature: [Signature]	
				Month: 8 Day: 31 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Santiago Vargas				Signature: [Signature]	
				Month: Day: Year:	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515476

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	528861	0000
WEIGHMASTER		
R000080 SINR C		
DATE IN	TIME IN	
31 August 2007	8:02 am	
DATE OUT	TIME OUT	
31 August 2007	8:02 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0572004		

Gross Weight 76,740.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 41,100.00 lb 20.55 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.55	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-31-07



NON-HAZARDOUS WASTE MANIFEST

J004  
0592004

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3088				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Iambert Golden, CO 80401 303-273-3088					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit	
					No.	Type	Drums	Drums	
a. Non-Haz			CO 157-00000 15/13/15				Yards	Yards	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Richman				Signature			Month 8	Day 31	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Santiago Vargas				Signature			Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

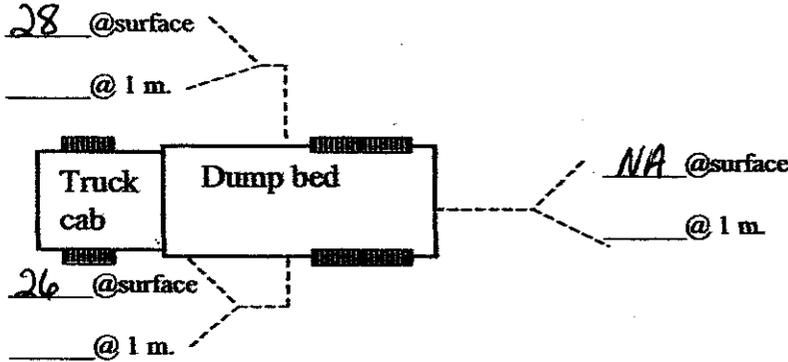
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 <sup>31</sup> 0813 Surveyed by: Citicks J Mattson  
 Trucking Company: Grievre Truck license plate no. /state: 461

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

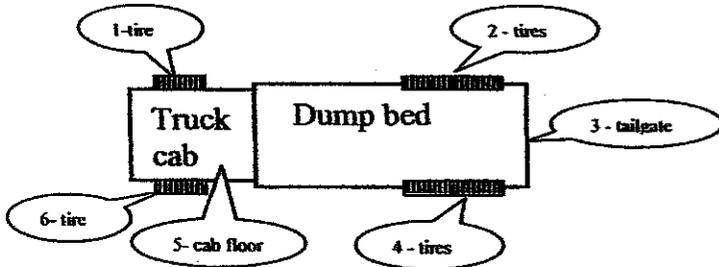
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0592005

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1530 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3000						
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address 1500 14th St Golden, CO		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. Heavy Soil		17. Allied Waste Approval # and Exp. Date CO 187 W(2) 1511915		18. Containers					
				19. Total Quantity		20. Unit Wt/Vol			
				No.		Type		Drums	
				18		4		7-Yards	
								Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Lindgren			Signature <i>[Signature]</i>		Month Day Year 8/31/97				
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Mike Murphy			Signature <i>[Signature]</i>		Month Day Year 8/31/97				
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name			Signature		Month Day Year				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name			Signature		Month Day Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

515435

FOOTHILLS LANDFILL  
 8900 HIGHWAY 73  
 GOLDEN  
 CO  
 750600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	558868	0000
WEIGHMASTER		
P000090 BINA C		
DATE IN	TIME IN	
31 August 2007	8:32 am	
DATE OUT	TIME OUT	
31 August 2007	8:32 am	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
0592005		

Gross Weight 22,440.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 46,180.00 lb 24.09 TN

Inbound ~

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.09	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



461

# NON-HAZARDOUS WASTE MANIFEST

## 0592005

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 10th and Smith St Golden, CO 80401 303-273-3996		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		201807060111916		18 Y 7 Cords 7 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Robinson			Signature <i>[Signature]</i>		Month Day Year 2 31 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murphy			Signature <i>[Signature]</i>		Month Day Year 2 31 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

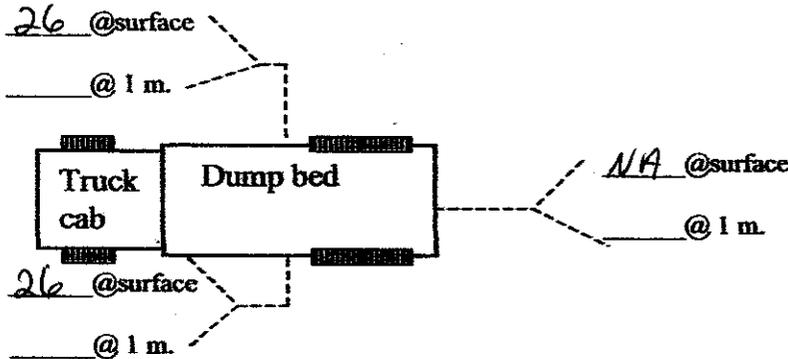
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/31/07 0819 Surveyed by: Chicks J Matson  
 Trucking Company: Griev Truck license plate no. /state: 23

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

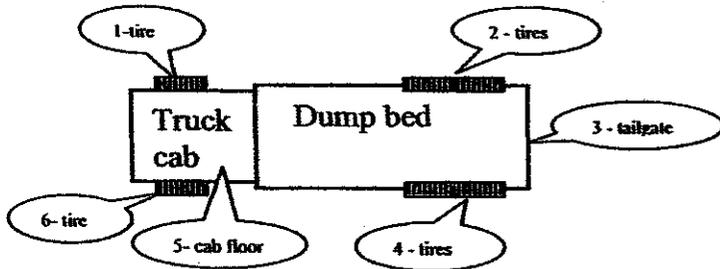
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X @ cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592016

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Mine St Golden, CO 80401 713-273-3698			5. Generating Location (if different) University of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez, CO 1790 Hwy 67 Cortez, CO 81301		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Iron Ore		20-LE 170908 Y311915		19. Total Quantity Cub Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 8/31/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan			Signature 		Month Day Year 8/31/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR'S COPY

COM000033

510438

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	585871	0000
WEIGHMASTER		
PC00080 GIMA C		
DATE IN	TIME IN	
31 August 2007	9:36 am	
DATE OUT	TIME OUT	
31 August 2007	9:36 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0592016		

Gross Weight 84,360.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 49,260.00 lb 24.63 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.63	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592016

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																									
3. Generator's Name and Mailing Address 1500 Frank St Littleton, CO 80120 303-773-0998			5. Generating Location (if different) 10th West of 12th and Tech St Littleton, CO 80120 303-773-0998																										
4. Phone ( )		6. Phone ( )																											
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone																									
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone																									
13. Designated T/S/D Facility Name and Site Address 1500 Frank St Littleton, CO 80120		14. US EPA ID Number		15. Facility's Phone																									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																									
a. Non-Hal		05/17/02-03/31/05		<table border="1"> <thead> <tr> <th>No.</th> <th>Type</th> <th>19. Total Quantity</th> <th>20. Unit</th> </tr> <tr> <th></th> <th></th> <th>Containers</th> <th>Wt/Vol</th> </tr> </thead> <tbody> <tr> <td></td> <td>18</td> <td>18</td> <td>Tons</td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		No.	Type	19. Total Quantity	20. Unit			Containers	Wt/Vol		18	18	Tons	b.				c.				d.			
No.	Type	19. Total Quantity	20. Unit																										
		Containers	Wt/Vol																										
	18	18	Tons																										
b.																													
c.																													
d.																													
21. Additional Descriptions for Materials Listed Above																													
22. Special Handling Instructions and Additional Information																													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																													
Printed/Typed Name Eric Bentzen			Signature 		Month Day Year 8/31/04																								
24. Transporter #1: Acknowledgement of Receipt of Materials																													
Printed/Typed Name Mark Phelan			Signature 		Month Day Year 8/31/04																								
25. Transporter #2: Acknowledgement of Receipt of Materials																													
Printed/Typed Name			Signature		Month Day Year																								
26. Discrepancy Indication Space																													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in item 19)																													
Printed/Typed Name			Signature		Month Day Year 1/15/05																								

GENERATOR

TRANSPORTER

T/S/D FACILITY

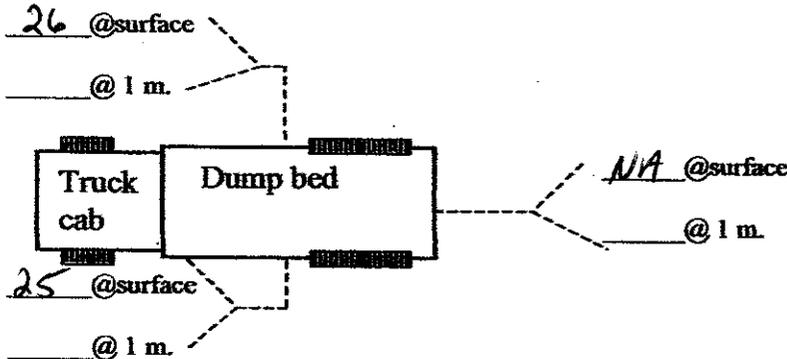
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0829 Surveyed by: Chicks J Mattson  
 Trucking Company: Giere Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

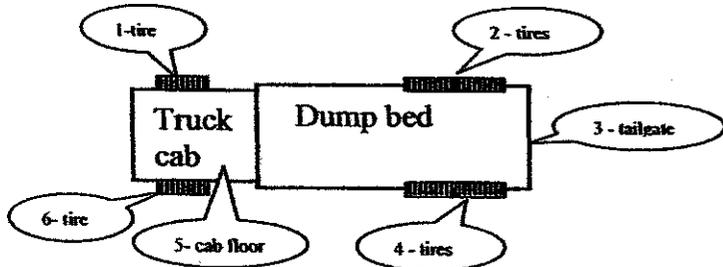
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



8

# NON-HAZARDOUS WASTE MANIFEST

0592017

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1575 Illinois St Golden, CO 80401 303-773-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1575 Illinois St Golden, CO 80401 # 80401 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
a. Iron Steel		000007070000 05-1-1915		18 4 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Eric Zimmerman			Signature <i>[Signature]</i>		Month Day Year 8 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature <i>[Signature]</i>		Month Day Year 08 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515498

FOOTHILLS LANDFILL  
8700 HIGHWAY 73  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586876	0000
WEIGHMASTER		
R000090 OINA C		
DATE IN	TIME IN	
31 August 2007	8:45 am	
DATE OUT	TIME OUT	
31 August 2007	8:45 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592017		

Gross Weight 85,140.00 lb  
Tare Weight 36,540.00 lb      Inbound -  
Net Weight 48,600.00 lb 24.30 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.30	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592017

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Wilson St Garden, NC 27401 201-773-1556				5. Generating Location (if different) Duke University School of Medicine Research Institute North West of 12th and Hamilton Garden, NC 27401 336-773-1556	
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Wilson St Garden, NC 27401		14. US EPA ID Number		16. Waste Shipping Name and Description	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity G/Grams	
				20. Unit Wt/Vol Pallets	
a.				18 4	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benson		Signature		Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature		Month Day Year 08 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

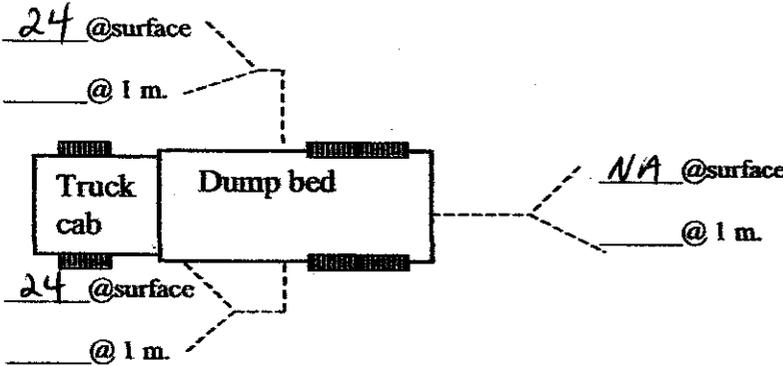
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0835 <sup>31</sup> Surveyed by: Chicks J Mattson  
 Trucking Company: Griev Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

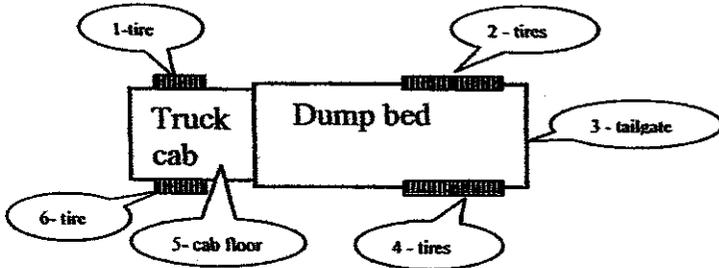
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	

24 513498

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	555551	0000
WEIGHMASTER		
PC000050 GINA C		
DATE IN	TIME IN	
31 August 2007	8:52 am	
DATE OUT	TIME OUT	
31 August 2007	8:52 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592006		

Gross Weight 84,520.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 47,320.00 lb 23.66 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.66	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kearf*



# NON-HAZARDOUS WASTE MANIFEST

0592008

24

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3544			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3544		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Poudre Canyon 6000 Hwy 92 Fruita, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <b>North Star</b>		17. Allied Waste Approval # and Exp. Date <b>2010707000 / 6/15/11</b>		18. Containers	
				No.	Type
				<b>18</b>	<b>Y</b>
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Beckman</b>			Signature <i>[Signature]</i>		Month Day Year <b>7/31/07</b>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>			Signature <i>[Signature]</i>		Month Day Year <b>08/31/07</b>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

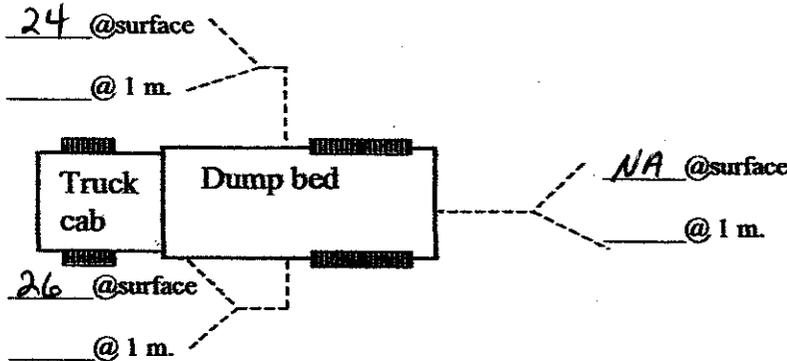
TRANSPORTER

T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0840 Surveyed by: Chicks J Mattson  
 Trucking Company: Greene Truck license plate no. /state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

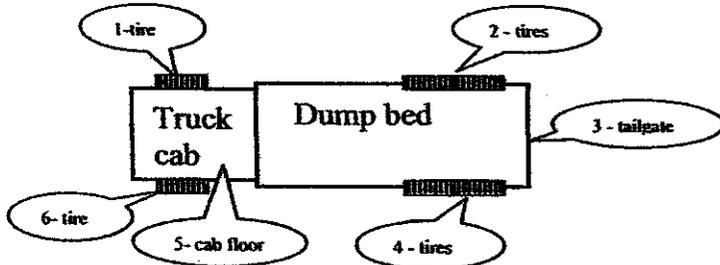
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X0cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0592021

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. Main St. Golden, CO 80401 303-273-0000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Dinkels Golden, CO 80401 303-273-0000		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 W. Main St. Golden, CO 80401		17. Allied Waste Approval # and Exp. Date CO LIT 027408 05/1/95		18. Containers	
16. Waste Shipping Name and Description a. Hard Soil		19. Total Quantity 6 Loads		20. Unit Load	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B...			Signature		Month Day Year 8 31 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Robert Lopez			Signature		Month Day Year 08 31 02
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515500

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
760608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585553	0000
WEIGHMASTER		
PC00080 SINA C		
DATE IN	TIME IN	
31 August 2007	8:58 am	
DATE OUT	TIME OUT	
31 August 2007	8:58 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592021		

Gross Weight 84,000.00 lb  
Tare Weight 35,700.00 lb Inbound -  
Net Weight 48,300.00 lb 24.15 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.15	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0592021

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Birch St. Corden, CO 80401 303-273-3438			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Corden, CO 80401 303-273-3438		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benner			Signature: [Signature]		Month Day Year: 8/31/02
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Michael Colero Lopez			Signature: [Signature]		Month Day Year: 08/31/02
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year: 8/1/02

GENERATOR

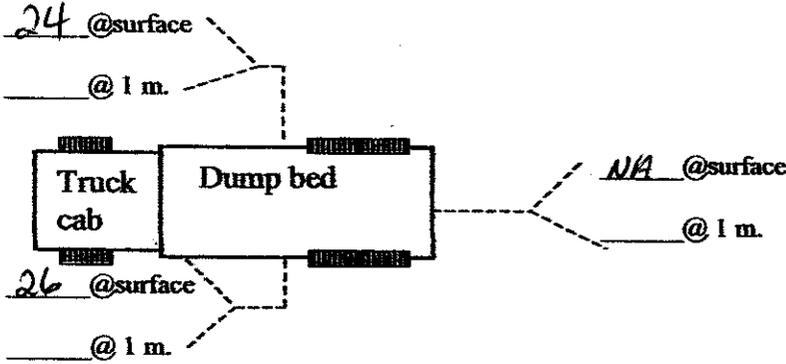
TRANSPORTER

T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/31/07 0848 Surveyed by: Chicks J Mattson  
 Trucking Company: Griev Truck license plate no. /state: 96

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

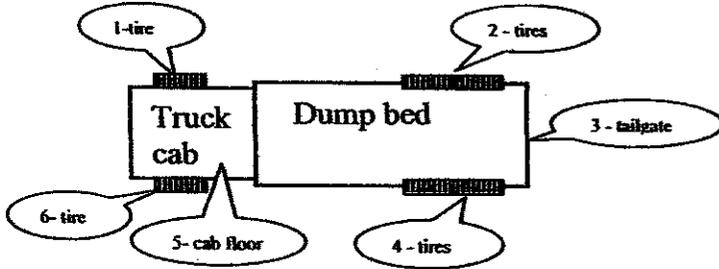
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

96  
0592018

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 18th St Golden, CO 80401 303-279-3000				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 13th and Circle 91 Golden, CO 80401 303-279-3000	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Hazardous		CO-17-070902 - 8/1/15		19. Total Quantity Y-Yards	
b.				20. Unit Wt/Vol C-Containers	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bonaparte				Signature: [Signature]	
				Month: 8 Day: 31 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando Hernandez				Signature: [Signature]	
				Month: 8 Day: 31 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515507

FOOTHILLS LANDFILL  
8700 HIGHWAY 95  
GOLDEN  
CO  
760608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585690	0000
WEIGHMASTER		
F000080 GINA C		
DATE IN	TIME IN	
31 August 2007	9:06 am	
DATE OUT	TIME OUT	
31 August 2007	9:06 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592018		

Gross Weight 79,320.00 lb  
Tare Weight 36,580.00 lb  
Net Weight 42,740.00 lb 21.37 TN  
Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.37	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0592018 <sup>96</sup>

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 5000 Wilson Rd Columbus, GA 31907 503-277-1000				5. Generating Location (if different) North West of 120 and Broad St Columbus, GA 31907 503-277-1000	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. <i>Waste 936</i>		<i>2018-07-01 1511915</i>		<i>18</i> Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve B...</i>				Signature <i>[Signature]</i>	
				Month Day Year <i>8/31/07</i>	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Fernando...</i>				Signature <i>[Signature]</i>	
				Month Day Year <i>8/31/07</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

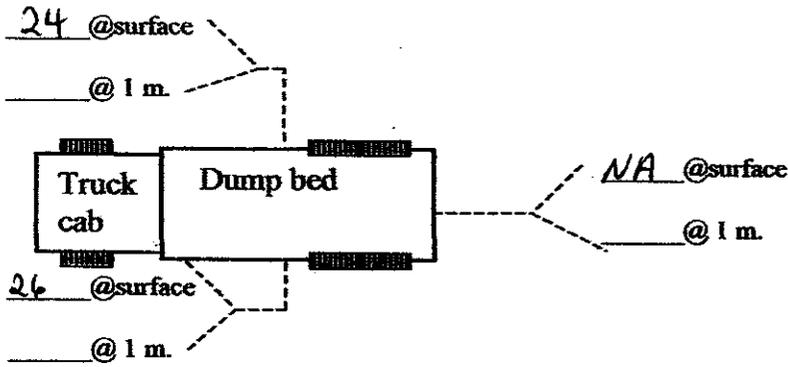
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0852 <sup>31</sup> Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 01

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

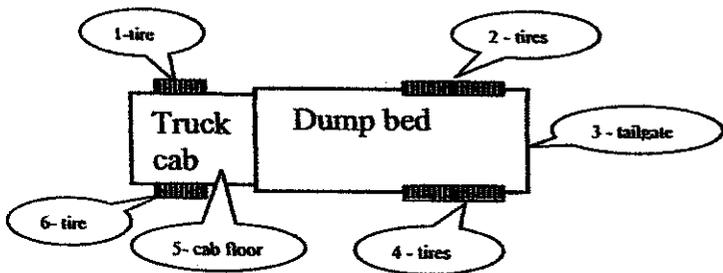
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592019

JDC/1

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Alliance St Golden, CO 80401 303-273-3566				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3566	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address FBI Bull Lab 2600 Hwy 63 Golden, CO 80401 (Bull Lab # 402A-3 (Inorganic) Section of 1300-1)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Waste Soil		CO 107 (0800) 1511015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beaman				Signature: [Signature]	
				Month: 6	Day: 31
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]				Signature: [Signature]	
				Month:	Day:
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month:	Day:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month:	Day:

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515506

FOOTHILLS LANDFILL  
8900 HIGHWAY 51  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y811915

SITE	TICKET	GRID
01	555891	0000
WEIGHMASTER		
P000086 GINA U		
DATE IN	TIME IN	
31 August 2007	9:07 am	
DATE OUT	TIME OUT	
31 August 2007	9:07 am	
VEHICLE	ROLL OFF	
Y811915		
REFERENCE	ORIGIN	
0592019		

Gross Weight 75,640.00 lb  
Tare Weight 35,140.00 lb Inbound -  
Net Weight 44,500.00 lb 22.25 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.25	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

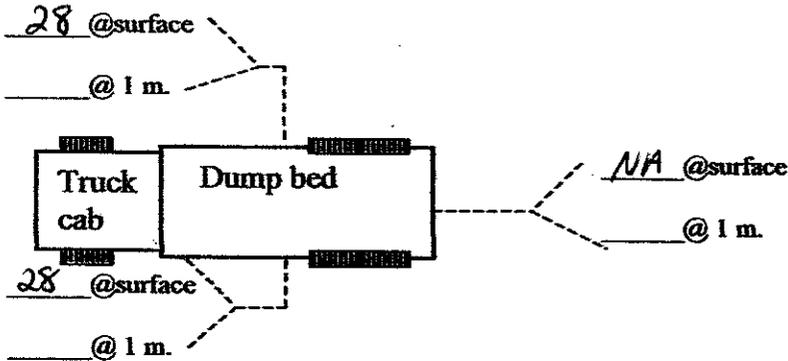


**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0858 Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 12

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

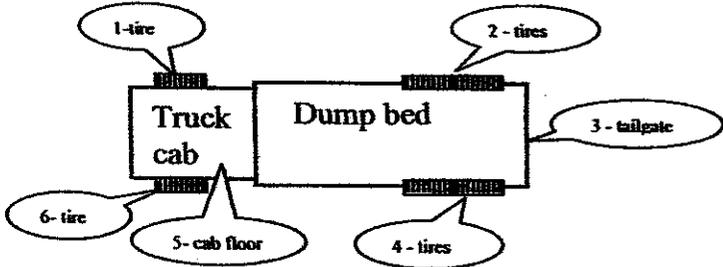
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592020

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3333			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Iarches Golden, CO 80401 303-273-3333		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Green Recycling W.L.		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Heavy Sand		17. Allied Waste Approval # and Exp. Date 17-187-07096-1611915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 8 31 05	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name K. [Name]		Signature <i>[Signature]</i>		Month Day Year 8 31 05	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515510

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80503  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

12

Contract: YE11915

SITE	TICKET	GRID
01	556873	0000
WEIGHMASTER		
P000050 GINA C		
DATE IN	TIME IN	
31 August 2007	9:13 am	
DATE OUT	TIME OUT	
31 August 2007	9:13 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0592020		

Gross Weight 85,940.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 48,240.00 lb 24.12 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.12	TN	SUB-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592020

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 17th St Denver, CO 80202 303 733-7448			5. Generating Location (if different) 303 School of Mines Research Institute North West of 17th and Birch St Denver, CO 80202 303 733-6700		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Green Bay Area H-2-		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3501 17th St Denver, CO 80202		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date 10/6/17998 Y01151E		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 8 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 8 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

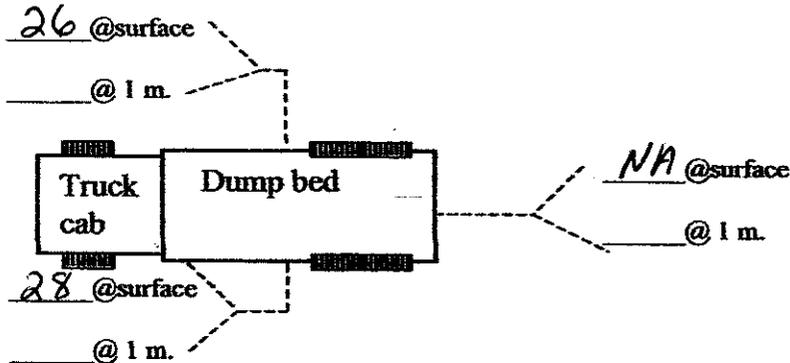
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30<sup>31</sup>/07 0903 Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 95

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

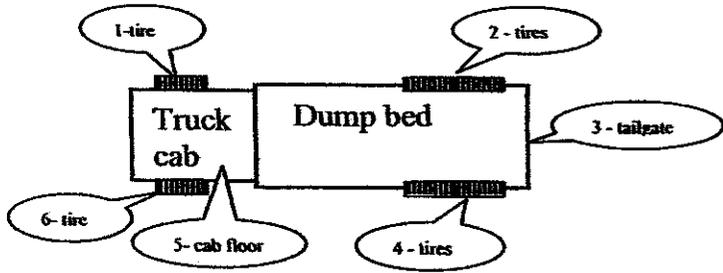
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



95

# NON-HAZARDOUS WASTE MANIFEST

0592007

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-773-3000			5. Generating Location (if different) School of Mines Research Institute North West of 10th and Birch St Golden, CO 80401 303-773-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. None Sent		17. Allied Waste Approval # and Exp. Date 01-01-2006 to 12-31-06		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blum		Signature <i>[Signature]</i>		Month 6	Day 31
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

515515

FOOTHILL LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE		TICKET		GRID	
01		588877		0030	
WEIGHMASTER					
R200080 GINA C					
DATE IN			TIME IN		
31 August 2007			9:22 AM		
DATE OUT			TIME OUT		
31 August 2007			9:55 AM		
VEHICLE			ROLL OFF		
Y511915					
REFERENCE		ORIGIN			

GR Gross Weight 81,160.00 lb  
 Tare Weight 36,980.00 lb      Inbound -  
 Net Weight 44,180.00 lb 22.09 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.09	TN	SO-CONT SOIL				
1.00	LI	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



95

# NON-HAZARDOUS WASTE MANIFEST

## 0592007

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Nitrate St Garden, CO 80401 303-770-3160			5. Generating Location (if different) 1400 Nitrate St Garden, CO 80401 303-770-3160		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2700 Hwy 10 Garden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date 073107-073008/05/10/10		18. Containers	
				19. Total Quantity 0.1 drums	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin			Signature <i>[Signature]</i>		Month Day Year 8/31/10
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name J. Smith			Signature <i>[Signature]</i>		Month Day Year 8/31/10

GENERATOR

TRANSPORTER

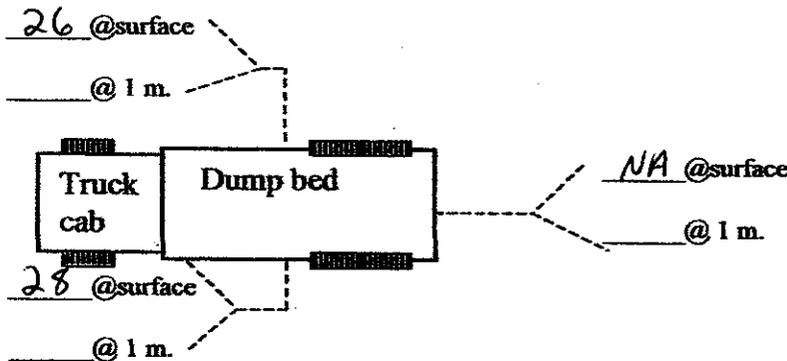
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/31/07 0910 Surveyed by: Chicks J Matson  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

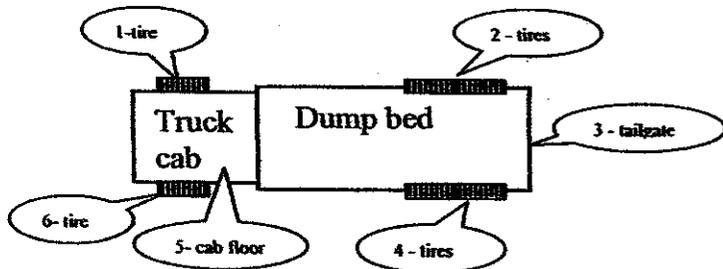
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	X0 cpm	316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0592008

961

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mine Research Institute 190 Illinois St Golden, CO 80401 303-273-3366			5. Generating Location (if different) School of Mine Research Institute North West of 12th and Locks Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Sol		17. Allied Waste Approval # and Exp. Date 10167 070408 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brakman		Signature <i>[Signature]</i>		Month Day Year 3/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>		Signature <i>[Signature]</i>		Month Day Year 3/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

510311

FOOTHILLS LANDFILL  
8900 HIGHWAY 78  
GOLDEN  
CO  
980606  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	288904	0000
WEIGHMASTER		
5000060 DINA C		
DATE IN	TIME IN	
31 August 2007	7:25 am	
DATE OUT	TIME OUT	
31 August 2007	7:29 am	
VEHICLE	ROLL OFF	
VEHICLE	ROLL OFF	
REFERENCE	ORIGIN	

OS Gross Weight 52,140.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 47,740.00 lb 23.87 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.87	TN	SUB-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0592008

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1770 Lincoln St Golden, CO 80401 303-273-1898				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Humboldt Golden, CO 80401 303-273-1898				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 2300 N. 1st St Golden, CO 80401			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description None			17. Allied Waste Approval # and Exp. Date 00107 03/08/10 11515		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Tons	Tons
						18		
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste								
Printed/Typed Name Steve Reinhard			Signature 		Month Day Year 3/07			
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name [Signature]			Signature [Signature]		Month Day Year 3/07			
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature		Month Day Year			
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature		Month Day Year			

GENERATOR

TRANSPORTER

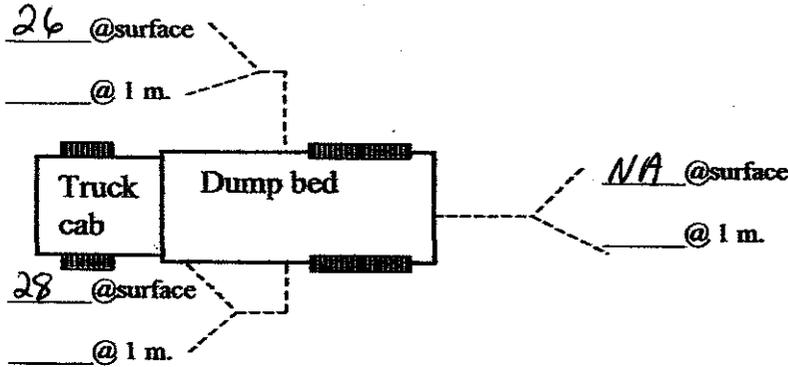
T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0915 Surveyed by: Chicks J Mattson

Trucking Company: Grievre Truck license plate no. /state: 04

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

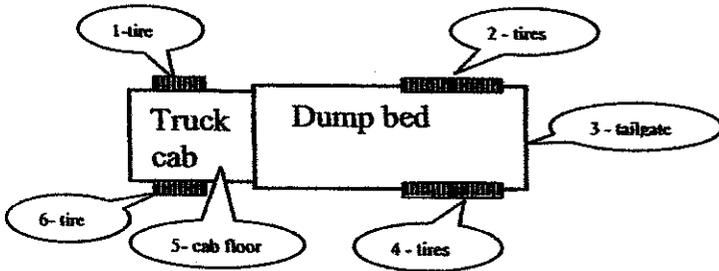
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	X 0 cpm	$\beta$ 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0592011

J004

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1510 Illinois St Golden, CO 80401 303-270-3000			5. Generating Location (if different): Colorado School of Mines Research Institute North West of 12th and Evans St Golden, CO 80401 303-270-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: 2000 Hwy 50 Golden, CO 80401 (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		CO L07 9/0908 7811915		7	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman			Signature:		Month: 8   Day: 31   Year: 04
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Sarah Varsoy			Signature:		Month:   Day:   Year:
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month:   Day:   Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month:   Day:   Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

515525

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558905	0000
WEIGHMASTER		
R000080 BTNA C		
DATE IN	TIME IN	
31 August 2007	7:35 am	
DATE OUT	TIME OUT	
31 August 2007	9:35 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592011		

Gross Weight 80,300.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 44,660.00 lb 22.33 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.33	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]* 8-31-07



# NON-HAZARDOUS WASTE MANIFEST

0592011

JAN 4

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1800 Illinois St Golden, CO 80401 303-275-2040			5. Generating Location (if different): School of Mines Research Institute North West of 12th and Lincoln Golden, CO 80401 303-275-2040		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: 2500 Lincoln Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO-152170900-1811905		17	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Benson				8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Santillano Vargas				8 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
				8 31 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

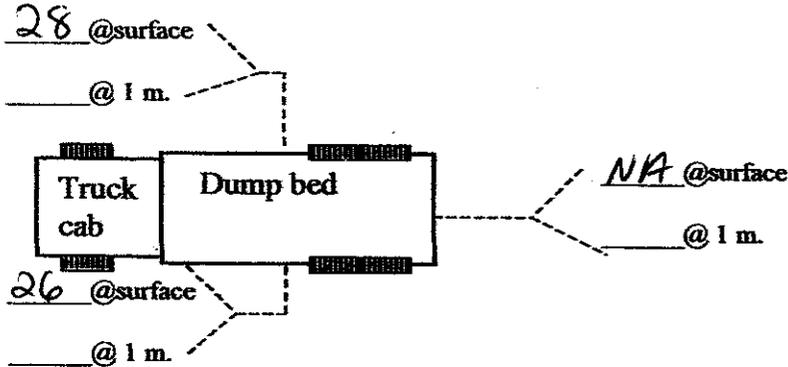
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0926 Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 461

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

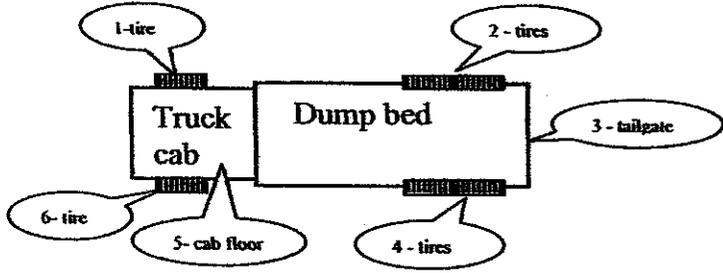
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	200 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0592009

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 W. 5th St Garden, CO 80401 303-273-3936			5. Generating Location (if different) School of Mass Research Institute North West of 12th and Birch St Garden, CO 80401 303-273-3936				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 7500 W. 12th St Garden, CO 80401 ADDITIONAL FACILITY INFORMATION (if any)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. None		CO 12100003 12/18/10		18	Y	Y-Yards	T-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Erickson				Signature		Month Day Year 6/3/07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Mike Murray				Signature		Month Day Year 6/3/07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515531

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	555915	0000
WEIGHMASTER		
R000080 SINA C		
DATE IN	TIME IN	
31 August 2007	9:45 am	
DATE OUT	TIME OUT	
31 August 2007	9:45 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592009		

Gross Weight 89,460.00 lb  
 Tare Weight 34,260.00 lb Inbound -  
 Net Weight 47,200.00 lb 24.60 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.60	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *M. M. M.*



NON-HAZARDOUS WASTE MANIFEST

0592009

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1100 Phoenix St Denver, CO 80202 Phone ( ) 303-771-1234			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Broadway Denver, CO 80202 Phone ( ) 303-771-1234		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.				No. Type	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Larson		Signature		Month Day Year 8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Jones		Signature		Month Day Year 8/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

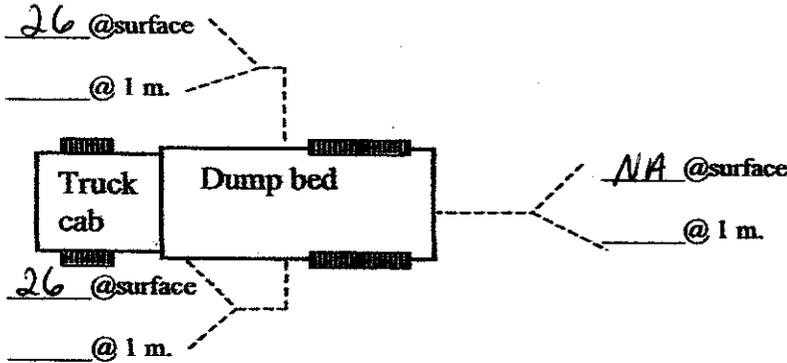
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/31/07 0932 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

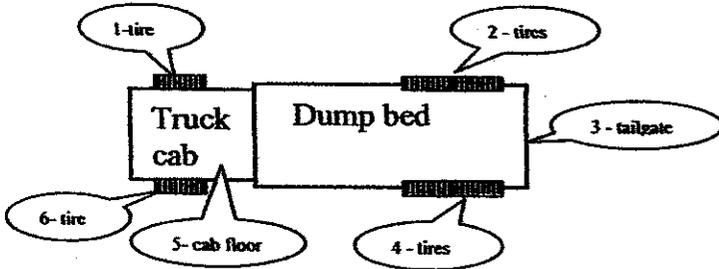
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	XOCpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0592010

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 177 Wilson St Cohen, CO 80401 303-273-0060			5. Generating Location (if different) School of Area Research Institute North West of 13th and Brach St Cohen, CO 80401 303-273-0060		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address SOUTH, CO Cohen, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Harm Soil		CO 037 07/00/08 15/11/15		19. Total Quantity 2 Yards	
b.				20. Unit Wt/Vol 1-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8 3 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN			Signature <i>[Signature]</i>		Month Day Year 8 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

5155-2

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 980606  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585925	0000
WEIGHMASTER		
PC000060 GUMA D		
DATE IN	TIME IN	
31 August 2007	9:59 am	
DATE OUT	TIME OUT	
31 August 2007	9:59 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0592010		

Gross Weight 57,360.00 lb  
 Tare Weight 35,100.00 lb Inbound -  
 Net Weight 22,150.00 lb 26.08 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.08	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0592010

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1. S. Lincoln St Garden, CO 80401 303-273-3088			5. Generating Location (if different) School of Mines Research Institute N. on West of 12th and Oak St Garden, CO 80401 303-273-3088		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

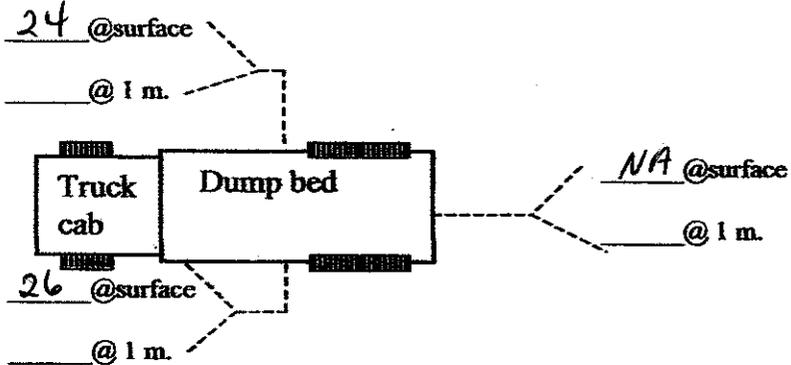
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0938 Surveyed by: Chicks J Mattson

Trucking Company: Grievre Truck license plate no. /state: 8

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

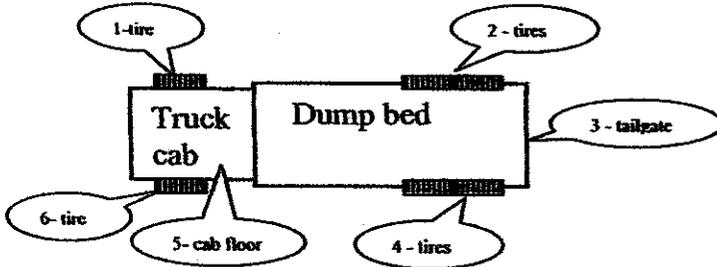
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	X 0 cpm	3 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550991

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1530 Illinois St Golden, CO 80401 303-273-3999			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3999		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado Landfill 4609 Hwy 30 Golden, CO ACCOUNT # 000000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		CO L07 070508 YS11815		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Siskind				8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				08 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515543

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588926	0000
WEIGHMASTER		
PC00060 BINA C		
DATE IN	TIME IN	
31 August 2007	10:00 am	
DATE OUT	TIME OUT	
31 August 2007	10:00 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0850991		

Gross Weight 34,640.00 lb  
 Tare Weight 36,540.00 lb      Inbound -  
 Net Weight 48,100.00 lb 24.05 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.05	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



8

# NON-HAZARDOUS WASTE MANIFEST

0550991

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-4586			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Ditch St Golden, CO 80401 303-273-0990		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401 (Research Institute)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Sol		CO 157-075008 03/11/95		19. Total Quantity 18 Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Binkman		Signature		Month Day Year 8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature		Month Day Year 08/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

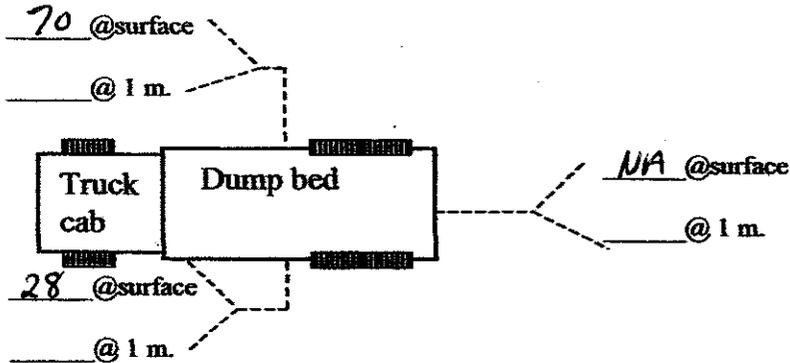
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0944 Surveyed by: Chicks J Mattson  
 Trucking Company: Griev Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

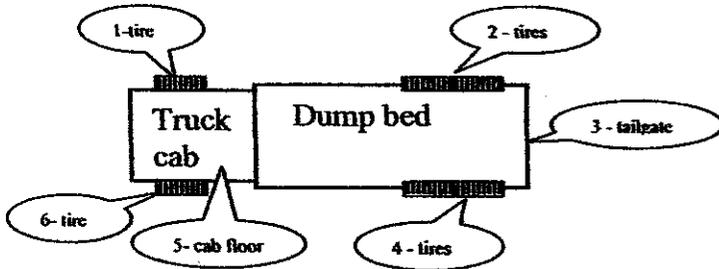
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	

24 5155 W

FOOTHILLE LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	583727	0000
WEIGHMASTER		
K000060 SIMA C		
DATE IN	TIME IN	
31 August 2007	10:01 AM	
DATE OUT	TIME OUT	
31 August 2007	10:01 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0550992		

Gross Weight 85,220.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 48,020.00 lb 24.01 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.01	TN	SW-COINT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kerr*



NON-HAZARDOUS WASTE MANIFEST

0550992

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Joe Grieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address T/S/D Facility 2800 Hwy 50 Golden, CO ACCOUNT # 50010 (Colorado State of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. None		17. Allied Waste Approval # and Exp. Date CO 087 070906 7511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bick		Signature <i>[Signature]</i>		Month 8	Day 31
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month 08	Day 31
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

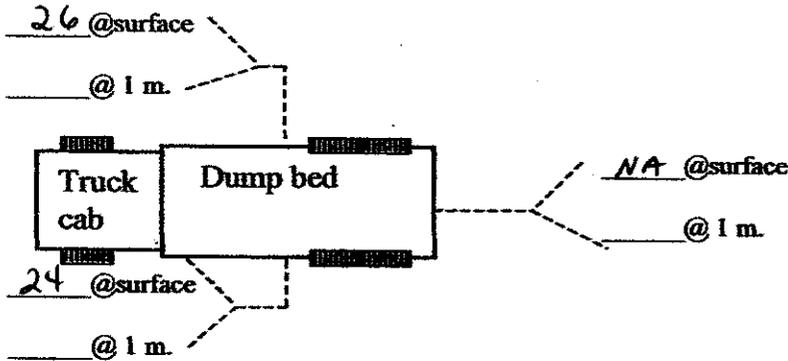
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0950 Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

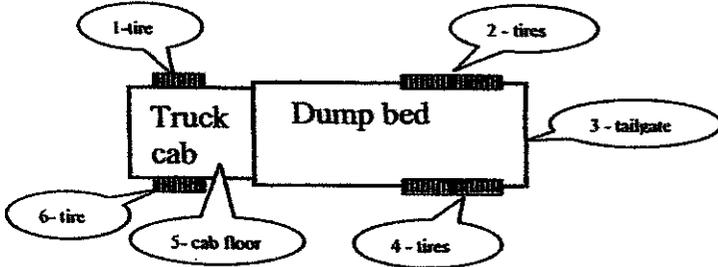
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550993

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Breck St Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footprints Landfill 14701 Hwy 90 Golden, CO ACCOUNT # 04400 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Sol		CO 167 073000 Y511516		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Bishara				8/31/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Daniel Colares Lopez				08/31/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515562

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588732	0000
WEIGHMASTER		
REC0000 31NA 0		
DATE IN	TIME IN	
31 August 2007	10:09 am	
DATE OUT	TIME OUT	
31 August 2007	10:10 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0550993		

OS Gross Weight 24,140.00 lb  
 Tare Weight 28,700.00 lb      Inbound --  
 Net Weight 48,440.00 lb 24.22 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.22	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550993

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado Landfill 1870 Hwy 91 Golden, CO 80401 (Colorado's Hazardous Waste)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Sol		0018707500-511915		18	Y-Yards
b.					Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Binkman		Signature: <i>[Signature]</i>		Month: 8	Day: 31
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature: <i>[Signature]</i>		Month: 09	Day: 31
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature: <i>[Signature]</i>		Month: 09	Day: 31
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name: <i>[Signature]</i>		Signature: <i>[Signature]</i>		Month: 09	Day: 31

GENERATOR

TRANSPORTER

T/S/D FACILITY

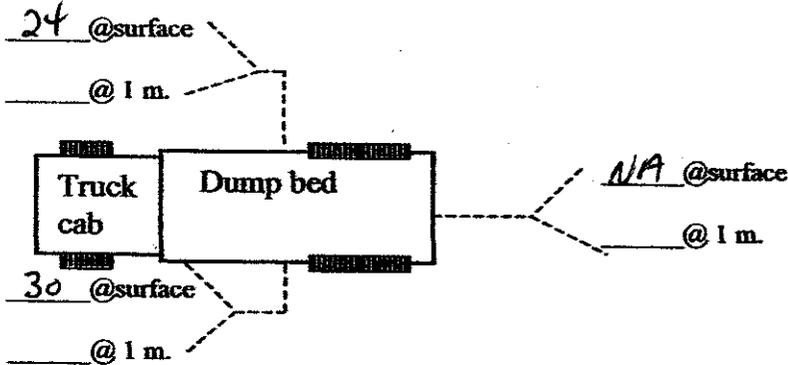
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 0956 Surveyed by: Chicks J Mattson  
 Trucking Company: Gnere Truck license plate no. /state: 96

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

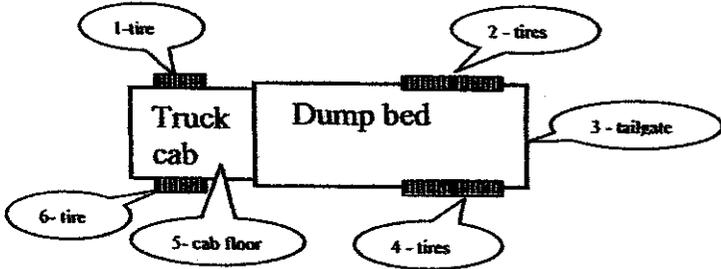
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X0 cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



NON-HAZARDOUS WASTE MANIFEST

0550994

96

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Harm Soil		07167070303131615		19. Total Quantity 0 Drums 16 Cans	
b.				20. Unit Yards Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blahna		Signature <i>[Signature]</i>		Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Luisa L...		Signature <i>[Signature]</i>		Month Day Year 8 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515583

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760803  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET E2879E	GRID 0000
WEIGHMASTER		
000080 GINA C		
DATE IN 31 August 2007	TIME IN 0414 am	
DATE OUT 31 August 2007	TIME OUT 1045 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0550994	ORIGIN	

GB Gross Weight 81,540.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 44,960.00 lb 22.48 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.48	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

96  
0550394

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1670 Illinois St Golden, CO 80401 303-273-4998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-4998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ADVISORY # 160113 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 161 070600 7511015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name L. M. [Name]		Signature <i>[Signature]</i>		Month Day Year 8 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name [Name]		Signature <i>[Signature]</i>		Month Day Year 8 31 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

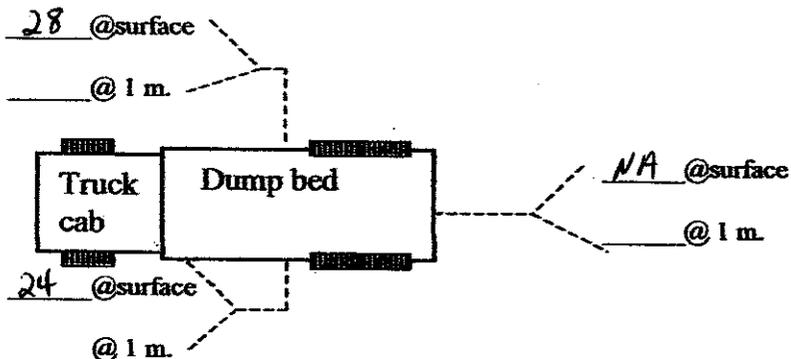
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1002 Surveyed by: Chicks J Mattson

Trucking Company: Griew Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

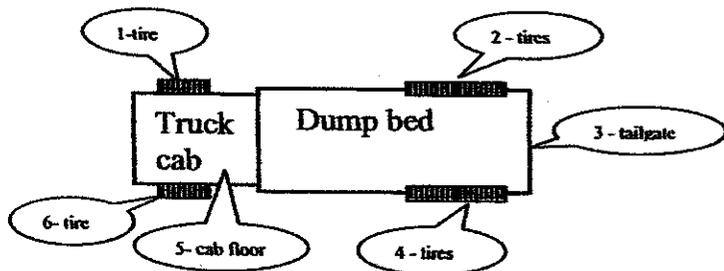
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	X 0 cpm	$\beta$ 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



NON-HAZARDOUS WASTE MANIFEST

0550995

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Division St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Green Recycling #12-		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado 1500 Division St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 1510703001-0511015		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				b.	
				c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brubaker		Signature		Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year 8 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515555 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	588909	0000
WEIGHMASTER		
R000060 SINA C		
DATE IN		TIME IN
31 August 2007		0815 am
DATE OUT		TIME OUT
31 August 2007		1040 am
VEHICLE		ROLL OFF
YS11915		
REFERENCE	ORIGIN	
0520795		

GS Gross Weight 87,120.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 49,420.00 lb 24.71 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.71	TN	SW-CENT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0550995

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3990		
4. Phone ( ) 303-273-3990			6. Phone ( )		
7. Transporter #1 Company Name Globe Recycling #10-		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Perrille Landfill 5800 Hwy 93 Golden, CO ACCOUNT # 98398 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date 00 LG/070408-151915		18. Containers No. Type	
				19. Total Quantity 0-Drums 0-Gallons 18 Yards 1-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name S. Beckman		Signature 		Month Day Year 8 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

TRANSPORTER #1

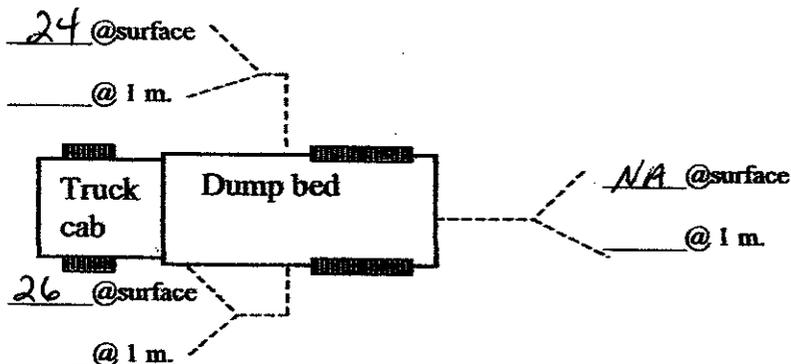
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/31/07 1009 Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

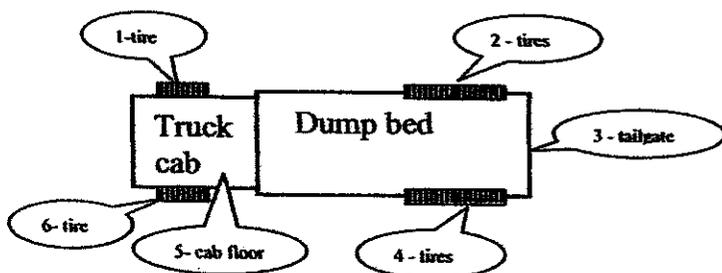
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	X0 cpm	$\beta$ 316 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

0550996

JDO1

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3996				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1600 Illinois St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO LB7 070900 1511015		18. Containers	
				No.	Type
a. Name Soil				Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>David Warner</i>				Signature <i>[Signature]</i>	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515573

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	888943	0000
WEIGHMASTER		
PC00080 GINA C		
DATE IN	TIME IN	
31 August 2007	10:26 am	
DATE OUT	TIME OUT	
31 August 2007	10:26 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0880943		

Gross Weight 80,600.00 lb  
 Net Weight 35,140.00 lb  
 Net Weight 45,460.00 lb 22.73 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.73	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



NON-HAZARDOUS WASTE MANIFEST

0550996

3007

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Minors St Golden, CO 80401 303-273-3900			5. Generating Location (if different) North West of 17th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				21. Additional Descriptions for Materials Listed Above	
				22. Special Handling Instructions and Additional Information	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

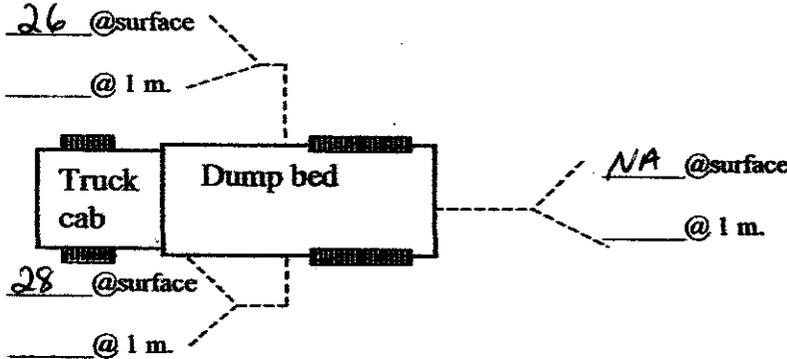
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1014 Surveyed by: Chicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 95

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

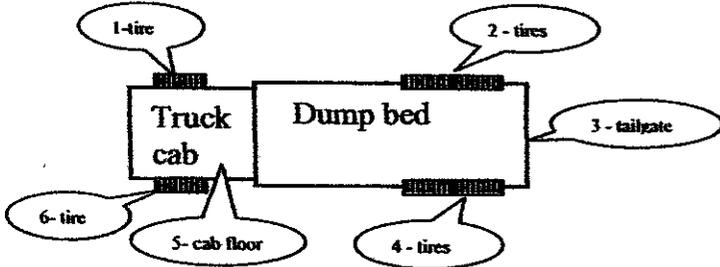
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



95

# NON-HAZARDOUS WASTE MANIFEST

## 0550997

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines 1301 Illick St Golden, CO 80401 303-273-3696			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3696		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 6600 Hwy 93 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Sol		CO L37 070000 Y511015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Bealman</i>			Signature <i>[Signature]</i>		Month Day Year 8   31   07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>			Signature <i>[Signature]</i>		Month Day Year     07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year     07
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year     07

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

FOOTHILLS LANDFILL  
 8900 HIGHWAY 92  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

8/28/07  
 010019

SITE		TICKET		GRID	
071		508745		0000	
WEIGHMASTER					
P000080 BINA C					
DATE IN			TIME IN		
31 August 2007			10:51 am		
DATE OUT			TIME OUT		
31 August 2007			10:31 am		
VEHICLE			ROLL OFF		
Y511915					
REFERENCE		ORIGIN			
0530997					

Gross Weight 82,700.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 45,720.00 lb 22.84 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.84	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



95

# NON-HAZARDOUS WASTE MANIFEST

## 0550997

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Bronco St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 30 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 00157 (70900) YS11015		18. Containers	
				No.	Type
a. Norm Soil				16	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Binkins			Signature:		Month Day Year: 8/31/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year: 8/31/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year: 8/31/07

GENERATOR

TRANSPORTER #1

T/S/D FACILITY

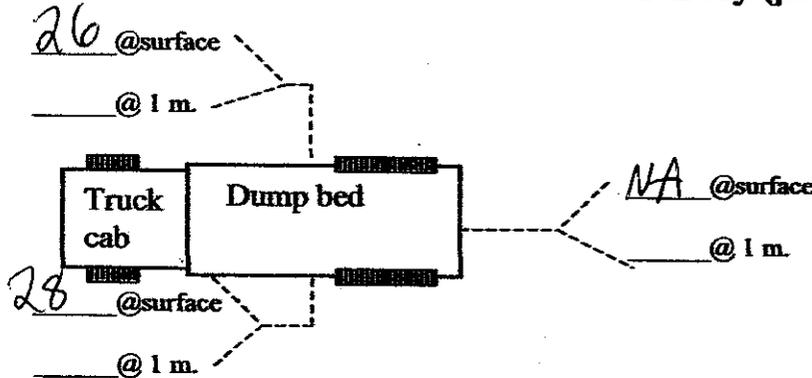
TRANSPORTER #1

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1022 Surveyed by: Citichs J Mattson

Trucking Company: Gneve Truck license plate no. /state: 961

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

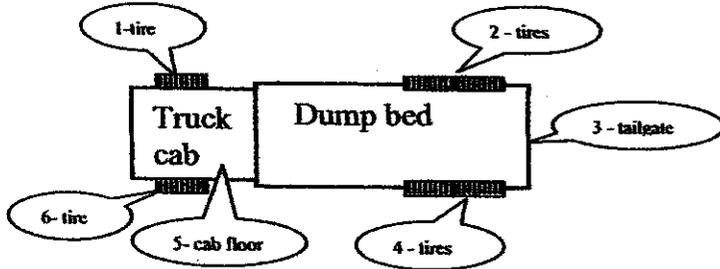
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	616.6 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0550998

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1000 Birch St Golden, CO 80401 303-273-3656			5. Generating Location (if different): Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3656		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Iron Sulfide		00 087 070000 10/19/16		19. Total Quantity 0-Drums 0-Containers	
b.				20. Unit Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name M. [Signature]		Signature <i>[Signature]</i>		Month Day Year 8 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY





961

# NON-HAZARDOUS WASTE MANIFEST

0550998

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Research Institute 1570 Illinois St Golden, CO 80401 303-273-3906			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3906				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1800 Hwy 95 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Sulf b. c. d.		17. Allied Waste Approval # and Exp. Date 00167 070908 1511215		18. Containers			
				No.	Type	19. Total Quantity	
						0 Drums	
						0 Gallons	
						Y-Yards	
				20. Unit Wt/Vol Tons			
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Bertram		Signature 		Month Day Year 8 31 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Miguel Marquez		Signature 		Month Day Year 8 31 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name Michael...		Signature 		Month Day Year 8 31 07			

GENERATOR

TRANSPORTER

T/S/D FACILITY

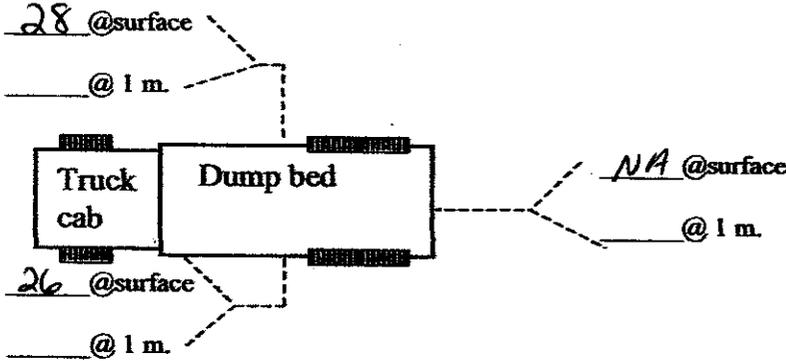
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30<sup>31</sup>/07 1027 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 04

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

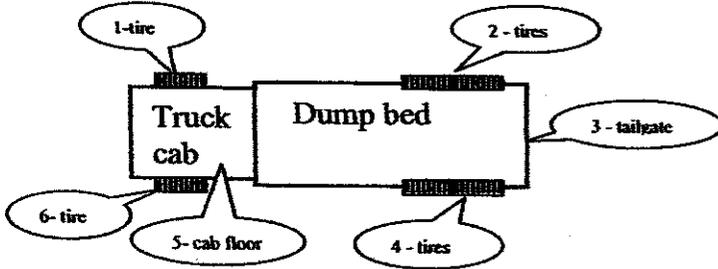
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	β 316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0551000

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Golden, CO 80401 303-273-3761				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		10167070008 10/10/15		Y Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Berkman</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 31 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Sandra Versos</i>				Signature <i>[Signature]</i>	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515587

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588957	0000
WEIGHMASTER		
PC00080 GINA C		
DATE IN	TIME IN	
31 August 2007	10:48 am	
DATE OUT	TIME OUT	
31 August 2007	10:48 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0551000		

Gross Weight 78,220.00 lb  
Tare Weight 35,640.00 lb  
Net Weight 42,580.00 lb 21.29 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.29	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-31-07



# NON-HAZARDOUS WASTE MANIFEST

0551000

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3500				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3500	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ACD UNIT # 10011 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Soil		17. Allied Waste Approval # and Exp. Date CO L67070001511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 8 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santana Vargas			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

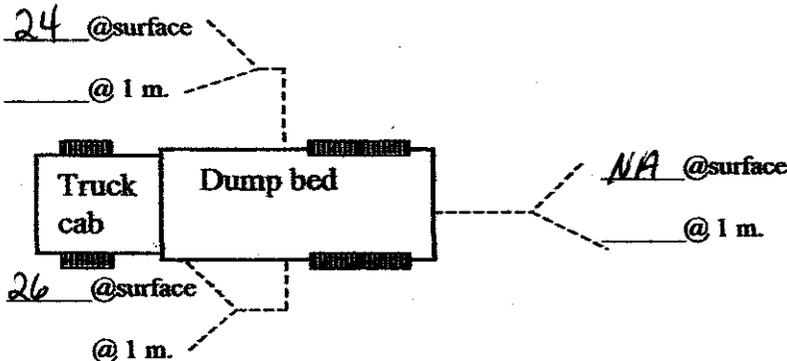
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1044 Surveyed by: C Hicks J Mattson

Trucking Company: Grievre Truck license plate no. /state: 23

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

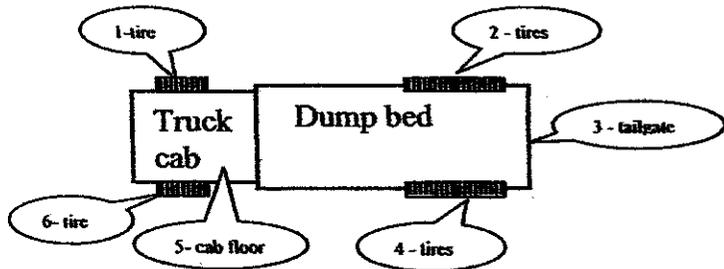
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	XOcpm	316 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	17 dpm	616.6 dpm	



23

# NON-HAZARDOUS WASTE MANIFEST

## 0550999

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 12th St Golden, CO 80401 303-275-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and First St Golden, CO 80401 303-275-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 12th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non Sol		00187 070008 Y511015		19. Total Quantity 6.00 tons	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve DeLorenzo			Signature		Month Day Year 10 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK MELAN			Signature		Month Day Year 8 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515593

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960803  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558965	0000
WEIGHMASTER		
PC00060 GINA C		
DATE IN		TIME IN
31 August 2007		11:01 am
DATE OUT		TIME OUT
31 August 2007		11:01 am
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
0550999		

OS Gross Weight 84,040.00 lb  
 Tare Weight 35,100.00 lb      Inbound --  
 Net Weight 50,940.00 lb 25.47 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
25.47	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE



23

# NON-HAZARDOUS WASTE MANIFEST

## 0550999

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address Facility Name 2000 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				WT/Vol	
				Cubic Yards	
				Tons	
a. Nonmt Sol		CO 187 070902 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 8 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK MELAN			Signature		Month Day Year 8 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

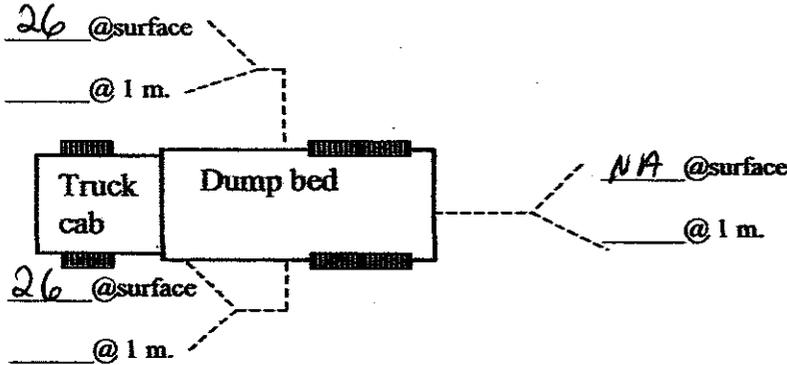
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/31/07 1051 Surveyed by: Chicks J Mattson  
 Trucking Company: Grievre Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

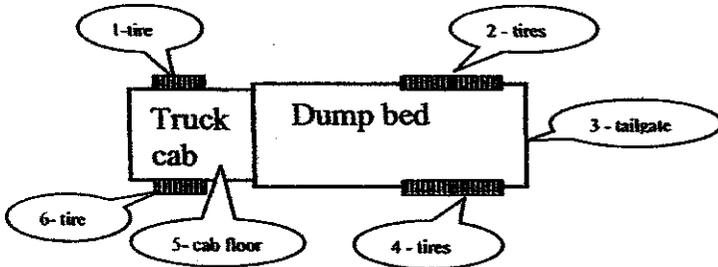
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	X 0 cpm	316 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	616.6 dpm	



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550989

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3906			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3906		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cofco Waste Facility 3000 Hwy 93 Golden, CO ACCOUNT # 91626 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		001 67 07/908 Y511216		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Caroline Hicks</i>			Signature <i>Caroline Hicks</i>		Month Day Year 0 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Chuck Foy</i>			Signature <i>Chuck Foy</i>		Month Day Year 08 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515602

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	882772	0000
WEIGHMASTER		
5000080 GINA C		
DATE IN	TIME IN	
31 August 2007	11:09 am	
DATE OUT	TIME OUT	
31 August 2007	11:09 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
0350989		

Contract: YE11915

Gross Weight 54,740.00 lb  
 Tare Weight 38,540.00 lb  
 Net Weight 16,200.00 lb 24.10 TN

Intercord -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.10	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550989

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1501 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Arch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1501 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 071167070978 YS11515		18. Containers	
				No.	Type
a. Metal Scrap				18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Carolyn Hicks			Signature <i>Carolyn Hicks</i>		Month Day Year 08 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Fay			Signature <i>Chuck Fay</i>		Month Day Year 08 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000033

# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Ruiz 95	8/30/07	1208	1214	18 cy
Marquez 961		1222	1232	
JD01		1222	1238	
Griever 8		1238	1245	
Griever 23		1245	1252	
Murray 461		1250	1258	
Griever 24		1258	1308	
Marquez 96		1308	1315	
JD04		1314	1322	
Collazo 13		1334	1340	
Ruiz 95		1340	1348	
Griever 8		1348	1357	
Griever 23		1357	1402	
Marquez 961		1402	1410	
JD01		1408	1416	
Murray 461		1415	1424	
Griever 24		1424	1430	
Griever 12		1430	1438	
Marquez 96		1438	1443	
JD04	↓	1443	1450	↓

80.2  
 81.4  
 80.5  
 82.1  
 85.6  
 81.4  
 84.5  
 80.2  
 75.5  
 83.9  
 78.8

# Truck Departure Record Form

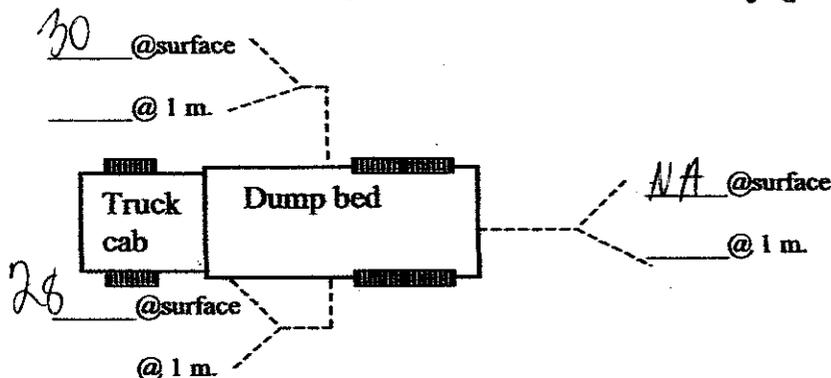
Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Callazo 13	8/30/07	1450	1459	18 cy
Ruiz 95	8/30/07	1458	1503	18 cy
Griere 8	8/30/07	1503	1511	↓
Griere <del>24</del> 23	8/30/07	1510	1517	
Marquez 961	8/30/07	1517	1527	
JD 01	8/30/07	1527	1535	
Murray 461	8/30/07	1535	1542	
Marquez 96	8/30/07	1548	1555	

68 trucks

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1214 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

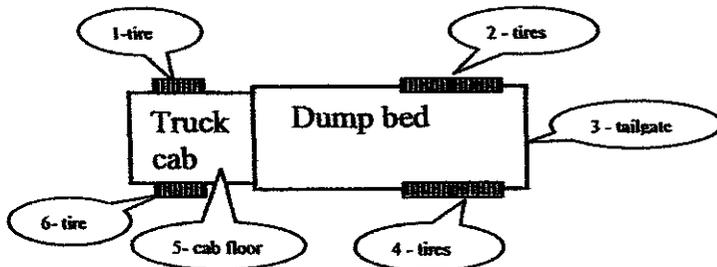
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	5220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643470

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 Illinois St Golden, CO 80401 303-273-3698			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Hill St Golden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 0016775308 01/915		18. Containers	
				19. Total Quantity	
				20. Unit	
a. Iron Saw				Y-Yards	
b.				Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Gene Benson			Signature		Month Day Year 8 20 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year 8 20 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515250

FOOTHILLS LANDFILL  
8700 HIGHWAY 95  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 588659	GRID 0000
WEIGHMASTER 2800056 Barbara Jo S		
DATE IN 30 August 2007		TIME IN 12:47 pm
DATE OUT 30 August 2007		TIME OUT 12:47 pm
VEHICLE YE11915		ROLL OFF
REFERENCE 643470	ORIGIN	

Contract: YE11915

GC Gross Weight 80,220.00 lb  
Tare Weight 36,980.00 lb  
Net Weight 43,240.00 lb 21.62 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.62	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0643470

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1330 Illinois St Golden, CO 80401 303-273-4338				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dickson Golden, CO 80401 303-273-3098	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1330 Illinois St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. <i>Waste Soil</i>		<i>CO161000001-01-1815</i>			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Gene Bergman</i>		Signature <i>[Signature]</i>		Month <i>8</i>	Day <i>20</i> Year <i>07</i>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month <i>8</i>	Day <i>20</i> Year <i>07</i>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

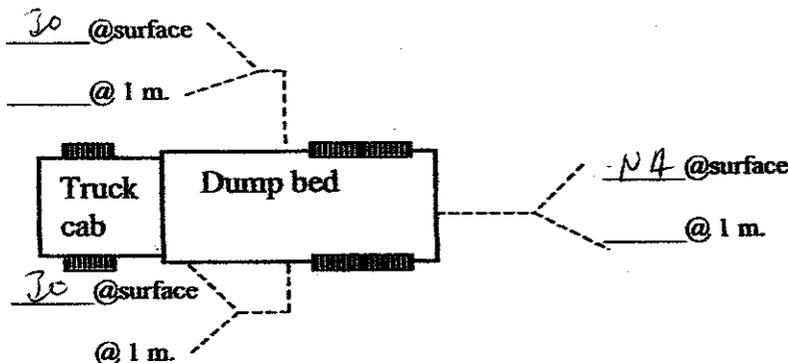
TRANSPORTER #1

COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1232 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

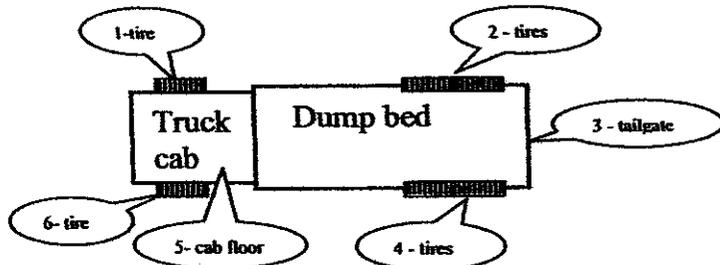
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643466

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Garden, CO 80401 303-273-3333			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Garden, CO 80401 303-273-3333		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Landfill 1000 Main St Garden, CO ACCOUNT # UNDER COLORADO SCHOOL OF MINES		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 037-070900-513515		18. Containers	
				No.	Type
a. Heavy Soil					1-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Zimmerman</i>				Signature <i>[Signature]</i>	
				Month	Day
				2	27
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>				Signature <i>[Signature]</i>	
				Month	Day
				2	27
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033





# NON-HAZARDOUS WASTE MANIFEST

0643466

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 10th and Birch St Golden, CO 80401 303-271-3998					
4. Phone ( ) 303-271-3998				6. Phone ( )					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Facility Name: 5000 Hwy 30 Golden, CO			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date 07107070918 Y511915		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Drums	Gallons	
a. Metal Spill							Yards	Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name: <i>SICIL B...</i>				Signature: <i>[Signature]</i>			Month: 6	Day: 2	Year: 97
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name: <i>[Name]</i>				Signature: <i>[Signature]</i>			Month: 7	Day: 20	Year: 97
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name:				Signature:			Month:	Day:	Year:
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name:				Signature:			Month:	Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

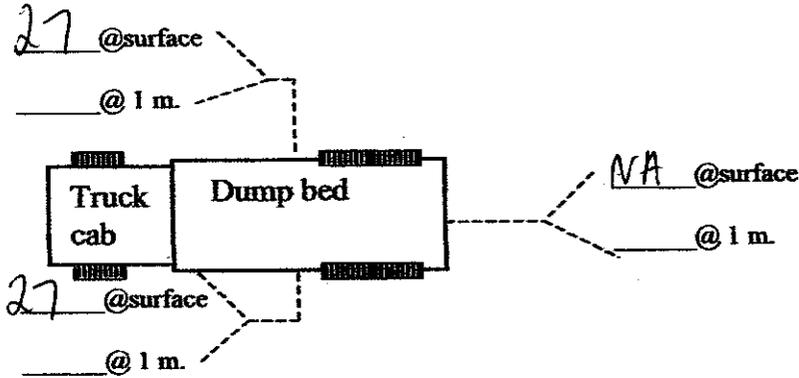
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1238 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

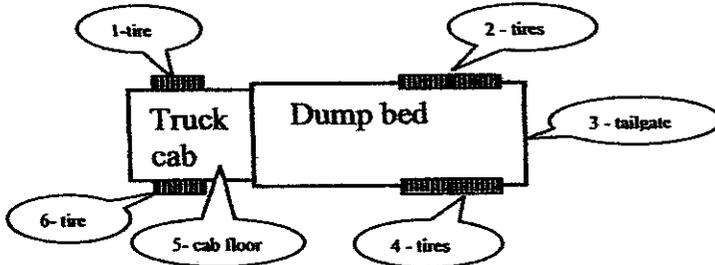
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

7001  
0643467

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 4500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-2000		
4. Phone ( ) 303-273-3665			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Center 2000 1st St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Warm Salt		CO19137002, 11-18-15		0	0 Gallons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Buchanan</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				5	5 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				6	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				6	07
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

631000033

315281

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
930603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	888473	0000
WEIGHMASTER		
6500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	1:17 pm	
DATE OUT	TIME OUT	
30 August 2007	1:17 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
043467		

Contracts Y511915

Gross Weight 80,460.00 lb  
Tare Weight 35,580.00 lb  
Net Weight 44,880.00 lb 22.44 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.44	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Manolo R



# NON-HAZARDOUS WASTE MANIFEST

0643467

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-274-3906				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-274-3996	
4. Phone ( ) 303-274-3906		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Heavy Soil		201870501401015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Blackman				Signature: [Signature]	
				Month	Day Year
				8	10 2017
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature: M. R	
				Month	Day Year
				8	10 2017
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature: M. R	
				Month	Day Year
				8	10 2017
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

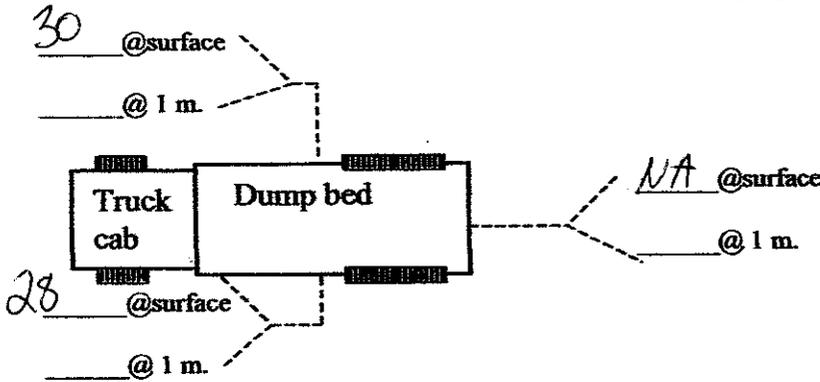
GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1245 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

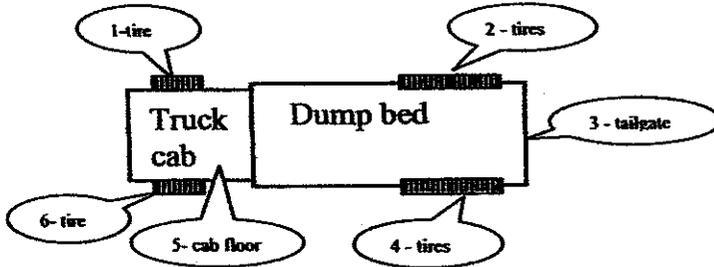
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643488

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Lincoln St Golden, CO 80401 303-273-2666				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3966	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Storm Sewer		07-117-97240-75-1015		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beaman				Signature: [Signature]	
				Month: 6	Day: 20
				Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Chuck Foy				Signature: [Signature]	
				Month: 08	Day: 30
				Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month:	Day:
				Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month:	Day:
				Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515200

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	525661	0000
WEIGHMASTER		
800056 Barbara Jo E		
DATE IN	TIME IN	
30 August 2007	1:03 pm	
DATE OUT	TIME OUT	
30 August 2007	1:03 pm	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
643468		

Contract: YE11915

Gross Weight 82,000.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 45,460.00 lb 22.73 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.73	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0643468

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Front Hills Landfill 6900 Hwy 90 Golden, CO ACCOUNT # 44466 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Norm Soil		CO 167 070309 7511915		18	Y	Y-Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brakman				Signature		Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Foy				Signature		Month Day Year 08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

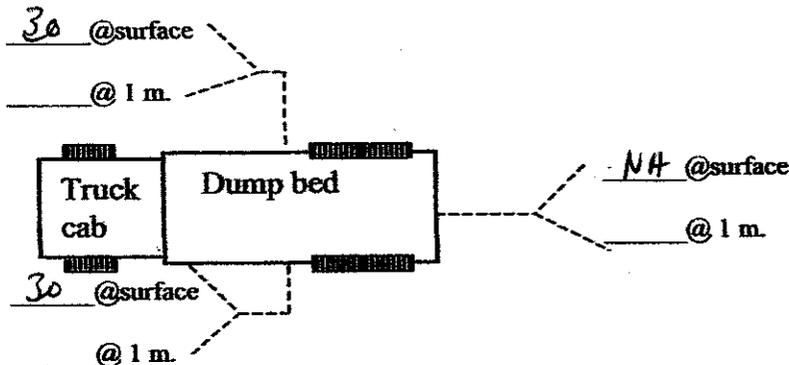
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1252 Surveyed by: C Hicks J Mattson

Trucking Company: Griewe Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

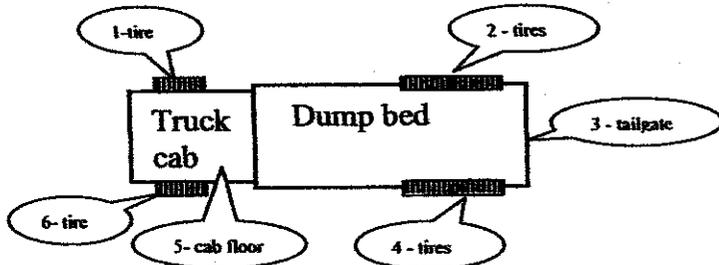
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2220				2220		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

25  
0643459

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303 273-0558	
4. Phone ( ) 303-273-0558		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address F. S. Smith & Co. 8500 Hwy. 35 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		101187070500 - 011815		Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blanton				Signature	
				Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK MELAN				Signature	
				Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515273

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
804600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	555465	0000
WEIGHMASTER		
1500054 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	1:09 pm	
DATE OUT	TIME OUT	
30 August 2007	1:09 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
640469		

GC Gross Weight 25,600.00 lb  
 Tare Weight 35,100.00 lb      Inbound ---  
 Net Weight 50,500.00 lb 25.25 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
25.25	TN	34-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0643469

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Minor St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Brantle Golden, CO 80401 303 273-0668		
4. Phone ( ) 303 273-0668			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footbills Lane #4 4000 Hwy 105 Golden, CO 80401 (City, State, County, Zip Code, Street Address)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 00187703001511515		18. Containers	
				No.	Type
a. Iron Sulfide					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Shannon		Signature <i>[Signature]</i>		Month 7	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name MARCUS PHELAN		Signature <i>[Signature]</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

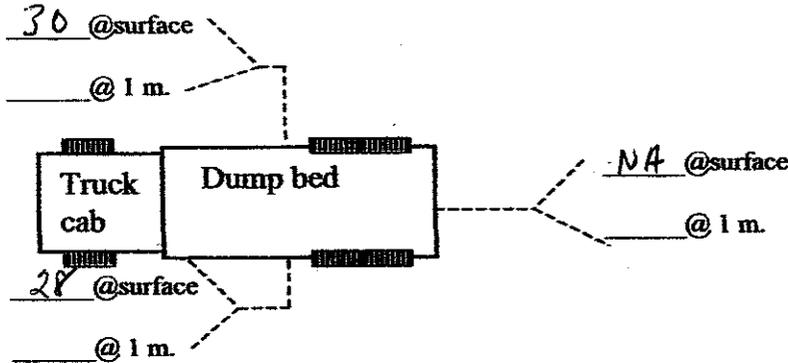
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1258 Surveyed by: C Hicks J Mattson

Trucking Company: Grievé Truck license plate no. /state: 4601

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

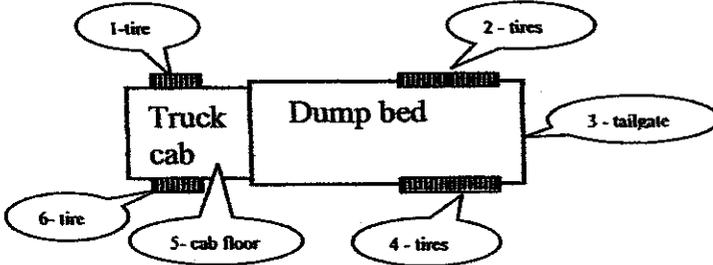
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643481

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Environmental Research Institute 1540 Genes St Golden, CO 80401 Phone (303) 270-3666				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 Phone (303) 270-3666	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Environmental Research Institute 1540 Genes St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		20-1271002808 10-1-12-14		17	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Brannon		<i>[Signature]</i>		5	31
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Mike Brown		<i>[Signature]</i>		5	30
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

315233

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	583677	0000
WEIGHMASTER		
8900036 Barbara Jo E		
DATE IN	TIME IN	
30 August 2007	1:22 pm	
DATE OUT	TIME OUT	
30 August 2007	1:22 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
643481		

Gross Weight 81,400.00 lb  
Tare Weight 34,260.00 lb Inbound -  
Net Weight 47,140.00 lb 23.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.57	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643481

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1571 Illinois St Golden CO 80401 303-273-5900				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Dahl St Golden CO 80401 303-273-5900	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1571 Illinois St Golden CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Normal Soil		CO 1571570001 0511913		18 4 drums Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bannan		Signature <i>[Signature]</i>		Month Day Year 05 20 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray		Signature <i>[Signature]</i>		Month Day Year 06 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

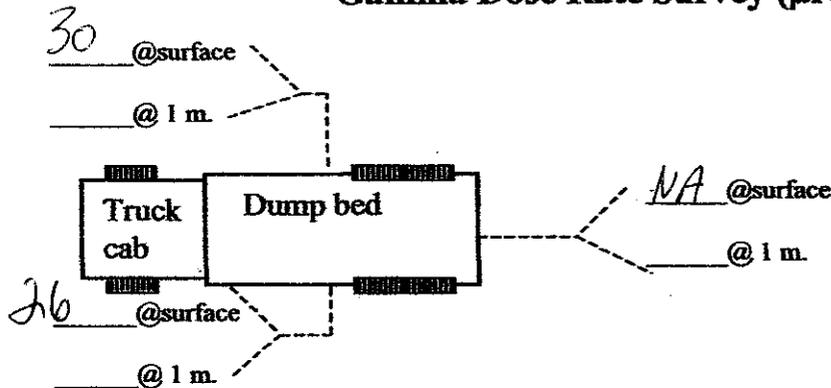
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1308 Surveyed by: C Hicks J Mattson

Trucking Company: Griev Truck license plate no. /state: 24

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

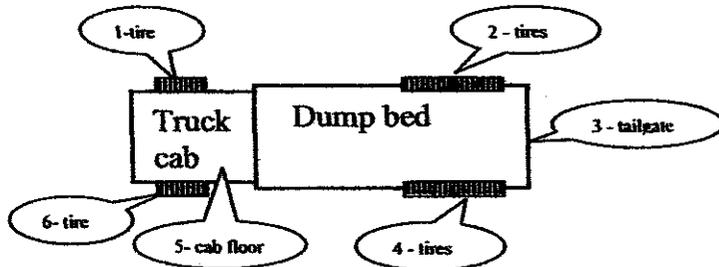
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

24  
0643482

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Alaska Dr Golden, CO 80401 303-273-3886			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3886				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name S O E Grievette Trucking		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1500 Alaska Dr Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Heavy Oil b. c. d.		17. Allied Waste Approval # and Exp. Date 00167 07/05/98 05/1/96		18. Containers			
				19. Total Quantity		20. Unit Wt/Vol	
				No.	Type	Quantity	Unit
				18	Y	7 Yards	7-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Beckman			Signature:		Month Day Year 8 30 97		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Ken Shannon			Signature:		Month Day Year 08 30 97		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

24 520230

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 585662	GRID 0000
WEIGHMASTER		
#E0005e Barbara Jo S		
DATE IN 30 August 2007	TIME IN 1:28 pm	
DATE OUT 30 August 2007	TIME OUT 1:28 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 643462	ORIGIN	

Contract: Y511915

Gross Weight 81,500.00 lb  
Tare Weight 37,200.00 lb Inbound --  
Net Weight 47,000.00 lb 23.65 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.65	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643482

24

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1800 Walnut St Golden, CO 80401 303-273-3896			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3896				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name Joe Grievetrucking		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1800 Walnut St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Ore b. c. d.		17. Allied Waste Approval # and Exp. Date 2016/03/23/01/18/18		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
					18 Y	Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month 3	Day 30		
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Ken Shannon		Signature <i>[Signature]</i>			
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		

GENERATOR

TRANSPORTER

T/S/D FACILITY

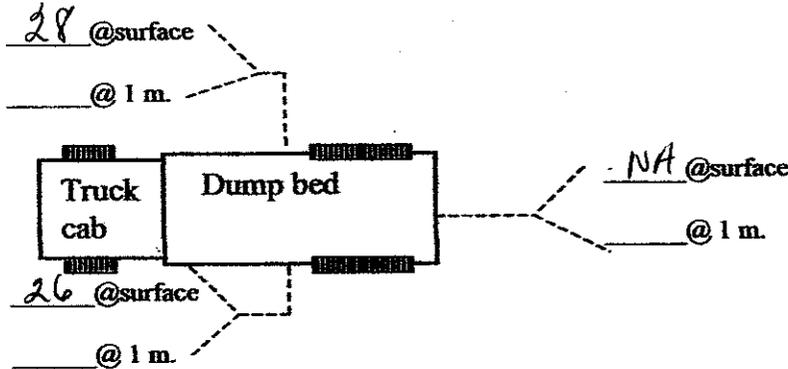
TRANSPORTER #1

COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1315 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

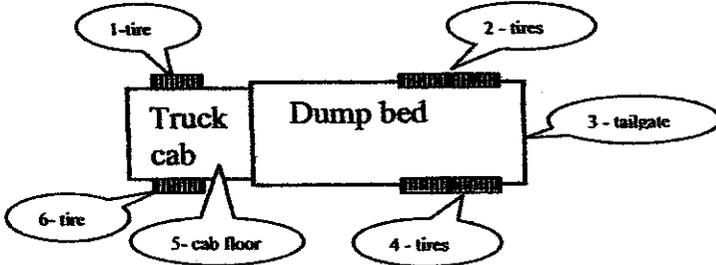
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643483

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 1st St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3008		
4. Phone ( ) 303-273-3008			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontline Landfill 1800 1/2 Ave S Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Warm Soil		17. Allied Waste Approval # and Exp. Date CO 017 070302 7/1/1975		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No.	
				Type	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bergman		Signature		Month	Day
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name Kenner's Waste		Signature		Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

313297

PICTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 038487	GRID 0000
WEIGHMASTER 2500036 Barbara Jo S		
DATE IN 30 August 2007		TIME IN 1:54 pm
DATE OUT 30 August 2007		TIME OUT 1:54 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 643480	ORIGIN	

Gross Weight 80,220.00 lb  
Tare Weight 36,580.00 lb      Inbound ---  
Net Weight 43,640.00 lb 21.82 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.82	TN	SU-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0643483

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1316 W. 1st St. Golden, CO 80401 303-273-3986				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and East St Golden CO 80401 303-273-3698	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez Landfill 8600 Hwy 50 Cortez, CO 81301		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		070908-151175		19. Total Quantity 2 Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Byrd		Signature		Month Day Year 8-20-97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Lopez		Signature		Month Day Year 8-20-97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

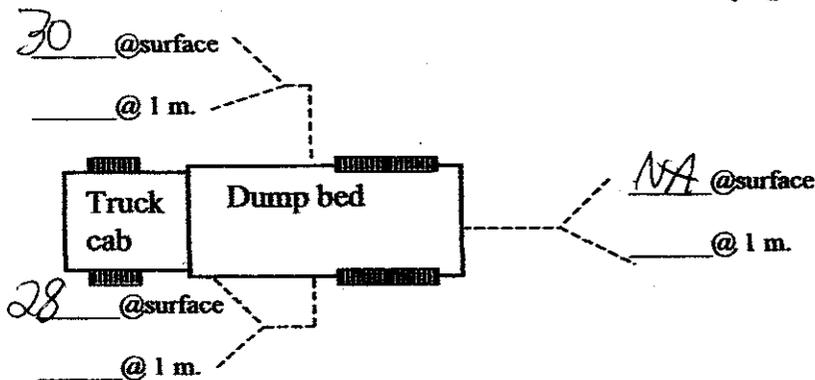
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1322 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no./state: JD04

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

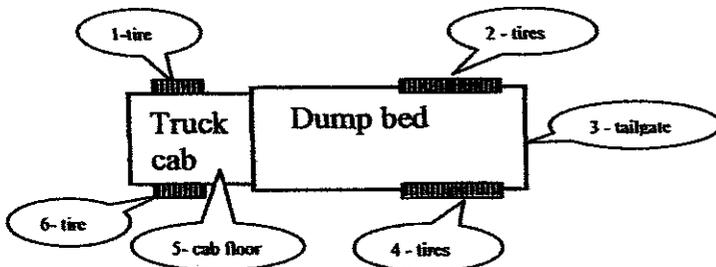
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220			<2200			

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0643484

JDCY

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1910 Range Dr Golden, CO 80401 303-273-3400			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3400		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1910 Range Dr Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Sol		201970A000 7/1/2015		19. Total Quantity 0.000000 20. Unit Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B...		Signature		Month Day Year 2 20 15	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name San J. Vargas		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000038

525302

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
806608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	588594	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	1:41 pm	
DATE OUT	TIME OUT	
30 August 2007	1:41 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
543484		

Gross Weight 75,500.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 39,860.00 lb 19.93 TN

Included --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.93	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE [Signature] 8-30-07



# NON-HAZARDOUS WASTE MANIFEST

JD09  
0643484

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Illinois St Golden, CO 80401 303-773-3900			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2945 Hwy 97 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Nerve Seal		JUL 07 04 0000 VS 1104E		7	Trucks
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brimmer		Signature 		Month	Day Year
				6	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas		Signature 		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

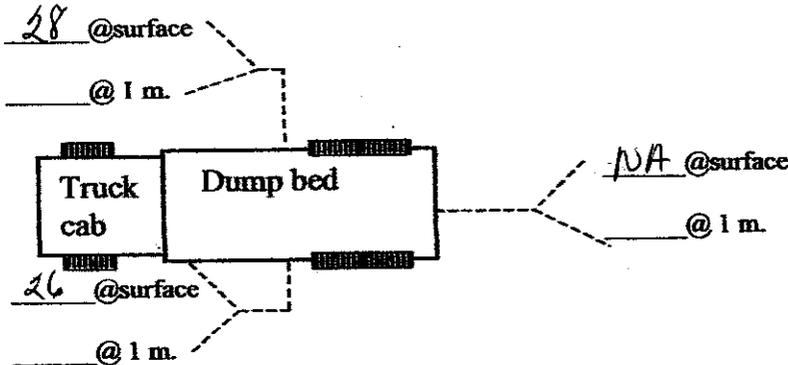
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1340 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

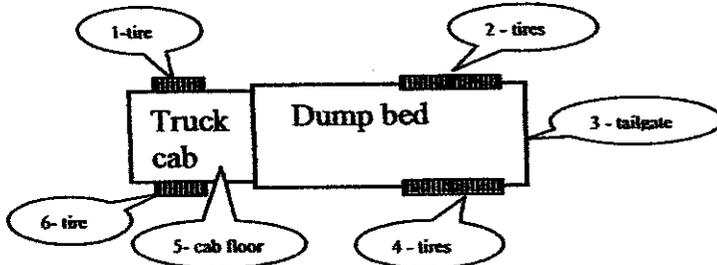
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

# 0643485

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Dings St. Golden, CO 80401				5. Generating Location (if different) S.M. Roberts School of Mines Research Institute North West of 12th and Dinkel Golden, CO 80401 303 273-0668	
4. Phone ( ) 303 273-0668			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 5000 E. 15th Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date CO 061 07/08/08 10/1/10/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve S. Johnson			Signature: [Signature]		Month Day Year 6 20 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Rafael Collazo Lopez			Signature: [Signature]		Month Day Year 08 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

GENERATOR'S COPY

COM000033

515319

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
760602  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE1191E

SITE	TICKET	GRID
01	566706	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	2:03 pm	
DATE OUT	TIME OUT	
30 August 2007	2:03 pm	
VEHICLE	ROLL OFF	
YE1191E		
REFERENCE	ORIGIN	
643485		

00 Gross Weight 83,920.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 48,220.00 lb 24.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.11	TN	SUB-COMT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643485

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 Illinois St Canton, OH 44705 Phone (330) 273-3640				5. Generating Location (if different) Cleveland School of Mines Research Institute North West of 12th and Birch St Yorben, OH 44104 Phone (330) 273-3600	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Schulte Landfill 5200 E. 1st St Canton, OH 44705 (Canton Municipal Airport - Schulte Area)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date 20160701-20170630		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman		Signature 		Month 08	Day 20
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Michael Colares Lopez		Signature 	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Month 08	Day 30
26. Discrepancy Indication Space		Signature		Year 07	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

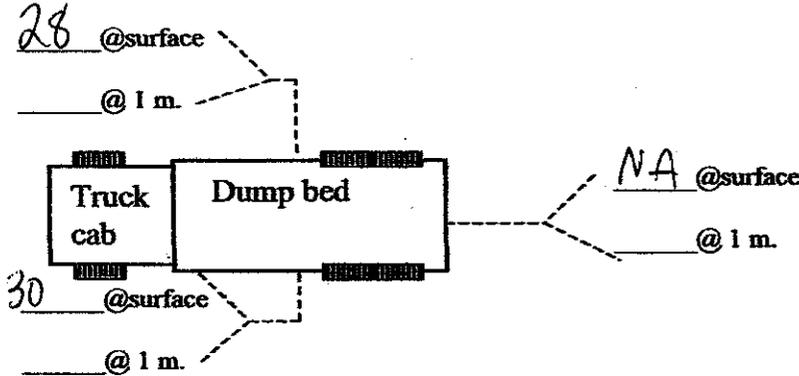
TRANSPORTER #1

COM00033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1748 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 95

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

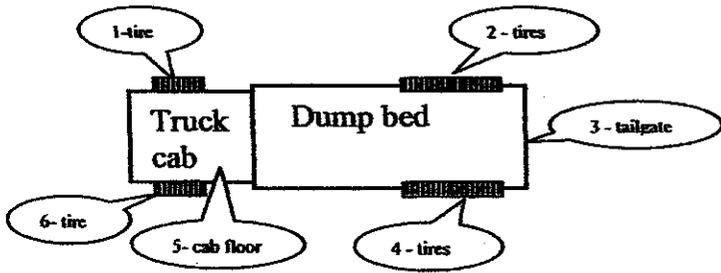
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	2220				2220		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0643436

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of							
3. Generator's Name and Mailing Address 1000 11th St Golden, CO 80401 303-271-9090				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-271-9090							
4. Phone ( )		6. Phone ( )									
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone							
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone							
13. Designated T/S/D Facility Name and Site Address 1000 11th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone							
16. Waste Shipping Name and Description a. Iron Ore b. c. d.		17. Allied Waste Approval # and Exp. Date CO 1879/0808 1/5/015		18. Containers							
				19. Total Quantity		20. Unit Wt/Vol					
				No.		Type		Drums		Gallons	
								Yards		Tons	
21. Additional Descriptions for Materials Listed Above											
22. Special Handling Instructions and Additional Information											
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name <i>Steve Benning</i>				Signature <i>[Signature]</i>							
				Month	Day						
				8	20						
				20	07						
24. Transporter #1: Acknowledgement of Receipt of Materials											
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>							
				Month	Day						
				2	20						
				07	07						
25. Transporter #2: Acknowledgement of Receipt of Materials											
Printed/Typed Name				Signature							
				Month	Day						
26. Discrepancy Indication Space											
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)											
Printed/Typed Name				Signature							
				Month	Day						

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

ADM000033

518323

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
720608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	888715	0000
WEIGHMASTER		
0200056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	2:06 pm	
DATE OUT	TIME OUT	
30 August 2007	2:06 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
643466		

Contract: Y511915

00 Gross Weight 78,800.00 lb  
Tare Weight 32,980.00 lb Inbound -  
Net Weight 41,820.00 lb 20.91 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.91	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0643486

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3008		
4. Phone ( ) 303-273-3000		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1400 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non-Hazardous		10/18/2000 #1215			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Sigue Benhous			Signature		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

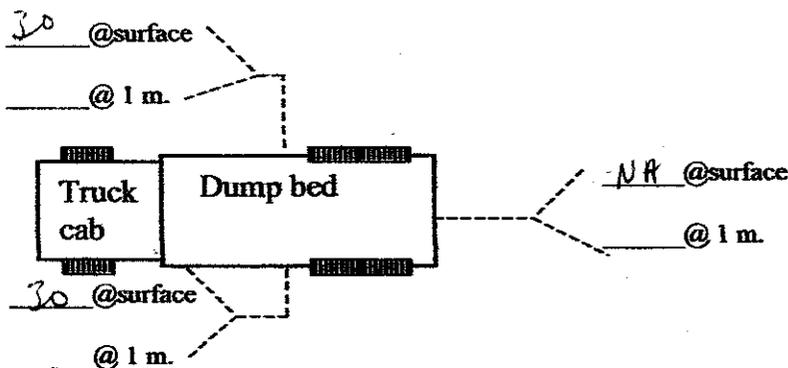
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1357 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grievé Truck license plate no. /state: Y

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

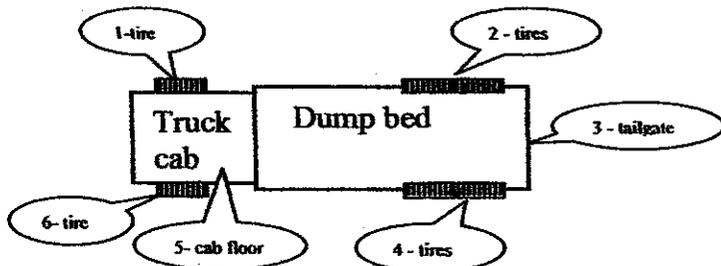
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	2220				22200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

# 0643487

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1530 W. 1st St. Golden, CO 80401 303-273-3900				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Foothill Golden, CO 80401 303-273-3900			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Codyville Landfill 6000 Hwy 67 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Scrap Steel		730704000-1511915		18	Y	Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Beckman				Signature:		Month Day Year: 5 2 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Chuck Foy				Signature:		Month Day Year: 08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name:				Signature:		Month Day Year:	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:				Signature:		Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515330

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract# Y511715

SITE	TICKET	GRID
01	526712	0000
WEIGHMASTER		
R500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	2:22 pm	
DATE OUT	TIME OUT	
30 August 2007	2:22 pm	
VEHICLE	ROLL OFF	
Y511715		
REFERENCE	ORIGIN	
543457		

Gross Weight 84,320.00 lb  
Tare Weight 36,540.00 lb Inbound -  
Net Weight 47,780.00 lb 23.59 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.59	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0643487

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 6. Phone ( ) 303-273-3998			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 3900 Hwy 90 Golden, CO ACCOUNT # 98403 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Norm Soil		CO 167 070308 7511915		18	Y	Y-Yards	T-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Brakman				Signature: <i>[Signature]</i>		Month Day Year: 8/30/07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Chuck Foy				Signature: <i>[Signature]</i>		Month Day Year: 08/30/07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name:				Signature:		Month Day Year:	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:				Signature:		Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

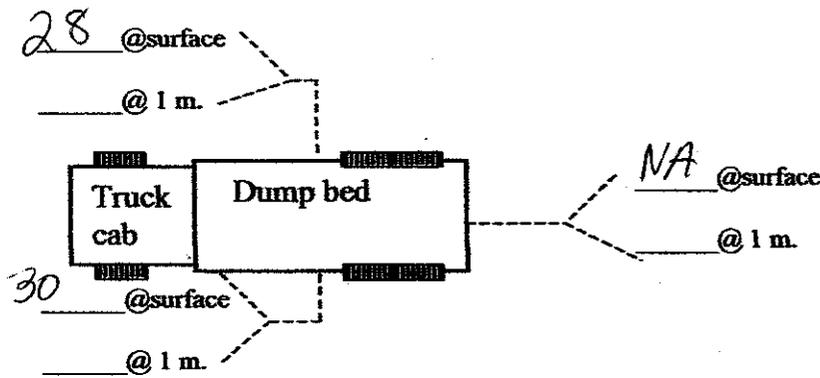
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1402 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: 2J

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

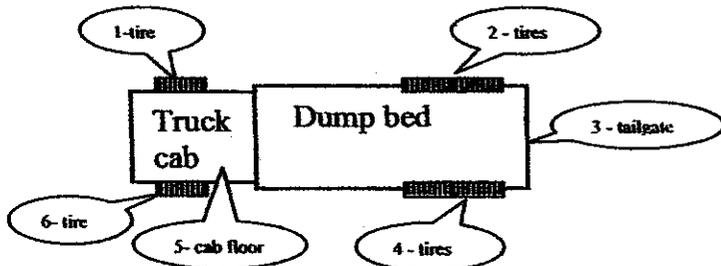
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643488

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Blaine St Glen, CO 81401 303-273-0166			5. Generating Location (if different) School of Mines Research Institute North West of 12th and North St Glen, CO 81401 303-273-0208		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3001 Hwy 50 Glen, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		02-07-07000000-11015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman				Signature:	
				Month	Day
				6	30
				Year	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: MARK PHELAN				Signature:	
				Month	Day
				8	30
				Year	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515301

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806803  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YEL1915

SITE 01	TICKET 588719	GRID 0000
WEIGHMASTER #500056 Barbara Jo S		
DATE IN 30 August 2007		TIME IN 2:25 pm
DATE OUT 30 August 2007		TIME OUT 2:25 pm
VEHICLE YEL1915		ROLL OFF
REFERENCE 643408	ORIGIN	

Gross Weight 84,720.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 49,620.00 lb 24.81 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.81	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643488

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1300 Wilcox St Golden, CO 80401 303-273-3000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	19. Total Quantity
				No.	Type
a. Non-hazardous		0643488-00000000			7 Yards
b.					Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman				Signature:	
				Month: 5	Day: 20
				Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: MARK PHILAN				Signature:	
				Month: 5	Day: 30
				Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month:	Day:
				Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month:	Day:
				Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

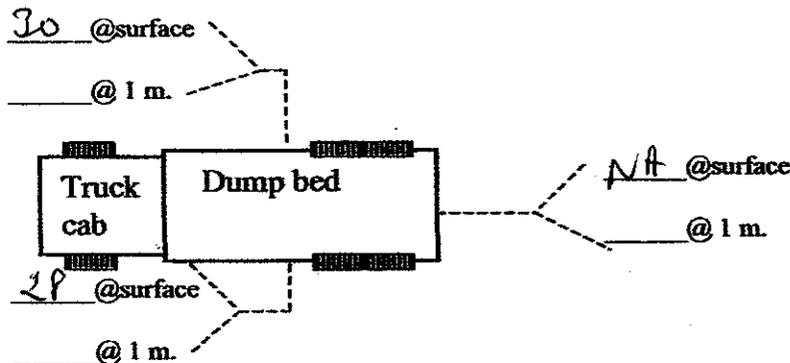
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1410 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

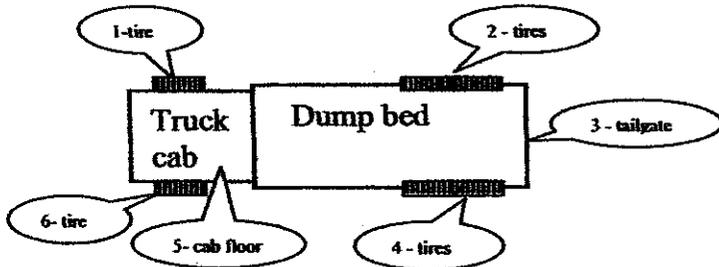
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	6220				6220		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

161  
0643490

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-0000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Hartz St Golden, CO 80401 303-273-0000	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Lumber 3000 Hwy 27 Spring, CO 80457		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Iron Saw		0315707000 - S1915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature 	
				Month	Day
				8	3
				Year	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Beckman				Signature 	
				Month	Day
				7	1
				Year	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
				Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000083





# NON-HAZARDOUS WASTE MANIFEST

0643490

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Phoenix Dr Durham, NC 27701 4. Phone ( ) 919-273-3887				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Park St Durham, NC 27701 6. Phone ( ) 919-273-3887	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		001-01-00000-0511995		19. Total Quantity Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman				Signature: [Signature]	
				Month: 8 Day: 30 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]				Signature: [Signature]	
				Month: 7 Day: 21 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

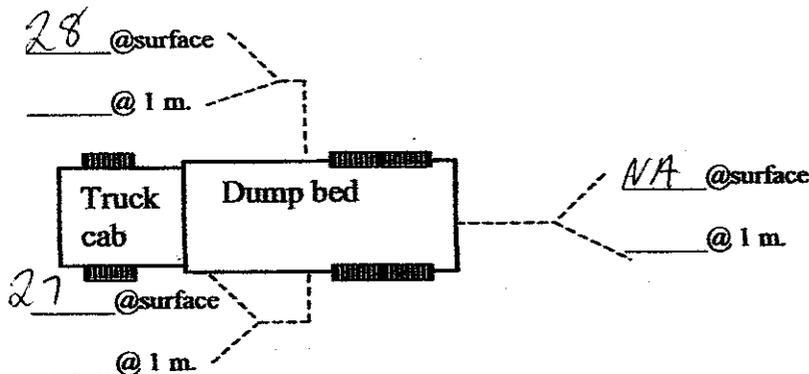
TRANSPORTER #1

CGM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1416 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

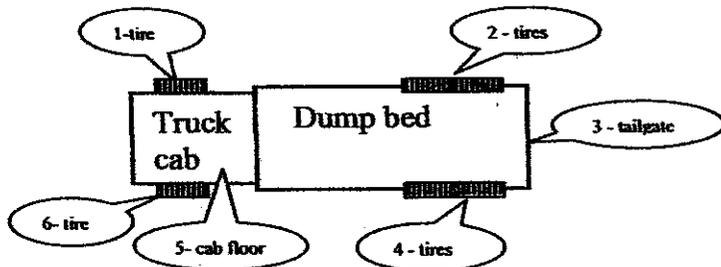
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643489

JDO1

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-273-3898			5. Generating Location (if different) School of Mines Research Institute West West of 12th and Dahlia St Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fountain Limited 18201 Hwy 92 Golden, CO 80401 # 303-273-3898		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		00197 079608 7511515			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Berkman</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				8	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Manolo</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				8	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Manolo</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				8	30 07
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515349

FOOTHILLS LANDFILL  
 8900 HIGHWAY 90  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	588737	0000
WEIGHMASTER		
#30005s Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	2:42 pm	
DATE OUT	TIME OUT	
30 August 2007	2:42 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
643457		

Gross Weight 77,920.00 lb  
 Tare Weight 35,580.00 lb Inbound -  
 Net Weight 42,340.00 lb 21.17 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.17	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Manolo



# NON-HAZARDOUS WASTE MANIFEST

0643489

JDO1

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 S. Lincoln St Golden, CO 80601 303-773-3444			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80601 303-273-3496		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a. Metal Slag		20151000008 Y511915		Y Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman				Signature:	
				Month Day Year 3 2 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: M. R.				Signature:	
				Month Day Year 3 2 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name: M. R.				Signature:	
				Month Day Year 3 2 07	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

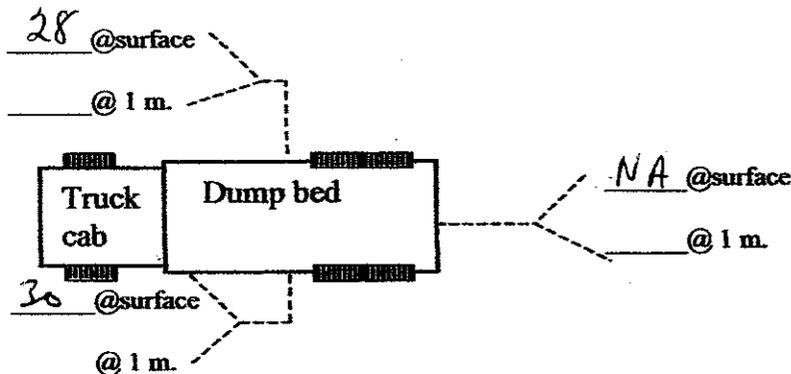
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1424 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grievé Truck license plate no. /state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

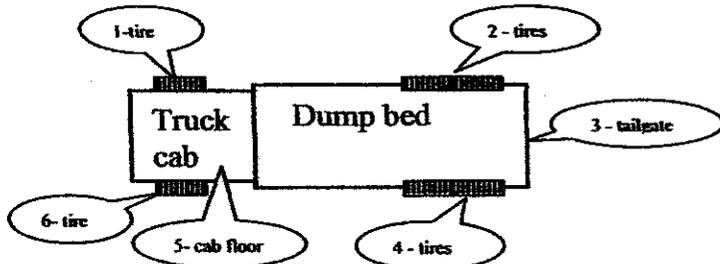
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2220				2220		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

401  
0592031

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Research Institute 1411 Illinois St Golden, CO 80401 303-273-3366			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Davis Golden, CO 80401 303-273-3366					
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Research Institute 1411 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non Sol		201470001-51910		18	4	Y-Yards	T-Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beckman				Signature		Month 1	Day 20	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Mike Murray				Signature		Month 8	Day 20	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR'S COPY

COM000033

315354

FOOTHILLS LANDFILL  
 6900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11515

SITE	TICKET	GRID
01	558742	0000
WEIGHMASTER		
S000056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	2:45 pm	
DATE OUT	TIME OUT	
30 August 2007	2:45 pm	
VEHICLE	ROLL OFF	
YS11515		
REFERENCE	ORIGIN	
590031		

Gross Weight 85,120.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 48,860.00 lb 24.43 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.43	TN	SUB-CONTY SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LI	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Michael M



# NON-HAZARDOUS WASTE MANIFEST

# 0592031

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address 1170 Illinois St Denver, CO 80202 303 273 7500				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 120th and Daniels Golden, CO 80401 303 273 3990									
4. Phone ( )		6. Phone ( )											
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone									
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone									
13. Designated T/S/D Facility Name and Site Address 8001111, 05 Denver, CO		14. US EPA ID Number		15. Facility's Phone									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers									
a. Iron Sulfide		C01P075000 7/4/1919		<table border="1"> <tr> <th>No.</th> <th>Type</th> <th>19. Total Quantity</th> <th>20. Unit Wt/Vol</th> </tr> <tr> <td>18</td> <td>4</td> <td>7 Yards</td> <td>Tons</td> </tr> </table>		No.	Type	19. Total Quantity	20. Unit Wt/Vol	18	4	7 Yards	Tons
No.	Type	19. Total Quantity	20. Unit Wt/Vol										
18	4	7 Yards	Tons										
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Brennan		Signature <i>[Signature]</i>		Month Day Year 8 2007									
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name Mike Murray		Signature <i>[Signature]</i>		Month Day Year 8 2007									
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name		Signature		Month Day Year									
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name		Signature		Month Day Year									

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

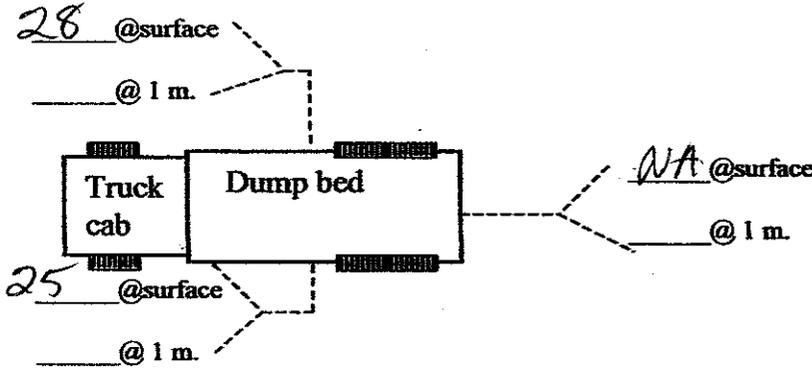
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1430 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: 24

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

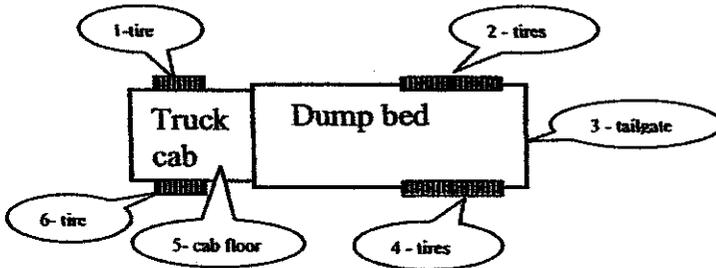
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

24  
0592030

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-279-3668			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Duval St. Golden, CO 80401 303-279-3668		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name <b>Joe Grievetrucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St. Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <b>Mine Soil</b>		17. Allied Waste Approval # and Exp. Date CO 157 77006 12/1/85		18. Containers No. <b>18</b> Type <b>Y</b>	19. Total Quantity 0.000000 Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Z...</b>			Signature <b>[Signature]</b>		Month Day Year 8 2 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>			Signature <b>Ken Shannon</b>		Month Day Year 08/30/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

24 51335

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	558747	0000
WEIGHMASTER		
5500053 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	2:54 pm	
DATE OUT	TIME OUT	
30 August 2007	2:54 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592030		

Gross Weight 82,400.00 lb  
 Tare Weight 37,200.00 lb Inbound --  
 Net Weight 45,200.00 lb 22.60 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.60	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE Kear

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

0592030

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address North West of 12th and East St Golden, CO 80401 303 273 3868			5. Generating Location (if different) School of Mines Research Institute North West of 12th and East St Golden, CO 80401 403 273 3868		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Toe Grievetrucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines Research Institute		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Iron Bolts		EPA 10000 11115		18 Y 7 Yards 3 tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Johnson		Signature [Signature]		Month Day Year 8 2007	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Shannon		Signature [Signature]		Month Day Year 08 2007	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

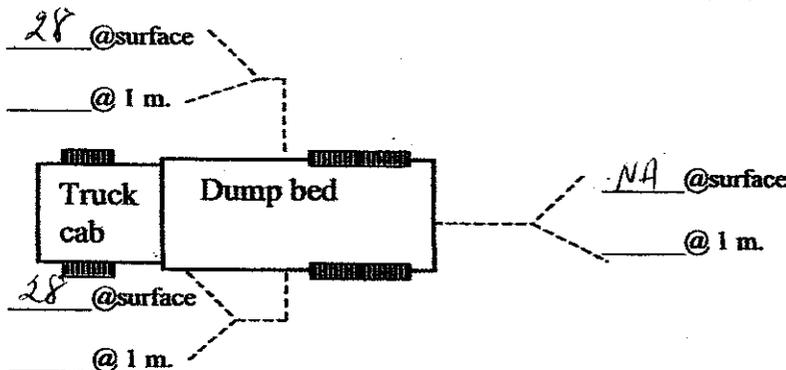
COM00033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 143P Surveyed by: C Hicks J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

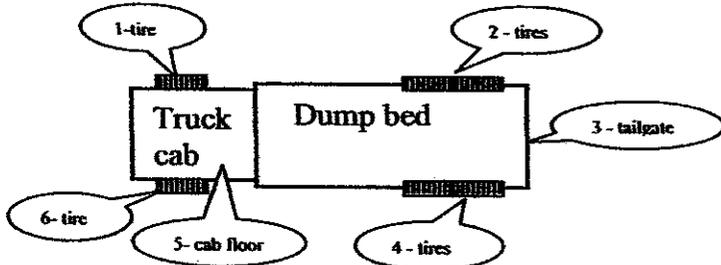
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0592029

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Oxford, CO 80401 303-273-5046			5. Generating Location (if different) Catholic School of Mines Research Institute North West of 12th and Arch St. Oxford, CO 80401 303-273-5046		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Crews Recycling, Inc		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Catholic School of Mines Research Institute 1500 Illinois St Oxford, CO 80401		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
a. Slime Soil		No. Type		20. Unit Wt/Vol	
		13		7 tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Buchanan		Signature <i>[Signature]</i>		Month Day Year 5 20 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Dennis Jones		Signature <i>[Signature]</i>		Month Day Year 5 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR'S COPY

COM000033





# NON-HAZARDOUS WASTE MANIFEST

12  
0592029

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-273-3996			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Grewis Trucking #12		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 4900 Hwy 93 Golden, CO 80401 (Golden School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a. Norm Sol		CO 167 070900 0511915		18 Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman				8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Sean J. Carter				8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

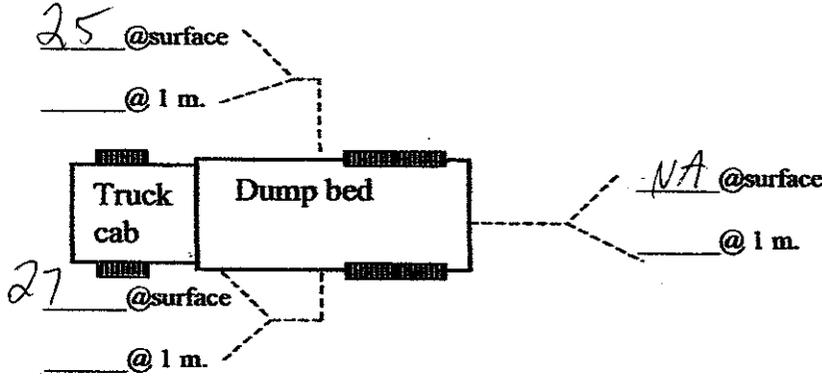
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1443 Surveyed by: C Hicks J Mattson

Trucking Company: Grievé Truck license plate no. /state: 96

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

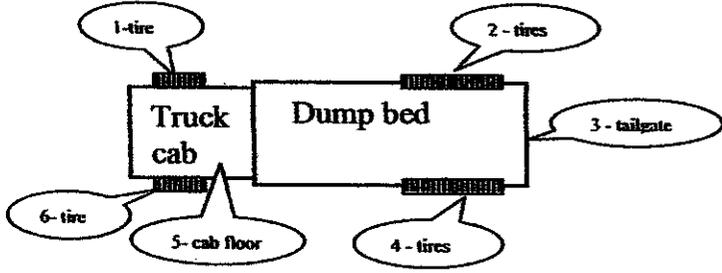
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592028

96

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Wilson St Durham, NC 27701 303-273-0266			5. Generating Location (if different) Duke University School of Medicine Research Institute North west of 12th and West St Durham, NC 27701 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Duke University 1000 W. Main St Durham, NC 27701		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. b. c. d.		17. Allied Waste Approval # and Exp. Date 0019737094 05/19/15		18. Containers	
				19. Total Quantity	
				20. Unit	
				No. Type	
				Cu/Yards Cu/Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin		Signature		Month Day Year 5 20 15	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Hernandez		Signature		Month Day Year 5 20 15	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515357

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contractor Y511915

SITE	TICKET	GRID
01	583755	0000
WEIGHMASTER		
IS00056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	3:04 pm	
DATE OUT	TIME OUT	
30 August 2007	3:04 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592028		

Gross Weight 77,580.00 lb  
 Tare Weight 36,580.00 lb      Inbound --  
 Net Weight 41,000.00 lb 20.50 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.50	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0592028

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 15700 E. 1st Ave. Denver, CO 80231 303-773-3668				5. Generating Location (if different) School of Mines Research Institute North West at 12th and Spruce Denver, CO 80202 303-273-3668				
4. Phone ( )				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 15700 E. 1st Ave. Denver, CO 80231			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Name: b. c. d.			17. Allied Waste Approval # and Exp. Date 10187-07019-1511915		18. Containers		19. Total Quantity 1 Yards	20. Unit Tons
					No.	Type		
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>		Month Day Year 5 20 07		
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Fernando Hernandez				Signature <i>[Signature]</i>		Month Day Year 5 20 07		
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month Day Year		

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

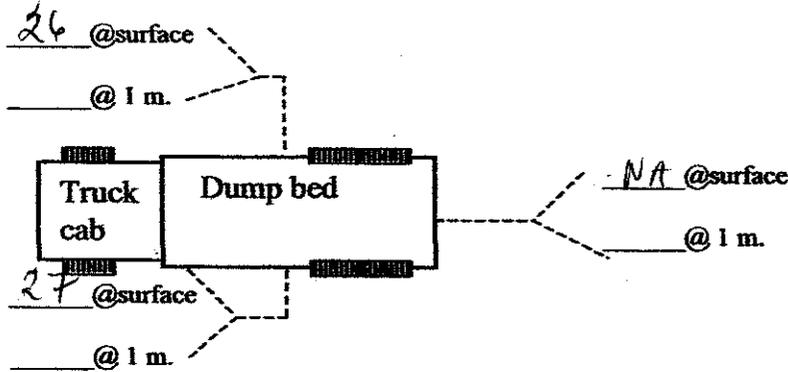
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1450 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: JD04

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

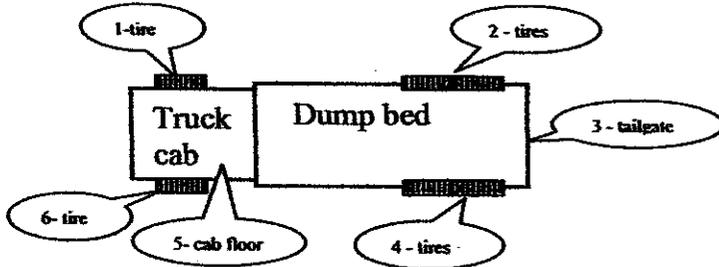
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	L 220				L 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



J004

# NON-HAZARDOUS WASTE MANIFEST

0592027

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 W. 14th St. Golden, CO 80401 303-273-3500			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3500		
4. Phone ( ) 303-273-3500		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Landfill 5907 Hwy 95 Golden, CO 80401 (Continuation of manifest if 19 items)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date C0LF707000 05/19/15		18. Containers	
				No.	Type
a. Iron Soil					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Dehman		Signature: <i>[Signature]</i>		Month: 8 Day: 20 Year: 2015	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Santiago Vargas		Signature: <i>[Signature]</i>		Month: Day: Year:	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515372

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558760	0000
WEIGHMASTER		
US00056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	3:12 pm	
DATE OUT	TIME OUT	
30 August 2007	3:12 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592027		

Gross Weight 75,700.00 lb  
 Tare Weight 35,640.00 lb Inbound -  
 Net Weight 40,060.00 lb 20.03 Tn

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.03	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-30-07



J 004

# NON-HAZARDOUS WASTE MANIFEST

0592027

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Golden, CO 80401 303-279-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Broomfield Golden, CO 80401 303-279-3098		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines Research Institute Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Normal Soil		02107029008-811010		7 TONS	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Blanton			Signature: [Signature]		Month: 8 Day: 20 Year: 21
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Santiago Vargas			Signature: [Signature]		Month: Day: Year:
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

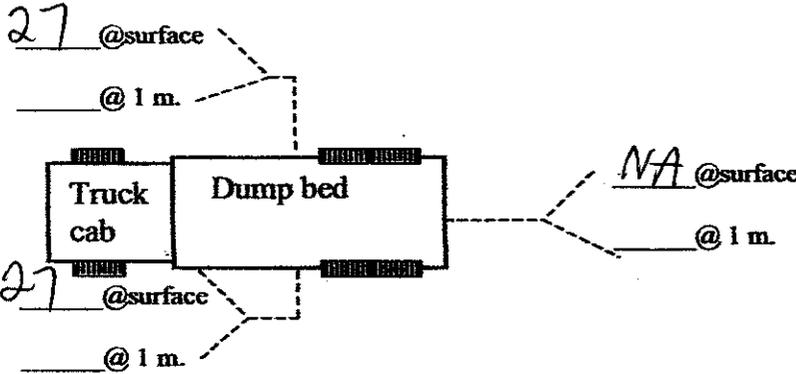
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1459 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 13

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

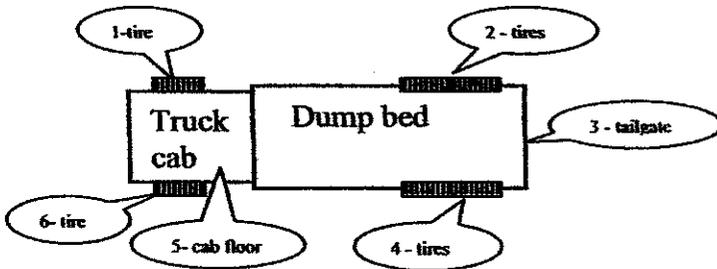
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

15  
0592026

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1507 18th St Golden, CO 80401 303-275-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1507 18th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a. Heavy Soil		0016/070908 0511016		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Z...			Signature		Month Day Year 08 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Michael Colton Lopez			Signature		Month Day Year 08 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

310074

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
950605  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y51191E

SITE	TICKET	GRID
01	585752	0007
WEIGHMASTER		
#300056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	0:14 pm	
DATE OUT	TIME OUT	
30 August 2007	0:14 pm	
VEHICLE	ROLL OFF	
Y51191E		
REFERENCE	ORIGIN	
592036		

Gross Weight 32,200.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 46,500.00 lb 23.25 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.25	TN	5M-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

15  
0592026

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Bruce St Golden, CO 80401 303-771-1900			5. Generating Location (if different) School of Mines Research Institute North West at 12th and Birch St Golden, CO 80401 303-770-3436		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1501 Bruce St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date 00147-070000-01-1810		18. Containers	
				No.	Type
a.				18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Zankovic			Signature 		Month Day Year 2 20 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Kasael Colton Lopez			Signature 		Month Day Year 08 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

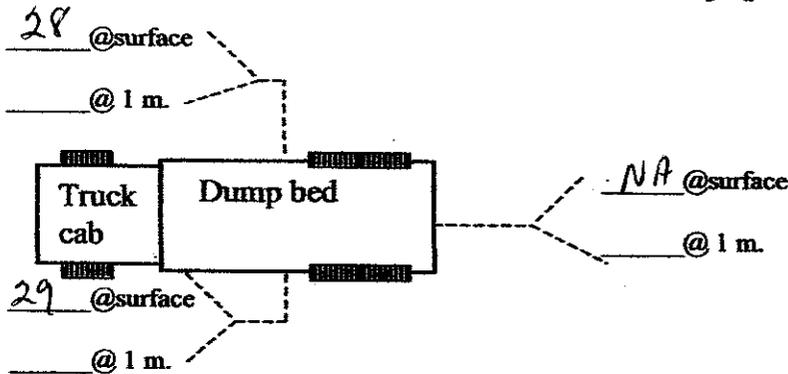
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1503 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 95

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

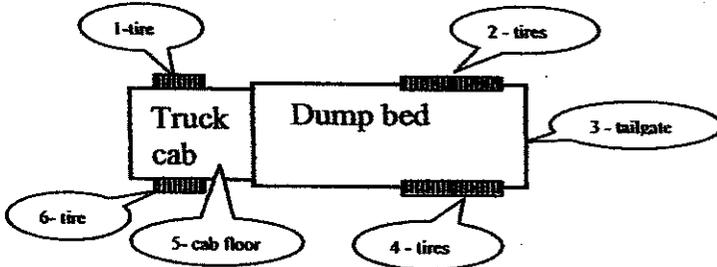
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA			
Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592025

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Millers Rd Jordan, CO 80401 303-773-0500				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Decatur Jordan, CO 80401 303-773-0500	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines Research Institute 1500 Millers Rd Jordan, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non-Hazardous Waste		Allied Waste Approval # 151041E		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Zimmerman				Signature: [Signature]	
				Month: 6 Day: 30 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]				Signature: [Signature]	
				Month: 05 Day: 30 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515378

FOOTHILLS LANDFILL  
 5700 HIGHWAY 93  
 GOLDEN  
 CO  
 760605  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	528766	0000
WEIGHMASTER		
4500054 Barbara Jo B		
DATE IN	TIME IN	
30 August 2007	3:17 pm	
DATE OUT	TIME OUT	
30 August 2007	3:19 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
570025		

Gross Weight 79,100.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 40,120.00 lb 20.06 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



95

# NON-HAZARDOUS WASTE MANIFEST

## 0592025

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1700 W. Main St Cedar Rapids, IA 52401 563-273-1400				5. Generating Location (if different) Iowa State University 44th West of 12th and Birch St Cedar Rapids, IA 52401 319-273-3000				
4. Phone ( )				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address R-1111, 30 Cedar Rapids, IA 52401			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity Yards	20. Unit Wt/Vol Tons
					No.	Type		
a.								
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brinkman				Signature 		Month 6	Day 30	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Meredith				Signature 		Month 10	Day 30	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

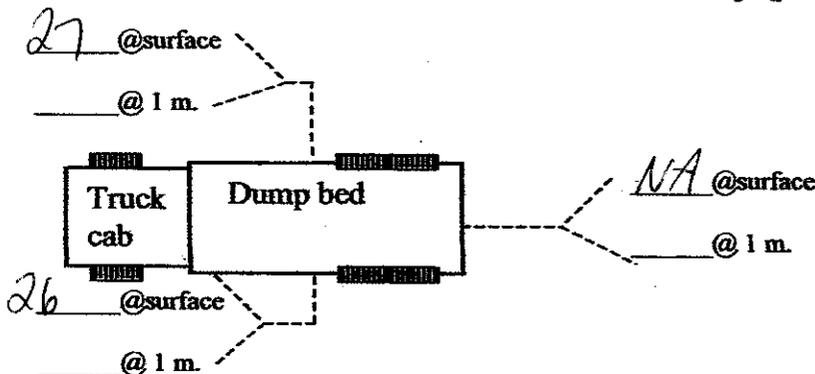
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1511 Surveyed by: C Hicks J Mattson

Trucking Company: Griewe Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

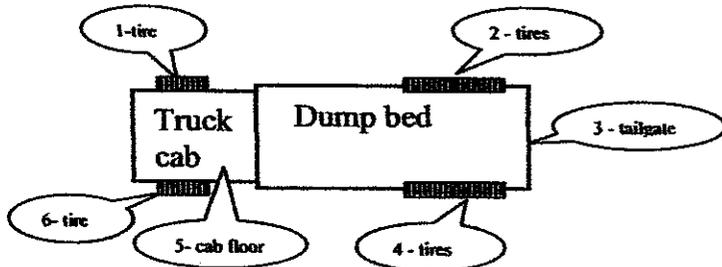
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



NON-HAZARDOUS WASTE MANIFEST

0592022

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Main St Canton, OH 44701 303-273-3030				5. Generating Location (if different) The School of Mines Research Institute North West of 12th and Beach St Canton, OH 44701 303-273-3030			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address The School of Mines Research Institute		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Metal Spill		17. Allied Waste Approval # and Exp. Date 0117070903 Y611910		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				18	4	7 Yards	5 Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beaman				Signature 		Month Day Year 8 5 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Foy				Signature 		Month Day Year 08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515384

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80401  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	555772	0000
WEIGHMASTER		
5800054 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	04:22 pm	
DATE OUT	TIME OUT	
30 August 2007	04:28 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
575022		

Gross Weight 82,420.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 45,880.00 lb 23.04 TN

Incounf -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.04	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592022

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Allied Waste 19701 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date AW 167 070908 Y511915		18. Containers	
				No.	Type
a. Norm Soil				18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Binkman		Signature 		Month	Day Year
				8	20 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature 		Month	Day Year
				08	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

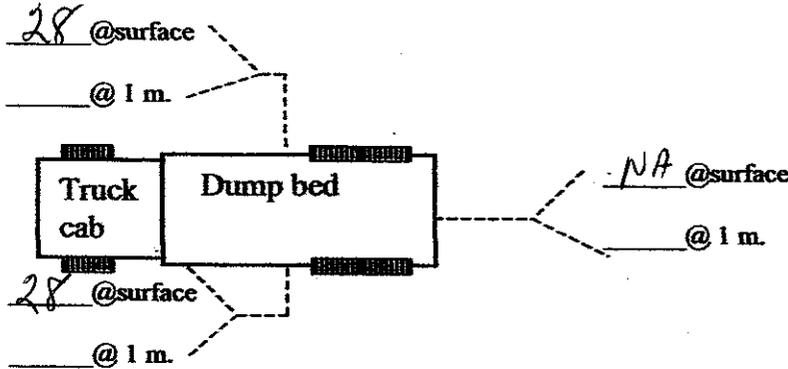
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1577 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 23

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

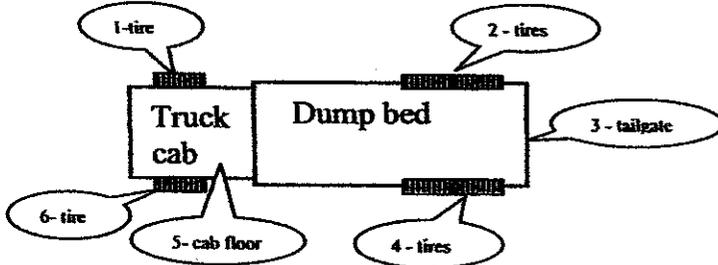
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



23

# NON-HAZARDOUS WASTE MANIFEST

## 0592023

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Environmental Research Institute 1501 Illinois St Suite 200 Denver, CO 80202 Phone ( ) 303-773-3600			5. Generating Location (if different) Environmental Research Institute North West of 17th and North St Denver, CO 80201 Phone ( ) 303-773-3600		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Environmental Research Institute 1501 Illinois St Denver, CO 80202		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Harm Soil		05-107-070-08-10-1010		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN		Signature 		Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515387

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	598775	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	3:33 pm	
DATE OUT	TIME OUT	
30 August 2007	3:53 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
598023		

Gross Weight 52,320.00 lb  
 Tare Weight 35,100.00 lb      Inbound -  
 Net Weight 47,220.00 lb 23.61 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.61	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592023

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address			5. Generating Location (if different)		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name			Signature		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

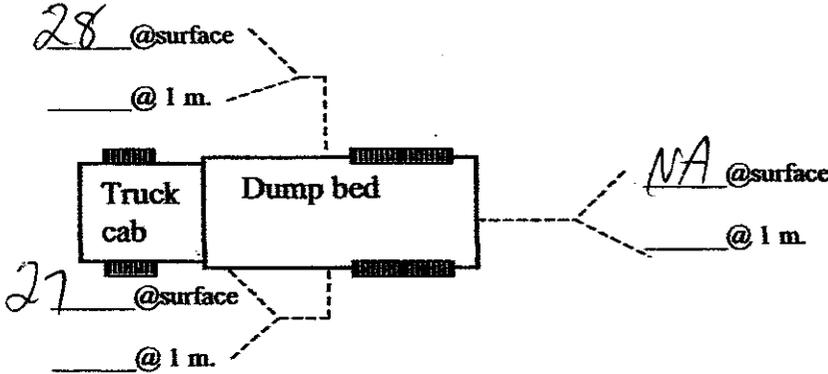
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1527 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

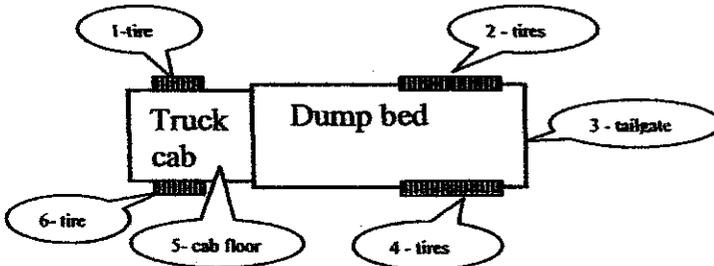
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0592024

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1601 Blue Hill St Caldwell, CO 80401 303-271-0688			5. Generating Location (if different) School of Mines Research Institute North West of 10th and Lincoln Caldwell, CO 80401 303-271-0688		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				21. Additional Descriptions for Materials Listed Above	
				22. Special Handling Instructions and Additional Information	
				23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.	
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)		Signature		Month Day Year	

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

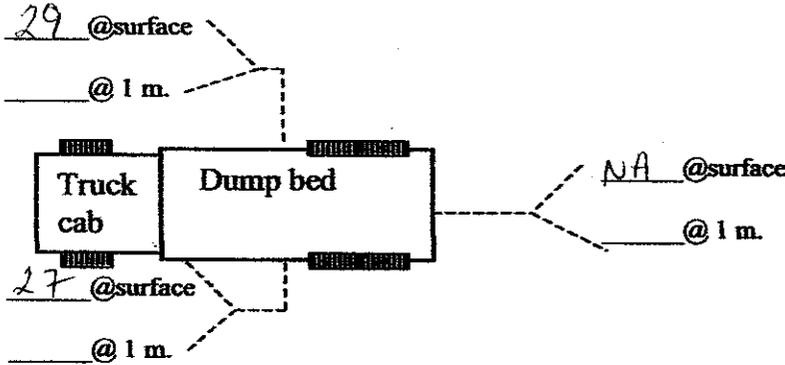




**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1535 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: JD01

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

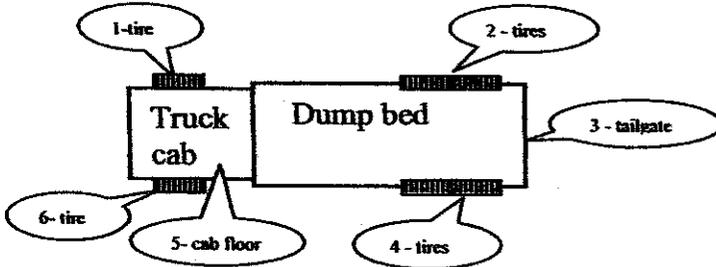
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	L220				L2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592012

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-9946				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Bristol Golden, CO 80401 303-273-9946	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Scale		17. Allied Waste Approval # and Exp. Date 01/18/07 09000176/10/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature 	
				Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name M. Beckman				Signature M.B.	
				Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name M. Beckman				Signature M.B.	
				Month Day Year 8 30 07	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515000

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	525786	0000
WEIGHMASTER		
8500056 Barbours Jo S		
DATE IN	TIME IN	
30 August 2007	3:51 pm	
DATE OUT	TIME OUT	
30 August 2007	3:51 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572012		

Gross Weight 76,960.00 lb  
Tare Weight 35,580.00 lb  
Net Weight 41,380.00 lb 20.69 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.69	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Manab R



# NON-HAZARDOUS WASTE MANIFEST

0592012

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-279-3000			5. Generating Location (if different) School of Mines Research Institute East West of 12th and Birch St Golden, CO 80401 303-279-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address EPA 100, 301 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		03-07-070002-MS-11015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benbow		Signature 		Month	Day Year
				8	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name M. R.		Signature 		Month	Day Year
				8	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name M. R.		Signature 		Month	Day Year
				8	30 07
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

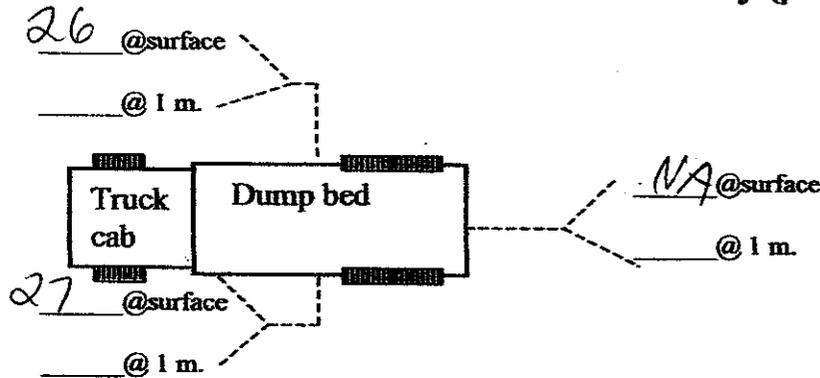
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1542 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 461

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

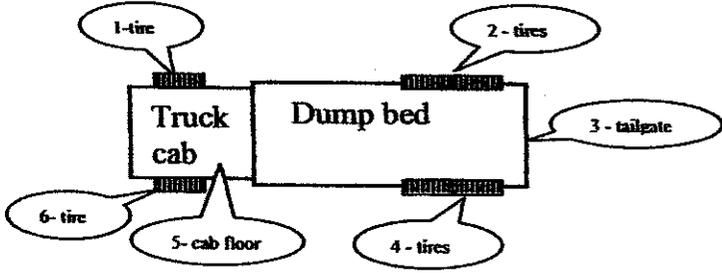
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA			
Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

461  
0592013

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1510 Lincoln St Golden, CO 80401 303-273-3990			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1510 Lincoln St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a. Home Soil		CO-07-020001-0511945		1/8 4 7-Yards 7-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brown				8 2007	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mike Murray				8 2007	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515403

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960-903  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588791	0000
WEIGHMASTER		
000056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	3:54 pm	
DATE OUT	TIME OUT	
30 August 2007	0:56 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572013		

Gross Weight 82,030.00 lb  
Tare Weight 34,260.00 lb  
Net Weight 47,760.00 lb 23.88 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.88	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

461  
0592013

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Garden, CO 80401 303-273-3440			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Puchst Garden, CO 80401 303-273-3498		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. None		001071000 011915		1 4 7 Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Binkman		Signature		Month Day Year 8 2 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray		Signature		Month Day Year 8 2 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

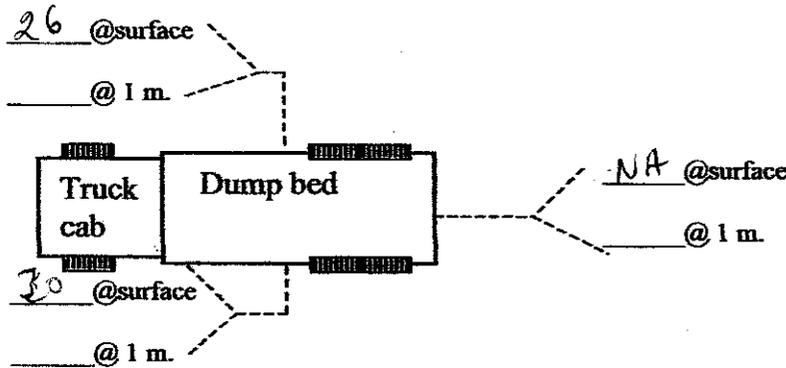
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1555 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griev Truck license plate no./state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

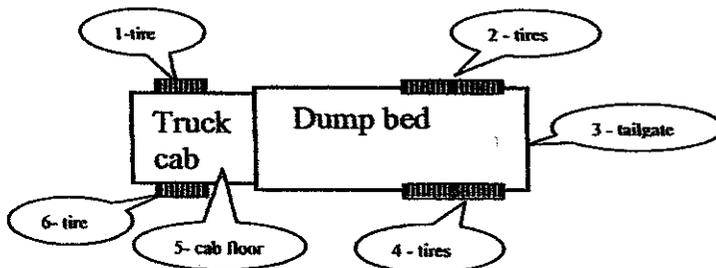
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592014

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1500 Blake St Denver CO 80202 303-733-3888				5. Generating Location (if different) School of Mines Research Institute 14th West of 12th and Lincoln Golden CO 80401 303-273-0600					
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address 1500 Blake St Denver CO 80202			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Metal Box			17. Allied Waste Approval # and Exp. Date 00147 070803 1011816		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	P. Drums	G. Gallons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Proctor				Signature <i>[Signature]</i>			Month 8	Day 20	Year 2003
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name L. M. M.				Signature <i>[Signature]</i>			Month 8	Day 20	Year 2003
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

315408

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET E86776	GRID 0000
WEIGHMASTER 500056 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 4:11 pm	
DATE OUT 30 August 2007	TIME OUT 4:11 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592014	ORIGIN	

Gross Weight 79,440.00 lb  
Tare Weight 36,580.00 lb Inbound -  
Net Weight 42,860.00 lb 21.43 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.43	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_





# NON-HAZARDOUS WASTE MANIFEST

0592014

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8000 Hwy 90 Golden, CO ACCOUNT # 560815 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Slurry Soil		CO L67 070903 Y511915			7-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brennan				8	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Fernando Torres				8	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

8/30/07 P. 1 e B

## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Griever 8	8/30/07	0700	0717	18 cy
Murray 461		0700	0724	
Griever 23		0700	0732	
Murray 96		0700	0737	
Griever 12		0700	0744	
Griever 24		0700	0752	
JD04		0710	0758	
Collazo 13		0715	0805	
Ruiz 95		0715	0811	
JD01		0715	0818	
Marquez 961		0720	0826	
Griever 8		0825	0830	
Murray 461		0830	0837	
Griever 23		0835	0845	
Marquez 96		0845	0854	
Griever 12		0854	0901	
Griever 24		0900	0907	
JD 04		0915	0921	
Collazo 13		0921	0926	
Ruiz 95	✓	0925	0932	✓

80.4  
80.3  
80.8  
76.9  
82.9  
81.1  
75.9  
80.3  
76.9  
79.3  
78.1  
81.7  
81.9  
82.1  
76.7  
80.7  
80.4  
76.8  
81.9  
78.5

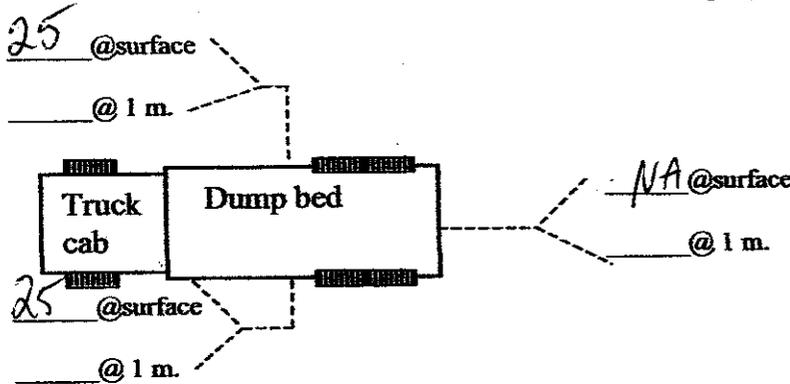
# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Marquez 961	8/30/07	0935	0945	18 cy	78.8
JD01		0935	0950		78.9
Griever 8		0940	0956		81.2
Murray 461		0955	1003		80.9
Griever 12		1002	1009		81.1
Griever 23		1009	1015		82.9
Marquez 96		1015	1020		76.6
Griever 24		1020	1027		82.7
JD04		1027	1034		77.8
Collazo 13		1034	1042		82.2
Ruiz 95		1042	1048		78.8
Marquez 961		1055	1110		80.9
JD01		1100	1115		80.5
Griever 8		1110	1122		83.4
Griever 23		1120	1131		84.5
Griever 24		1131	1136		84.4
Murray 461		1135	1144		83.2
Marquez 96		1144	1149		79.5
JD04		1149	1200		78.1
Collazo 13	✓	1200	1208	✓	84.3

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0717 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 8

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

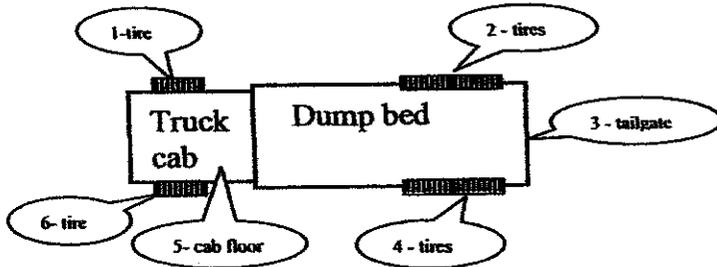
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592061

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Words St Golden, CO 80401 303-270-7448			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-270-3908		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Words St Golden, CO 80401		14. US EPA ID Number		16. Waste Shipping Name and Description	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non Sol		20147-077908 Y814515		19. Total Quantity 18 Yards	
b.				20. Unit Wt/Vol T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Bankman				8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515063

SITE	TICKET	GRID
01	558463	0000
WEIGHMASTER		
8500056 Barbara Jo E		
DATE IN	TIME IN	
30 August 2007	7:37 am	
DATE OUT	TIME OUT	
30 August 2007	7:37 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592061		

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

Gross Weight 80,420.00 lb  
 Tare Weight 36,540.00 lb      Inbound ---  
 Net Weight 43,880.00 lb 21.94 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.94	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592061

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Columbus, OH 43210 614-277-1266			5. Generating Location (if different) School of Mines Research Institute North West of 10th and Union St Columbus, OH 43210 614-277-1908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Illinois St Columbus, OH 43210		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Haz		17. Allied Waste Approval # and Exp. Date 2010/07/27/2008/05/11/2015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B...		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name Chuck Foy		Signature		08	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name		Signature			
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

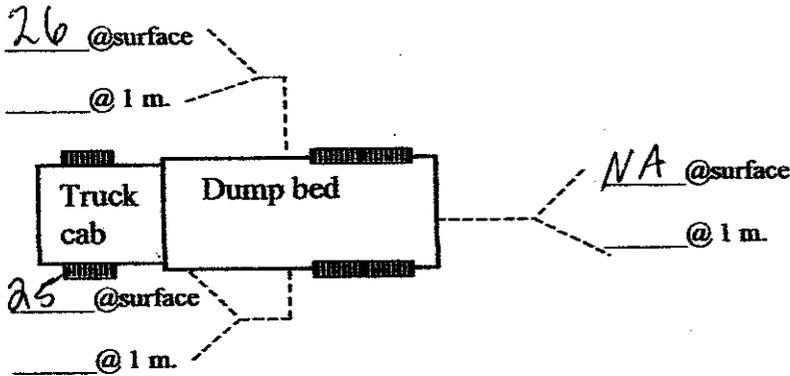
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0724 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

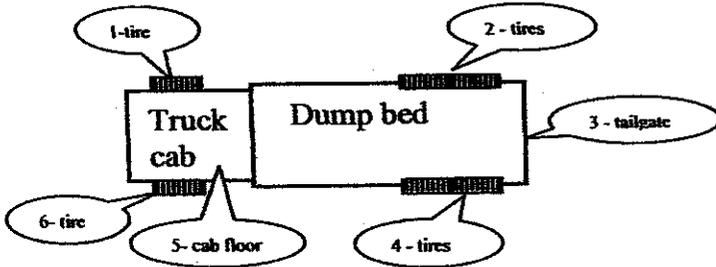
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

461

0592060

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Duane St Golden, CO 80401 303-273-0066			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-0068		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Duane St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. None listed		C0167-170009-12-16-15		12	4 Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Berman</i>			Signature <i>[Signature]</i>		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Mike Murray</i>			Signature <i>[Signature]</i>		Month Day Year 8 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

513089

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 588471	GRID 0000
WEIGHMASTER 8900056 Barbara Jo E		
DATE IN 20 August 2007		TIME IN 7:45 am
DATE OUT 30 August 2007		TIME OUT 7:45 am
VEHICLE Y511915		ROLL OFF
REFERENCE	ORIGIN	

Gross Weight 180,300.00 lb  
 Tare Weight 34,260.00 lb Inbound  
 Net Weight 46,040.00 lb 23.02 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.02	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0592060

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Pikes Peak Blvd Golden, CO 80401 303-773-3888			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Lincoln St Golden, CO 80401 303-773-3888		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address School of Mines Research Institute North West of 12th and Lincoln St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. None		2011070506 0511415		10	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman			Signature:		Month Day Year: 8/30/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Mike Murray			Signature:		Month Day Year: 8/30/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

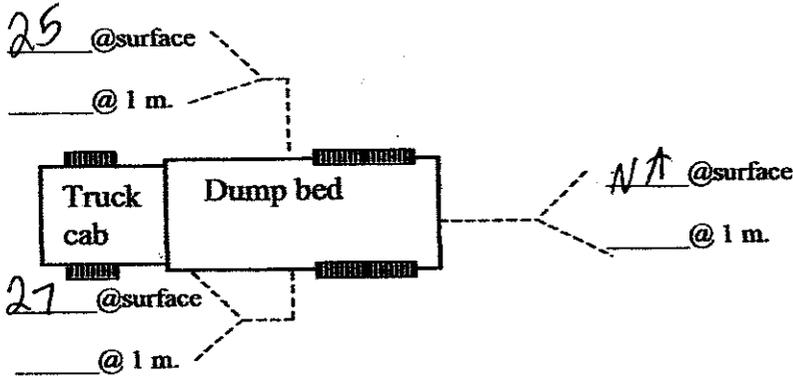
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0732 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

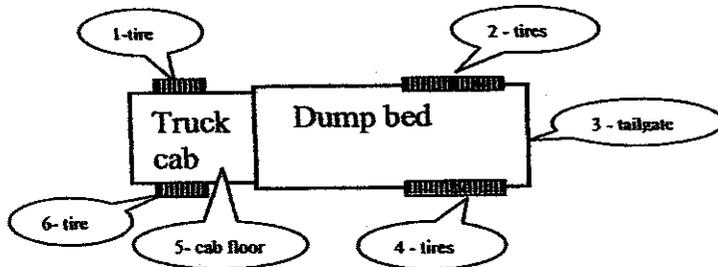
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592059

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 8th St Golden, CO 80401 303-273-3908			5. Generating Location (if different) School of Mines Research Institute North West of 12th and 13th St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 W. 8th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Heavy Soil		201102020000 1511015		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin				Signature	
				Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PISLAN				Signature	
				Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

825071

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	588473	0000
WEIGHMASTER		
BSC0056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	7:49 am	
DATE OUT	TIME OUT	
30 August 2007	7:49 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572059		

Gross Weight 80,820.00 lb  
Tare Weight 35,100.00 lb  
Net Weight 45,720.00 lb 22.86 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.86	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0592059

Please print or type.

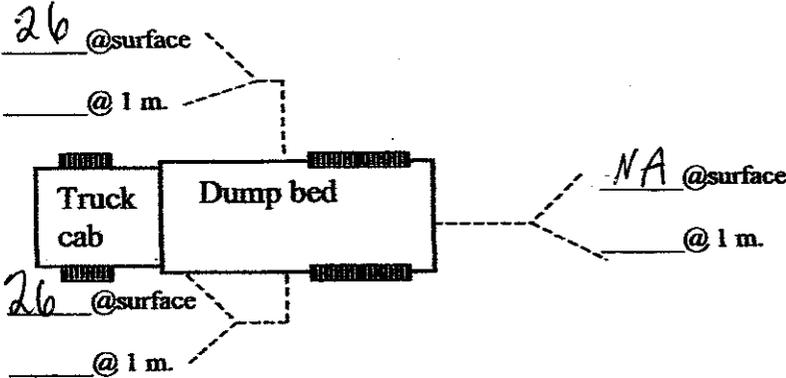
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1971 Monte St Golden, CO 80401 303-273-3006			5. Generating Location (if different) Colorado School of Mines Research Institute North West at 12th and Birch St. Golden, CO 80401 303-273-3006		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				No.	
				Type	
				Quantity	
				Wt/Vol	
a.		031070009 Y514515		1 Year	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benjamin</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>MARK PHELAN</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0737 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

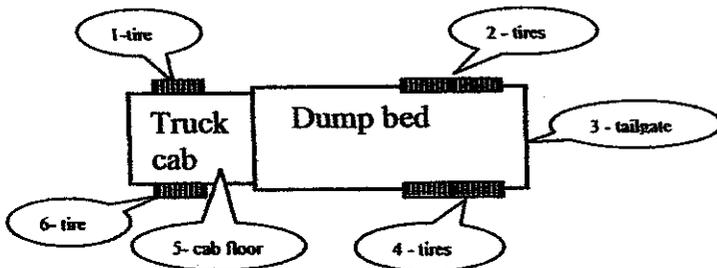
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592058

16

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 1st St Denver, CO 80202 303-271-4600			5. Generating Location (if different) North West of 12th and Birch St Denver, CO 80401 303-271-3890		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 W. 1st St Denver, CO 80202		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date 00107-076X01-1915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 1/30/07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature <i>[Signature]</i>		Month Day Year 5/30/07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515075

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80203  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 588477	GRID 0000
WEIGHMASTER		
8800056 Barbara Jo E		
DATE IN 30 August 2007	TIME IN 7:56 am	
DATE OUT 30 August 2007	TIME OUT 7:56 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592058	ORIGIN	

Contract: Y511915

Gross Weight 76,820.00 lb  
Tare Weight 36,540.00 lb  
Net Weight 40,240.00 lb 20.17 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.17	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592058

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 1st St. Tucson, AZ 85710 913-273-3096			5. Generating Location (if different) School of Mines Research Institute 1 1/2 West of 12th and Peach St Tucson, AZ 85701 913-273-3096		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 W. 1st St. Tucson, AZ 85710		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date 0012170010 11/19/10		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>				Signature <i>[Signature]</i>	
				Month Day Year 1 30 10	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Fernando Lopez</i>				Signature <i>[Signature]</i>	
				Month Day Year 1 30 10	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

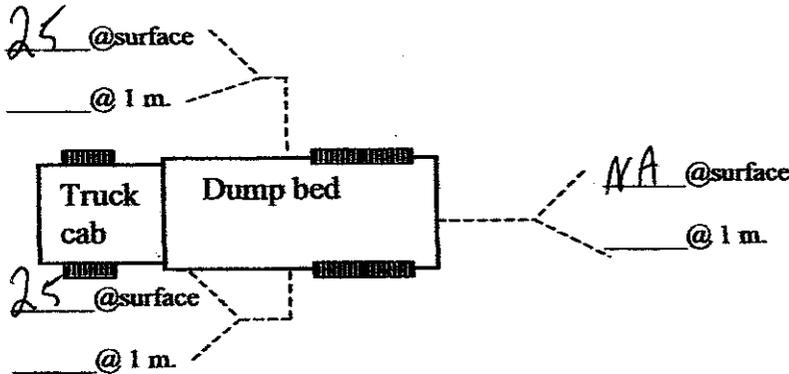
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0744 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

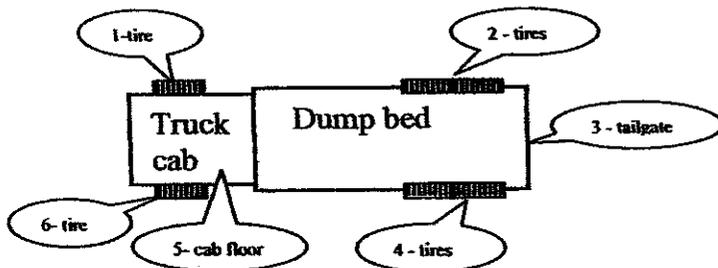
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592057

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098			5. Generating Location (if different)		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

515079

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
980603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

12

SITE	TICKET	GRID
01	5150421	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	8:00 am	
DATE OUT	TIME OUT	
30 August 2007	8:00 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592087		

Gross Weight 81,120.00 lb  
 Tare Weight 37,700.00 lb      Inbound --  
 Net Weight 43,420.00 lb 21.71 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.71	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0592057

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Globe (Rocky Mt)		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8300 Hwy 21 Golden, CO ACCOUNT # 99900 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		20107070005 Y511915		1	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman			Signature 		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Dan Lina			Signature 		Month Day Year 8 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Richard			Signature 		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

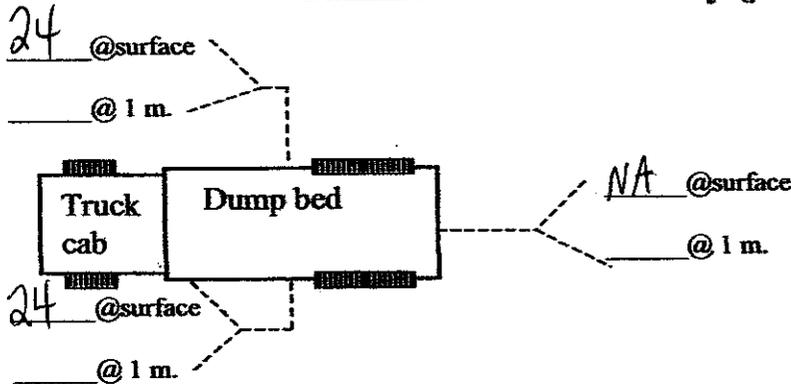
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0752 Surveyed by: C Hicks J Matheson

Trucking Company: Grieve Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

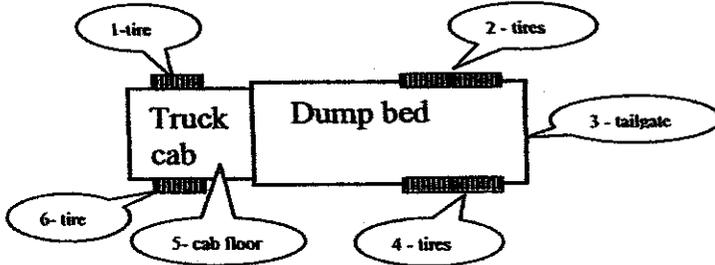
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



515084

FOOTHILLER LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	883486	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	8:11 am	
DATE OUT	TIME OUT	
30 August 2007	8:11 am	
VEHICLE	ROLL OFF	
Y811915		
REFERENCE	ORIGIN	
892056		

Contract: Y811915

Gross Weight 82,850.00 lb  
Tare Weight 37,200.00 lb      Inhouse -  
net Weight 45,650.00 lb 22.63 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.63	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *KERS*



24

# NON-HAZARDOUS WASTE MANIFEST

## 0592056

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1510 Urban St Garden, CO 80101 303 771-1860			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 120 <sup>th</sup> and Birch St Garden, CO 80101 303 773-3594				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines Research Institute		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity Ct/Drums	20. Unit Wt/Vol Ct/Drums
				No.	Type		
a. <i>More Soil</i>		<i>021010005 03/19/15</i>		<i>18</i>	<i>Y</i>	<i>1</i>	<i>Tons</i>
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Brinkman</i>				Signature <i>[Signature]</i>		Month Day Year <i>8 30 14</i>	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Ken Shannon</i>				Signature <i>[Signature]</i>		Month Day Year <i>08 30 14</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

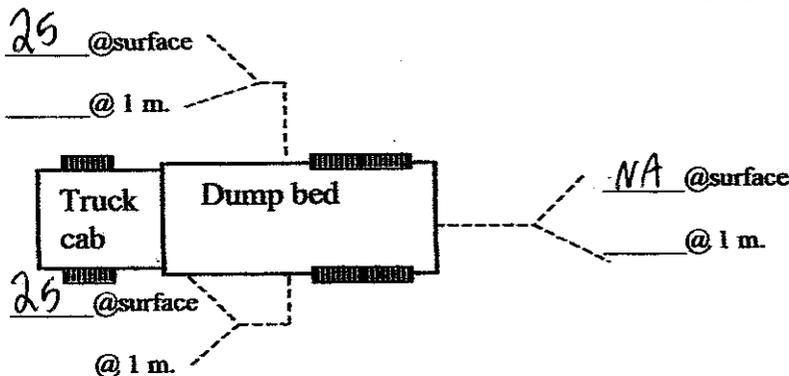
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0758 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no./state: J004

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

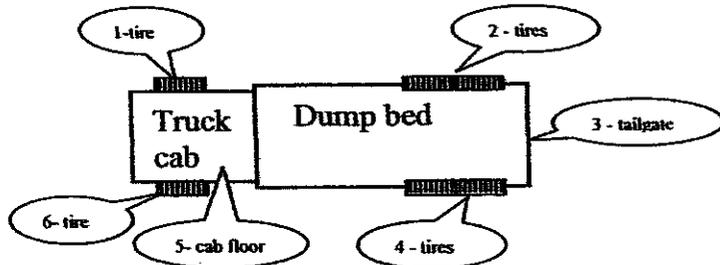
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592055

04

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Winoak St Golden, CO 80401 303-273-0000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-0000		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Troy Hills Landfill 8920 W. 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Iron Soil		CO 007-0308 7511815		19. Total Quantity 2.0 Yards	
b.				20. Unit WT/Vol Cubic Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin			Signature 		Month Day Year 8 30 01
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Scott A. Vorse			Signature 		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

825080

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
750266  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588470	0000
WEIGHMASTER		
2500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	8:17 am	
DATE OUT	TIME OUT	
30 August 2007	8:17 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592053		

Gross Weight 75,920.00 lb  
Tare Weight 35,640.00 lb      Inbound -  
Net Weight 40,280.00 lb 20.14 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.14	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



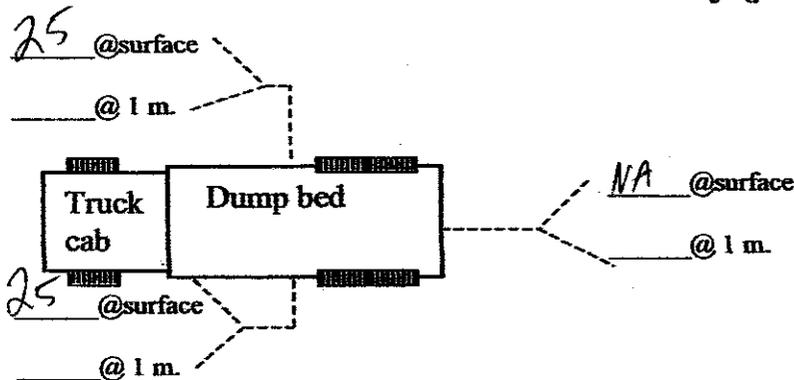
SIGNATURE *[Signature]* 8-30-07



## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0805 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: Collazo 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

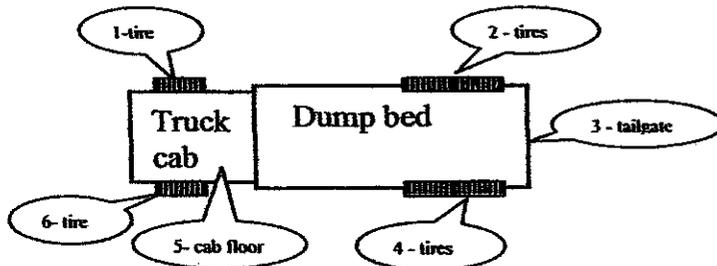
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592054

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1600 Maple St Golden, CO 80401 303-273-3400			5. Generating Location (if different) University School of Mines Research Institute North West of 12th and First St Golden, CO 80401 303-273-3400		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1600 Maple St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Soil		17. Allied Waste Approval # and Exp. Date 001010-000001511816		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Buckner				Signature 	
				Month Day Year 08 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Michael Angelo Lopez				Signature 	
				Month Day Year 08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

515093

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	55847E	0000
WEIGHMASTER		
6800054 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	8:25 AM	
DATE OUT	TIME OUT	
30 August 2007	8:25 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
552054		

Gross Weight 80,340.00 lb  
Tare Weight 35,700.00 lb      Inbound -  
Net Weight 44,640.00 lb 22.32 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.32	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592054

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 ... ... ... 275-3508			5. Generating Location (if different) ... ... ... 275-3508		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address ...		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		...		Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bush...				Signature: [Signature]	
				Month Day Year: 13 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]				Signature: [Signature]	
				Month Day Year: 08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

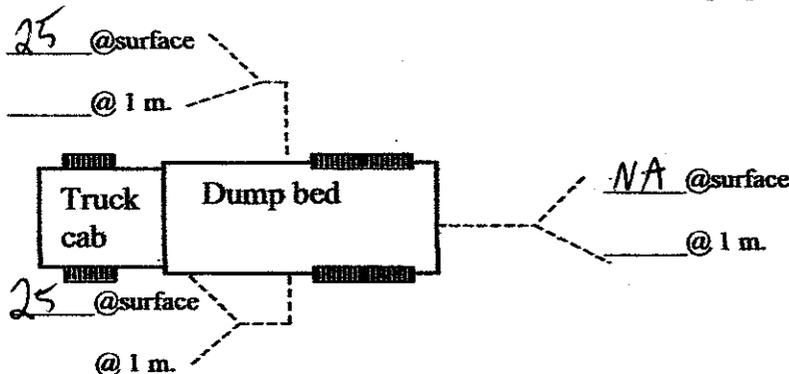
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0811 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no./state: Ruiz 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

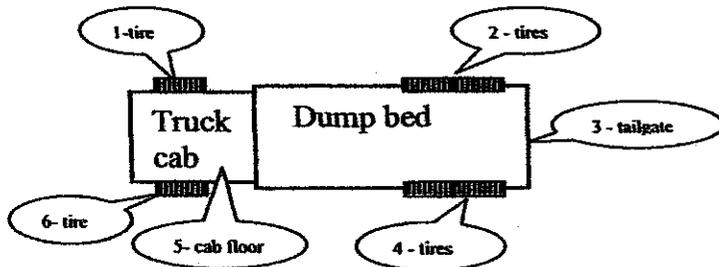
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

# 0592053

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 W. 39th St Golden, CO 80401 303-273-3950			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Grand Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Earth Soil		00167 03/08 Y511010		19. Total Quantity 20. Unit Yards Cubic Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benham</i>				Signature <i>[Signature]</i>	
				Month Day Year 2 3 05	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Mark [unclear]</i>				Signature <i>[Signature]</i>	
				Month Day Year 2 3 05	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

### GENERATOR'S COPY

COM000033

315-35

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
SOLIEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	888497	0000
WEIGHMASTER		
100005d Barbara Jo B		
DATE IN	TIME IN	
30 August 2007	8:33 am	
DATE OUT	TIME OUT	
30 August 2007	8:30 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572053		

Contract: Y511915

Gross Weight 76,900.00 lb  
Tare Weight 36,980.00 lb  
Net Weight 39,920.00 lb 19.96 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.96	TN	SW-COHT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0592053

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1110 (Blank) St Golden, CO 80401			5. Generating Location (if different) North West of 12th and Birch St Golden, CO 80401 303-275-3000						
4. Phone ( ) 303-275-3000		6. Phone ( )							
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. Hazardous b. c. d.		17. Allied Waste Approval # and Exp. Date 303-275-3000 7/31/01		18. Containers					
				19. Total Quantity		20. Unit			
				No.		Type		C. Drums	
								Y. Yards	
								L. Gallons	
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name <i>Steve Benbow</i>				Signature <i>[Signature]</i>					
				Month Day Year 12 30 01					
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name <i>Mind [Signature]</i>				Signature <i>[Signature]</i>					
				Month Day Year 12 20 01					
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature					
				Month Day Year					
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature					
				Month Day Year					

GENERATOR

TRANSPORTER

T/S/D FACILITY

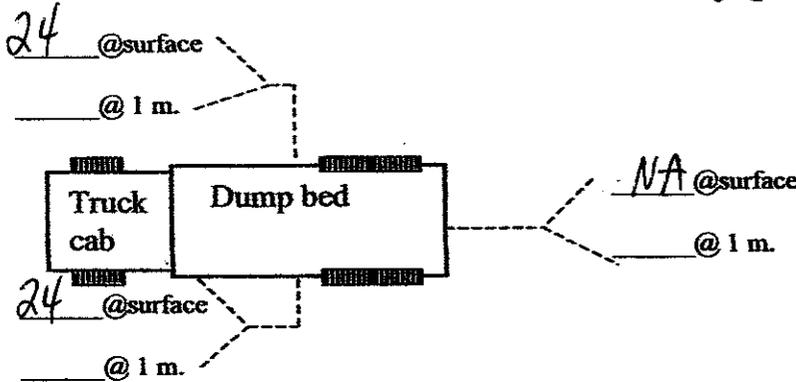
TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0818 Surveyed by: C Hicks J Mattson

Trucking Company: Grievé Truck license plate no. /state: JD061

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

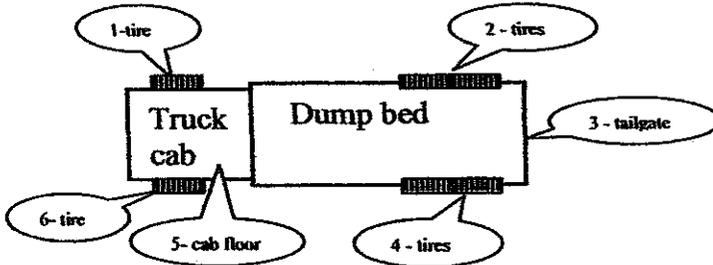
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592042

01

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1100 Benson St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 120th and Bronco Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1470 Hwy 30 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Ore		17. Allied Waste Approval # and Exp. Date AQ 067 PRODUCE 1915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benken		Signature <i>[Signature]</i>		Month Day Year 8 30 92	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]		Signature <i>[Signature]</i>		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]		Signature <i>[Signature]</i>		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

318038

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	838479	0000
WEIGHMASTER		
8500054 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	8:46 am	
DATE OUT	TIME OUT	
30 August 2007	8:46 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572042		

Gross Weight 79,260.00 lb  
 Tare Weight 35,580.00 lb      Inbound -  
 Net Weight 43,680.00 lb 21.84 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.84	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Manole R



# NON-HAZARDOUS WASTE MANIFEST

0592042

01

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1810 Vincent St Columbus, OH 43201 419-773-0340				5. Generating Location (if different) The School of Mines Research Institute North West of 12th and Birch Columbus, OH 43201 315-373-3000					
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Bioscience Center Columbus, OH		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. <i>Spent Sol</i>		17. Allied Waste Approval # and Exp. Date 1516700000-11/01/15		18. Containers					
				19. Total Quantity		20. Unit Wt/Vol			
				No.		Type		Pounds	
								Tons	
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name <i>Steve Benham</i>				Signature <i>[Signature]</i>					
				Month Day Year <i>6 30 07</i>					
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature <i>[Signature]</i>					
				Month Day Year					
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>					
				Month Day Year					
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature					
				Month Day Year					

GENERATOR

TRANSPORTER

T/S/D FACILITY

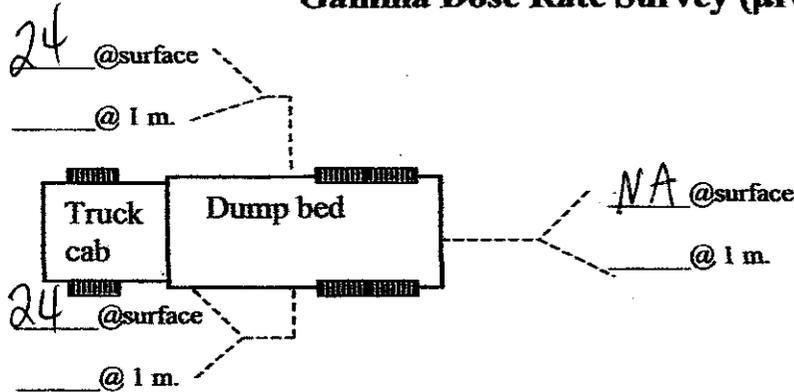
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0826 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

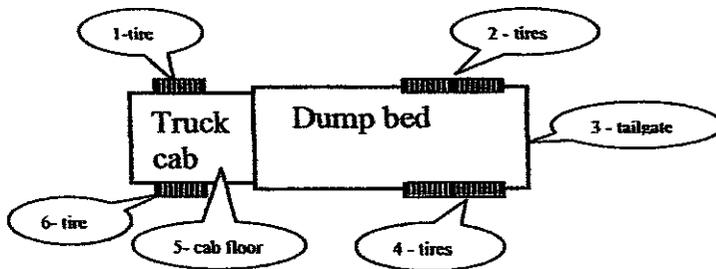
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0592043

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Adams St. Golden, CO 80401 303-273-3696			5. Generating Location (if different) School of Mines Research Institute North West of 10th and Birch St Golden, CO 80401 303-273-3696		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		170027000019115		Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benkman</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>	
				Month Day Year 7 21 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033





# NON-HAZARDOUS WASTE MANIFEST

961  
0592043

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address North West of 12th and Birch St Golden, CO 80401 303-275-3906			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3906		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit Wt/Vol	
a.		b.		c.	
c.		d.		e.	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name			Signature		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

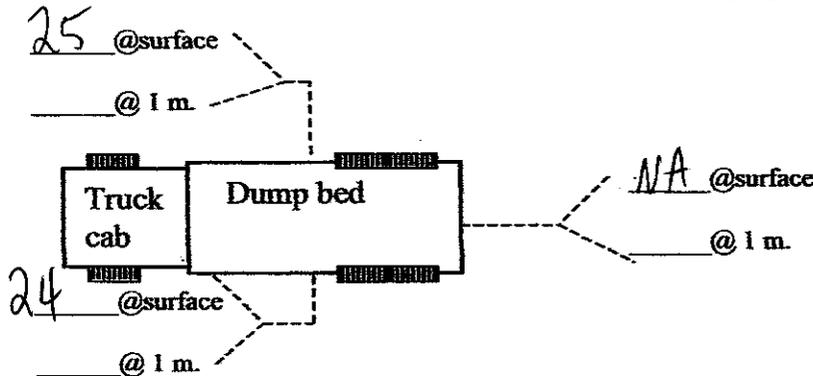
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0830 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 7

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits** (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

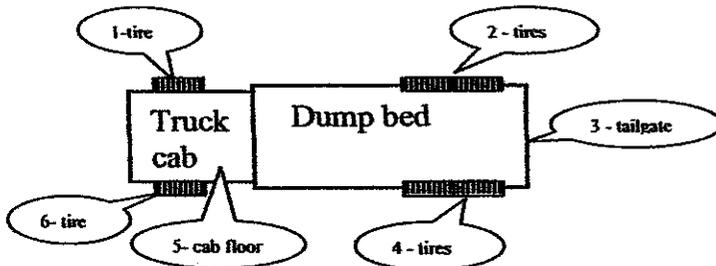
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592044

8

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-773-6606			5. Generating Location (if different) School of Mines Research Institute North West of 126 and Broad Golden, CO 80401 303-773-6606		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Slurry Sol		20160700000000000000		18 Y	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bloomman			Signature		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year 08 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000038

315105

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
940600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	288505	0000
WEIGHMASTER		
#600056 Barbara Jo B		
DATE IN	TIME IN	
30 August 2007	8:53 am	
DATE OUT	TIME OUT	
30 August 2007	8:53 am	
VEHICLE	ROLL OFF	
Y811915		
REFERENCE	ORIGIN	
592044		

Contract: Y811915

Gross Weight 21,680.00 lb  
Tare Weight 36,540.00 lb      Inbound --  
Net Weight 45,140.00 lb 22.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.57	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592014

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Lincoln St Orlando, FL 32801 407-270-3666			5. Generating Location (if different) School of Mass Research Institute North West of 12th and Birch St Orlando, FL 32801 407-270-3666		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1400 Lincoln St Orlando, FL 32801		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. <i>Empty Tank</i>		167-2700-0000-11018		18. Containers	
				19. Total Quantity	
				20. Unit	
				WT/Vol	
				Drums	
				Tons	
				Yards	
				Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
<i>Steve Brogan</i>		<i>[Signature]</i>		8/30/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
<i>Chuck Foy</i>		<i>[Signature]</i>		08/30/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

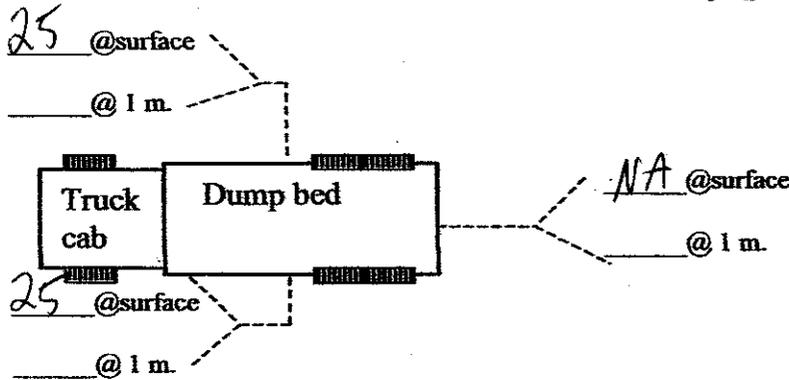
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0837 Surveyed by: C Hicks J Mattson

Trucking Company: Grieve Truck license plate no./state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

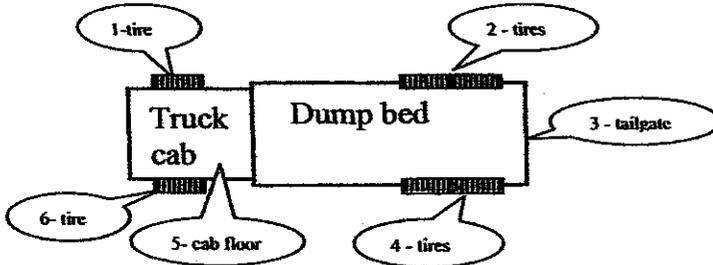
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592051

761

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of						
3. Generator's Name and Mailing Address 1500 Minor St Golden, CO 80401 303-273-3000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000						
4. Phone ( )		6. Phone ( )		7. Transporter #1 Company Name		8. US EPA ID Number				
9. Transporter #1's Phone		10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2900 14th St Golden, CO 80401				14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Heavy Mud				17. Allied Waste Approval # and Exp. Date 00167 07/09/15-12/15		18. Containers		19. Total Quantity Yards	20. Unit Tons	
						No.	Type			
b.										
c.										
d.										
21. Additional Descriptions for Materials Listed Above										
22. Special Handling Instructions and Additional Information										
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.										
Printed/Typed Name Steve Brinkman				Signature <i>[Signature]</i>		Month 8	Day 30	Year 07		
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name Mike Murray		Signature <i>[Signature]</i>		Month 8	Day 30	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name		Signature		Month	Day	Year
26. Discrepancy Indication Space										
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)										
Printed/Typed Name				Signature		Month	Day	Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515108

FOOTHILLS LANDFILL  
 6900 HIGHWAY 93  
 GOLDEN  
 CO  
 80608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	588508	0000
WEIGHMASTER		
ISO7054 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	8:58 am	
DATE OUT	TIME OUT	
30 August 2007	8:58 am	
VEHICLE	ROLL OFF	
Y311915		
REFERENCE	ORIGIN	
572051		

Contract# Y311915

Gross Weight 82,100.00 lb  
 Tare Weight 34,260.00 lb      Inbound --  
 Net Weight 47,840.00 lb 23.92 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.92	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

761  
0592051

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address 1500 Wilshire St Golden, CO 80401 303-275-3400				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-0990									
4. Phone ( )				6. Phone ( )									
7. Transporter #1 Company Name				8. US EPA ID Number				9. Transporter #1's Phone					
10. Transporter #2 Company Name				11. US EPA ID Number				12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Prothier Landfill 10171 Hwy 40 Golden, CO				14. US EPA ID Number				15. Facility's Phone					
16. Waste Shipping Name and Description a. Non-hal				17. Allied Waste Approval # and Exp. Date 01107 07000s 11131E				18. Containers		19. Total Quantity		20. Unit Wt/Vol	
								No.		Type		Pounds	
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name: Steve Brinkman				Signature: <i>[Signature]</i>				Month: 8		Day: 30		Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name: Mike Murray				Signature: <i>[Signature]</i>				Month: 8		Day: 30		Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name:				Signature:				Month:		Day:		Year:	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name:				Signature:				Month:		Day:		Year:	

GENERATOR

TRANSPORTER

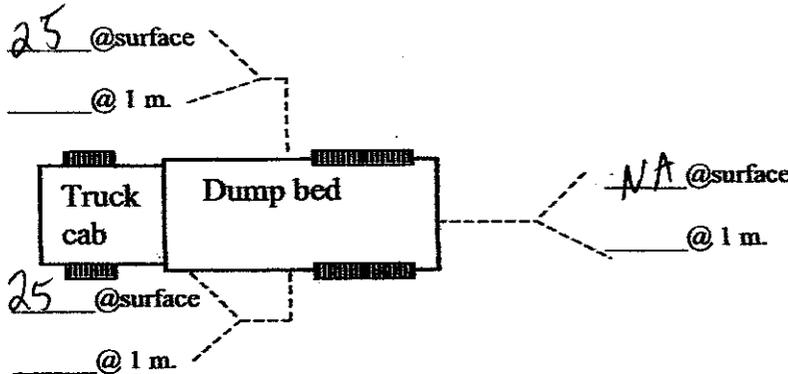
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0845 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

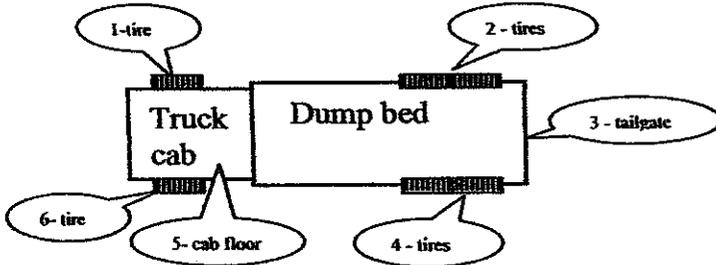
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

25  
0592050

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Illinois St Golden, CO 80401 303-273-3386			5. Generating Location (if different) School of Mines Research Institute North West of 12th and French St. Golden, CO 80401 303-273-3386		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 177 West Colfax Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Heavy Soil		17. Allied Waste Approval # and Exp. Date 201670759281711419		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHILLAN		Signature 		Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515111

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588511	0000
WEIGHMASTER		
8000056 Barbers Jo S		
DATE IN	TIME IN	
30 August 2007	7:05 AM	
DATE OUT	TIME OUT	
30 August 2007	7:05 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592050		

Contract: Y511915

Gross Weight 22,120.00 lb  
Tare Weight 25,100.00 lb      Inbound -  
Net Weight 47,020.00 lb 23.51 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.51	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

## 0592090

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303 277-5800			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Lincoln Golden, CO 80401 303 273-5800		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.		0010 000000 051016			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman		Signature 		Month Day Year 8/30/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN		Signature 		Month Day Year 8/30/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

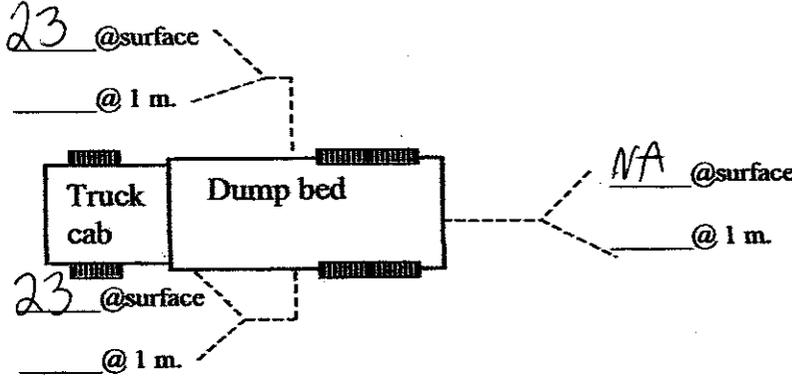
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0854 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

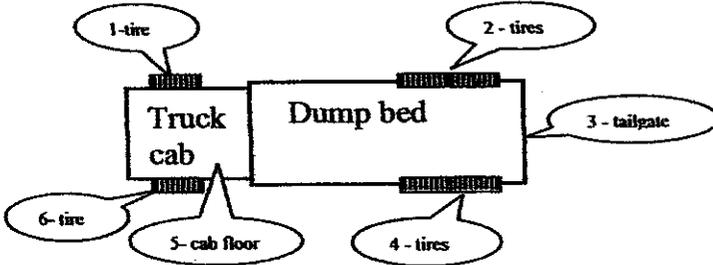
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

76  
0592049

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Lincoln St Golden, CO 80401 303-275-2006			5. Generating Location (if different) School of Mines Research Institute North West of 10th and Birch St. Golden, CO 80401 303-275-2006		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO 07 W600 Y51012		Y Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Binkman			Signature 		Month Day Year 8 30 02
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Torres			Signature 		Month Day Year 8 30 02
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

515117

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 538517	GRID 0500
WEIGHMASTER 2500056 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 7:14 am	
DATE OUT 30 August 2007	TIME OUT 7:14 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 572049	ORIGIN	

Gross Weight 76,680.00 lb  
Tare Weight 36,580.00 lb      Inbound --  
Net Weight 40,100.00 lb 20.05 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.05	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



46

# NON-HAZARDOUS WASTE MANIFEST

## 0592049

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 N. Hwy 27 Tomball, TX 77401 303-773-3096			5. Generating Location (if different) 1500 N. Hwy 27 Tomball, TX 77401 303-773-3096		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.				No.	
b.				Type	
c.				Drums	
d.				Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Blahman				8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Borro				5 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

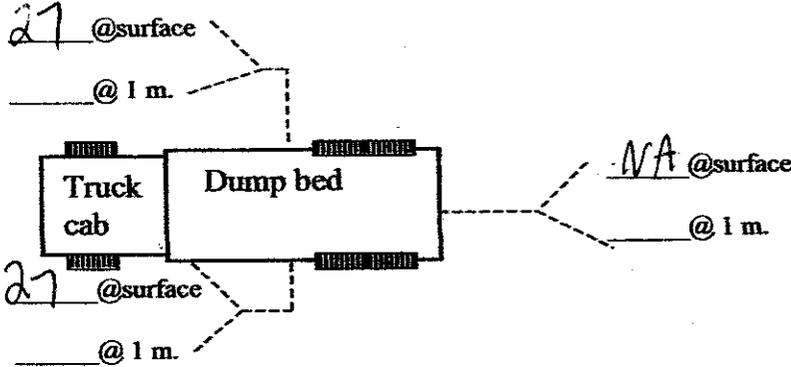
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0901 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

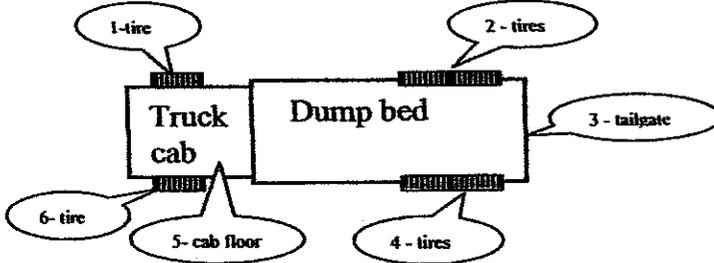
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



FOOTHILLS LANDFILL  
 8900 HIGHWAY 73  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1300 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

12 815210

SITE	TICKET	GRID
01	553519	0000
WEIGHMASTER		
S000036 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	9:17 am	
DATE OUT	TIME OUT	
30 August 2007	9:17 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592048		

Gross Weight 80,720.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 43,020.00 lb 21.51 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.51	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0592048

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1510 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Green Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 6000 Hwy 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. <i>Normal Soil</i>		<i>CO L67 070208 Y511315</i>		<i>18</i>	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>		Signature <i>[Signature]</i>		Month Day Year <i>8 30 07</i>	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month Day Year <i>8 30 07</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

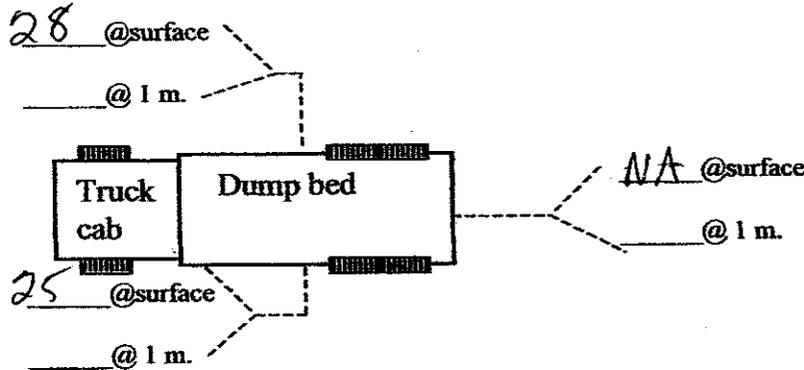
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0907 Surveyed by: C Hicks J Matheon  
 Trucking Company: Griewe Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

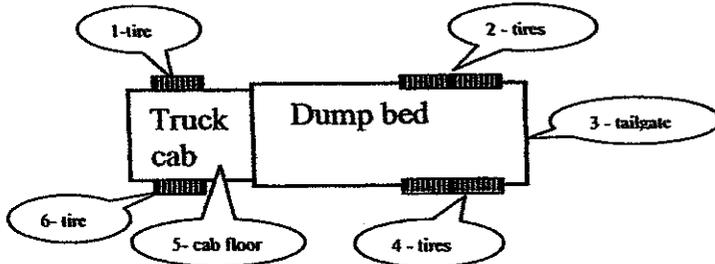
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592032

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Wilson St Garden, CO 80401 303-374-3800				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-374-3800			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name <i>Joe Griveau Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address ADCO May 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. <i>Household</i> b. c. d.		17. Allied Waste Approval # and Exp. Date <i>07-107470308 1511015</i>		18. Containers			
				No.	Type	19. Total Quantity C. Drums	20. Unit Wt/Vol C. Gallons
				<i>18</i>	<i>Y</i>	<i>Y-Yards</i>	<i>7-Tons</i>
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Baker</i>				Signature <i>[Signature]</i>			
				Month Day Year <i>2 30 07</i>			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Ken Shannon</i>				Signature <i>[Signature]</i>			
				Month Day Year <i>08 30 07</i>			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature			
				Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature			
				Month Day Year			

GENERATOR'S COPY

CGM000033

34 515123

FOOTHILLS LANDFILL  
 8900 HIGHWAY 9E  
 GOLDEN  
 CO  
 80508  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588523	0000
WEIGHMASTER		
*600006 Barbara Jo S		
DATE IN		TIME IN
30 August 2007		7:25 am
DATE OUT		TIME OUT
30 August 2007		7:25 am
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
572032		

Gross Weight 80,360.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 43,160.00 lb 21.53 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.53	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KERS



# NON-HAZARDOUS WASTE MANIFEST

0592032

24

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1200 Blaine St. Cedar SC 29011 803-271-6608			5. Generating Location (if different) School of Mines Research Institute North West of 17th and Brown Cedar, SC 29011 803-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>The Grieve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 4300 Hwy 57 Cedar, SC 29011		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <i>Slurry Mud</i>		17. Allied Waste Approval # and Exp. Date <i>101071-5229-611815</i>		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Joe Beckman</i>			Signature <i>Joe Beckman</i>		Month Day Year <i>2 30 07</i>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Shannon</i>			Signature <i>Ken Shannon</i>		Month Day Year <i>08 30 07</i>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

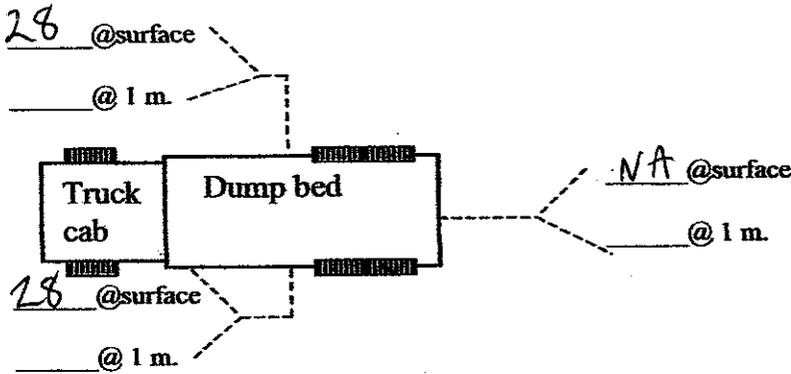
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0921 Surveyed by: C Hicks J Mattson

Trucking Company: Grieve Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

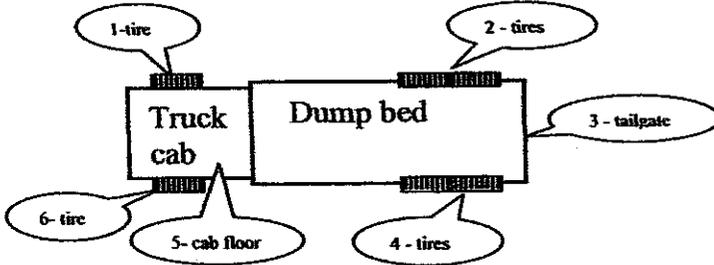
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

04  
0592033

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1517 Drape Pl Golden, CO 80401 303-270-8500				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-270-3098	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2900 Hwy 27 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Iron Sol		CO 147 070306 (5/1/91)		4 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Br...</i>				Signature <i>[Signature]</i>	
				Month Day Year 30	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Santiago Vargas</i>				Signature <i>[Signature]</i>	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR'S COPY

COM000033

515129

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 788828	GRID 0000
WEIGHMASTER 8500056 Barbara Jo E		
DATE IN 20 August 2007		TIME IN 7:40 am
DATE OUT 30 August 2007		TIME OUT 9:40 am
VEHICLE Y511915		ROLL OFF
REFERENCE 592003	ORIGIN	

Contract: Y511915

00 Gross Weight 76,820.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 41,180.00 lb 20.59 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.59	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-30-07



# NON-HAZARDOUS WASTE MANIFEST

04  
0592033

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1510 Illinois St Golden, CO 80401 303-273-3036				5. Generating Location (if different) George School of Mines Research Institute North West of 12th and Dumbell Golden, CO 80401 303-273-3036	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1700 1/2 Ave 8000 Hwy 93 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Normal Soil		03167 (2000) 12/19/16			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brunner</i>				Signature <i>[Signature]</i>	
				Month	Day Year
					30 16
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Santiago Vargas</i>				Signature <i>[Signature]</i>	
				Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

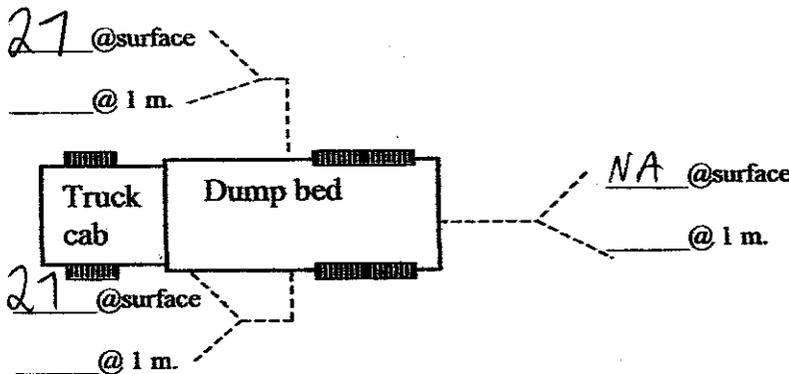
CQM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0926 Surveyed by: C Hicks J Mattson

Trucking Company: Grievé Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

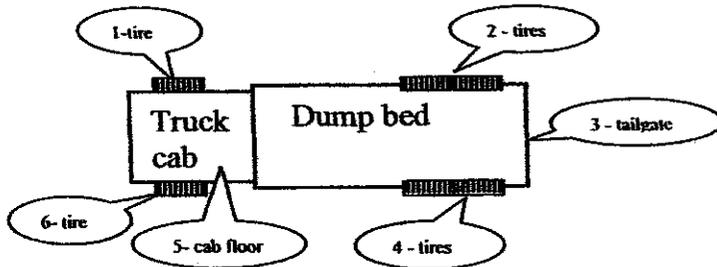
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643471

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1000 Lincoln St Garden, CO 80401 Phone ( ) 303-270-3960			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Garden, CO 80401 Phone ( ) 303-270-3960				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Purshouse, Inc 6000 E. Hwy 50 Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Mason Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 00107070000-01/19/15		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
					18	Y-Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brakman		Signature <i>[Signature]</i>		Month	Day Year		
				8	30 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Robert Alan Lopez		Signature <i>[Signature]</i>		Month	Day Year		
				08	30 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

515135

FOOTHILLE LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 828533	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 20 August 2007	TIME IN 9:50 am	
DATE OUT 30 August 2007	TIME OUT 9:50 am	
VEHICLE 7511715	ROLL OFF	
REFERENCE 545471	ORIGIN	

Gross Weight 81,920.00 lb  
Tare Weight 38,700.00 lb Inbound -  
Net Weight 43,220.00 lb 23.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.11	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643471

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1500 Durand St Golden, CO 80401 Phone (303) 273-3696				5. Generating Location (if different) School of Mines Research Institute North West of 12th and J Street St Golden, CO 80401 303-273-3696				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address School of Mines 2000 W. Ave 90 Golden, CO 80401			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Soil			17. Allied Waste Approval # and Exp. Date 0016107002 5/15/05		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Drums	Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brakman			Signature <i>[Signature]</i>			Month 5	Day 30	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Miguel Lopez			Signature <i>[Signature]</i>			Month 08	Day 30	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature			Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

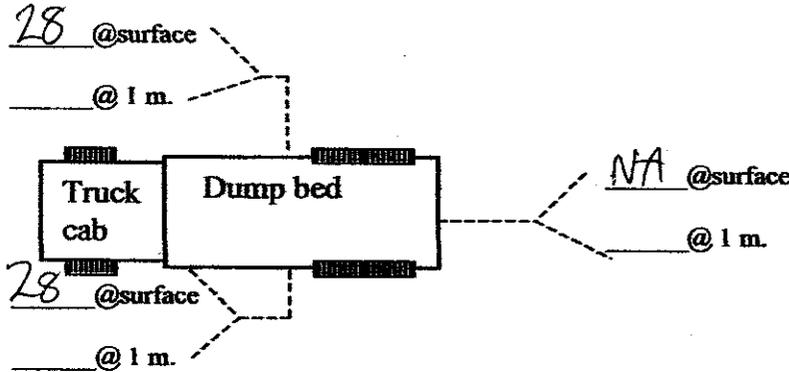
CCM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0932 Surveyed by: C Hicks J Mattson

Trucking Company: Grievé Truck license plate no. /state: 95

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

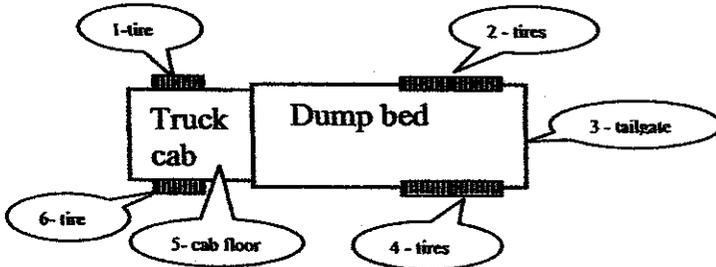
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

## 0643472

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 1/2 St Golden, CO 80401 303-273-0846				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Clark St Golden, CO 80401 303-273-0800	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. (Empty Soil)		17. Allied Waste Approval # and Exp. Date J0197 07/24/87-01/31/95		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month 8	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month 8	Day 30
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

510104

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	085532	0000
WEIGHMASTER		
2500956 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	9:48 am	
DATE OUT	TIME OUT	
30 August 2007	9:48 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
543472		

Gross Weight 78,480.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 41,500.00 lb 20.75 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.75	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0643472

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1510 1/2 Golden, CO 80401 303-273-2046				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1510 1/2 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron b. c. d.		17. Allied Waste Approval # and Exp. Date CO 107 02/28/1996		18. Containers	
				No.	Type
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature		Month 7	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 8	Day 24
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

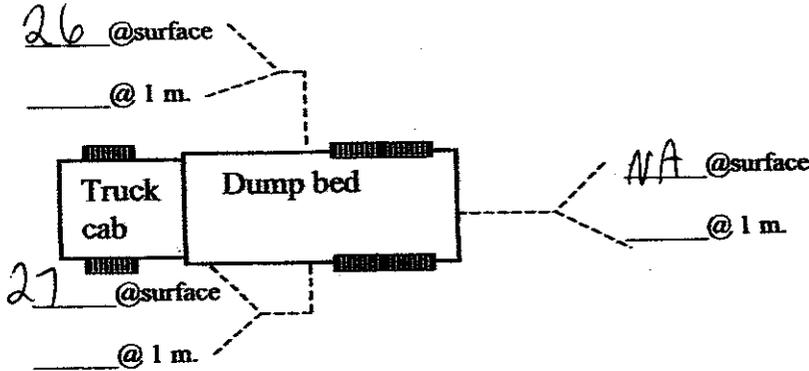
TRANSPORTER

T/S/D FACILITY

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0945 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

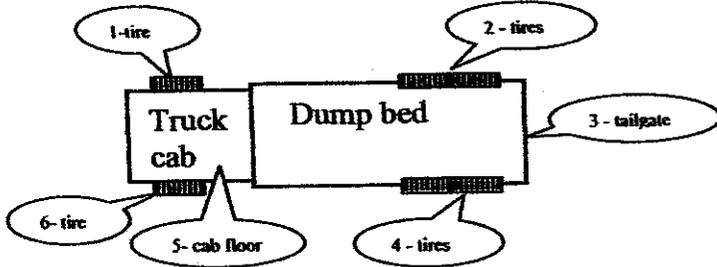
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

961  
0643473

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1000 Illinois St Golden, CO 80401				5. Generating Location (if different) North West of 12th and Basalt St Golden, CO 80401 303-273-3900	
4. Phone ( ) 303-273-3900		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		AWL07-070901-041915		19. Total Quantity 1 Yards	
				20. Unit WT/Vol -Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brann				Signature	
				Month Day Year 6 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year 6 30 07	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

515145

FOOTHILLS LANDFILL  
 8900 HIGHWAY 90  
 GOLDEN  
 CO  
 750600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191E

SITE	TICKET	GRID
01	388542	0000
WEIGHMASTER		
300056 barbara Jo B		
DATE IN	TIME IN	
30 August 2007	10:04 am	
DATE OUT	TIME OUT	
30 August 2007	10:04 am	
VEHICLE	ROLL OFF	
Y51191E		
REFERENCE	ORIGIN	
643473		

Gross Weight 78,780.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 44,380.00 lb 22.19 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.19	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *A. J.*



# NON-HAZARDOUS WASTE MANIFEST

961  
0643473

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 Black St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3990	
4. Phone ( ) 303-273-3990		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 500 Hwy 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Sub		00167000007511045			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brennan				Signature	
				Month	Day Year
				9	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
Steve Marquez					
				Month	Day Year
				9	30 07
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

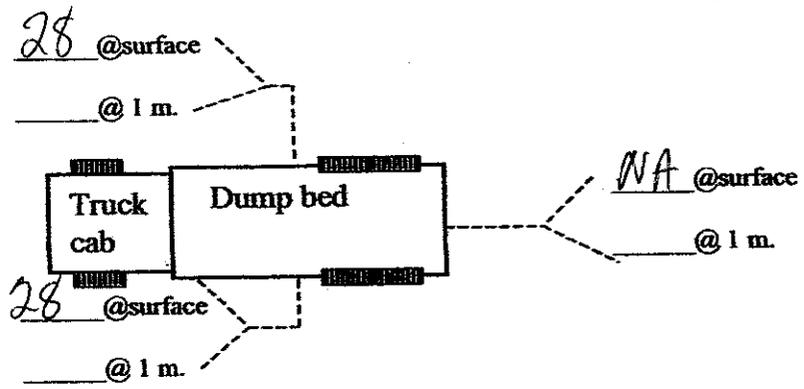
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0950 Surveyed by: C Hicks J Matton  
 Trucking Company: Grieve Truck license plate no./state: JD01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

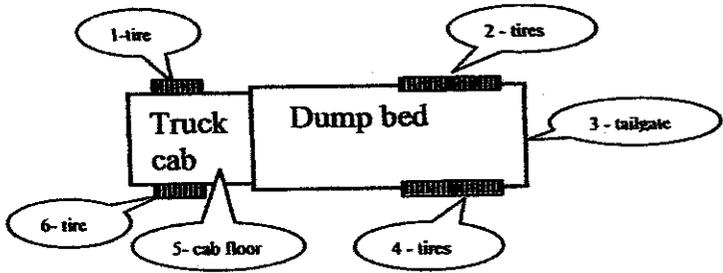
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	17 dpm	554 dpm	



NON-HAZARDOUS WASTE MANIFEST

0643490

01

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-1166			5. Generating Location (if different) University School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3006		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				No.	
				Type	
				Ct/Dumps	
				Tons	
a.		20 LB 870628 11/19/15		Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beaman				Signature: [Signature]	
				Month: 6 Day: 30 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]				Signature: [Signature]	
				Month: 6 Day: 30 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]				Signature: [Signature]	
				Month: 7 Day: 30 Year: 07	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

315140

FOOTHILLS LANDFILL  
8900 HIGHWAY 98  
GOLDEN  
CO  
780603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 555546	GRID 0000
WEIGHMASTER 850056 Barbara Jo S		
DATE IN 30 August 2007		TIME IN 10:12 am
DATE OUT 30 August 2007		TIME OUT 10:12 am
VEHICLE Y511915		ROLL OFF
REFERENCE 645460	ORIGIN	

Gross Weight 78,940.00 lb  
Tare Weight 35,580.00 lb Inbound -  
Net Weight 43,360.00 lb 21.58 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.58	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Manolo



# NON-HAZARDOUS WASTE MANIFEST

0643420

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St Golden, CO 80401 303-773-3996				5. Generating Location (if different) School of Mines Research Institute North West of 120 and Birch St Golden, CO 80401 303-773-3996	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Iron Sulfide		CONCERNED PARTS		1 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benken				Signature: [Signature]	
				Month: 8 Day: 30 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Manno				Signature: H. R.	
				Month: 8 Day: 30 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Manno				Signature: H. R.	
				Month: 8 Day: 30 Year: 07	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

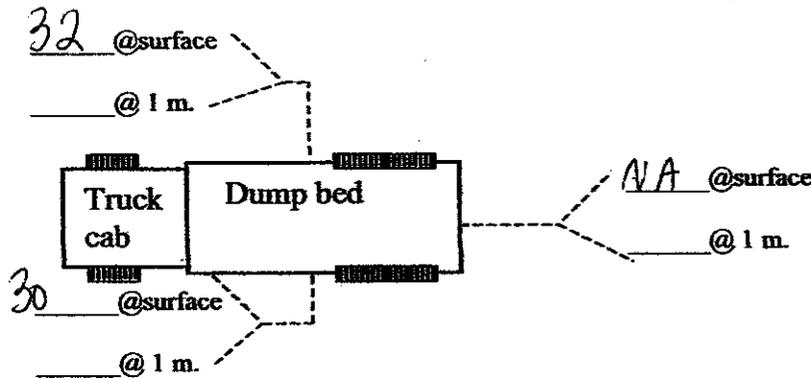
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 0956 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

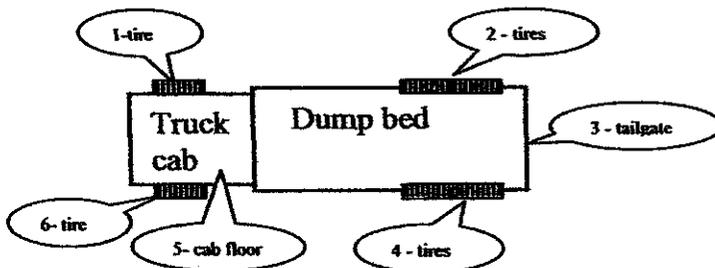
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	5220				52200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0643474

8

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1900 Blaine St Golden, CO 80401 303-273-3600				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3636	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1900 Blaine St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve B. Brown				Signature:	
				Month: 05 Day: 30 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Chuck Foy				Signature:	
				Month: 08 Day: 30 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

318188

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YB11915

SITE 01	TICKET 888052	GRID 0000
WEIGHMASTER 850056 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 10:16 am	
DATE OUT 30 August 2007	TIME OUT 10:16 am	
VEHICLE YB11915	ROLL OFF	
REFERENCE 648474	ORIGIN	

Gross Weight 81,200.00 lb  
Tare Weight 36,540.00 lb      Inbound --  
Net Weight 44,660.00 lb 22.33 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.33	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



8

# NON-HAZARDOUS WASTE MANIFEST

## 0643474

Please print or type.

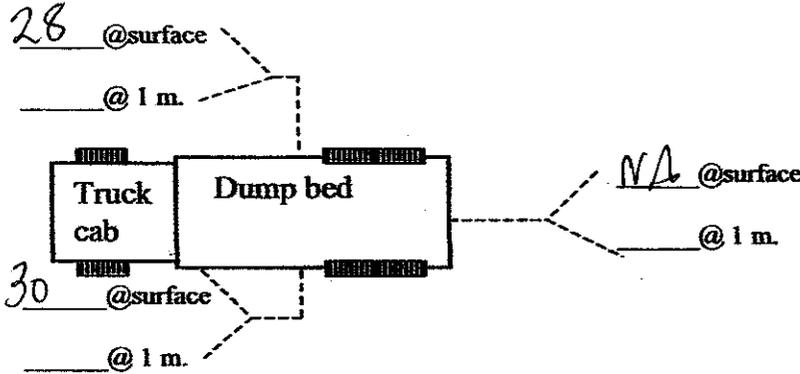
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 6900 Hwy 93 Golden, CO ADDUJINI W PRGR (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		CO 197 070008 1511915		6 Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Reinman				8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
TRANSPORTER #1  
TRANSPORTER #2  
T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1003 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

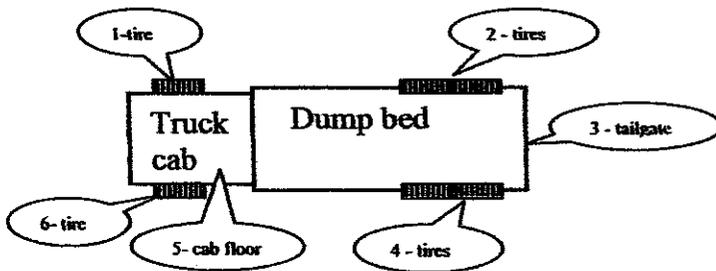
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	6220				62200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

461  
0643475

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 703-273-1040				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3990	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 10000 W. 10th Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Rock Soil		02-167-07000-01-015		16	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin		Signature		Month 8	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 8	Day 30
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033





# NON-HAZARDOUS WASTE MANIFEST

461  
0643475

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1744 Wilcox St Golden, CO 80401 Phone (303) 273-3900				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Brach St Golden, CO 80401 303-273-3900	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cyanide Recovery 12301 W. 12th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Flamm. Sol.		17. Allied Waste Approval # and Exp. Date 0000000000-000000		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information M&M					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature 		Month 4	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 8	Day 30
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

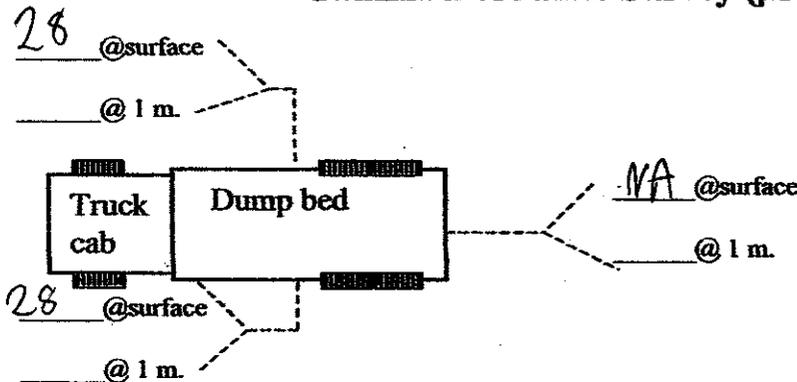
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1009 Surveyed by: C Hicks J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

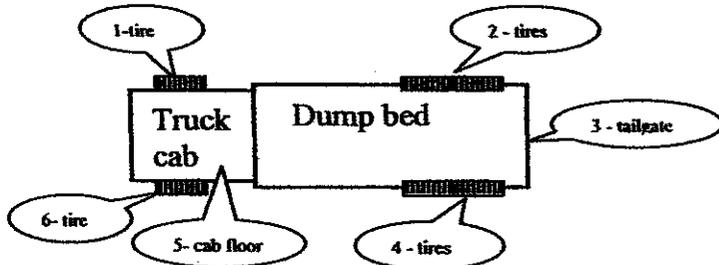
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0643476

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1540 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-272-2880				
4. Phone ( )				6. Phone ( )				
7. Transporter #1 Company Name Grease Trucking 12			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 10000 Hwy 30 Golden, CO			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Sulf b. c. d.			17. Allied Waste Approval # and Exp. Date CO 137 07/06/06 - 5/1/07		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Drums	Containers
					1		7-Yards	Tons
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Blinneman			Signature		Month Day Year 5 30 07			
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature		Month Day Year 5 30 07			
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature		Month Day Year			
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

312101

12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	896853	0000
WEIGHMASTER		
8800056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	10:26 am	
DATE OUT	TIME OUT	
30 August 2007	10:26 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
643476		

Gross Weight 84,100.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 46,400.00 lb 23.20 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.20	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643476

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Green Trucking 12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 1500 Hwy 89 Golden, CO ACCOUNT # 150713 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		CO L87 070908 7511915		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blumhagen			Signature		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year 8 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

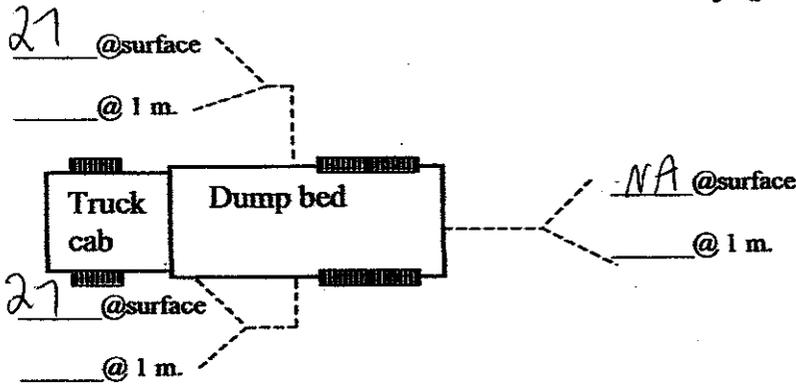
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1015 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

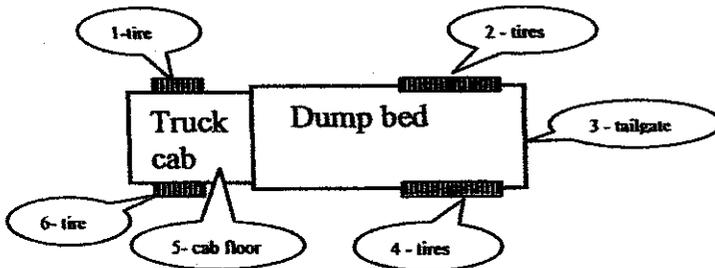
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



23

# NON-HAZARDOUS WASTE MANIFEST

## 0643477

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-271-3006			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-271-3006		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.		100 55 07500 101 1818			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brinkman				Signature:	
				Month	Day
				8	30
				Year	07
24. TRANSPORTER #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: MARK PHELAN				Signature:	
				Month	Day
				8	30
				Year	07
25. TRANSPORTER #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00083

518182

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	588557	0000
WEIGHMASTER		
6300056 Barbara Jo E		
DATE IN	TIME IN	
30 August 2007	10:31 am	
DATE OUT	TIME OUT	
30 August 2007	10:31 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
845477		

Gross Weight 82,860.00 lb  
Tare Weight 35,100.00 lb      Inbound -  
Net Weight 47,760.00 lb 23.88 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.88	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0643477

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1575 Floor 51 Cinder, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Cinder, CO 80401 303.439.3996	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cinder, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman				8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mark Phelan				8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

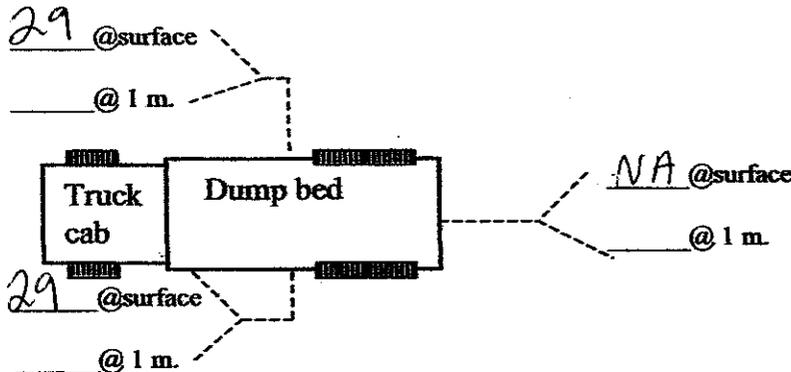
TRANSPORTER #1

COM000035

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1020 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

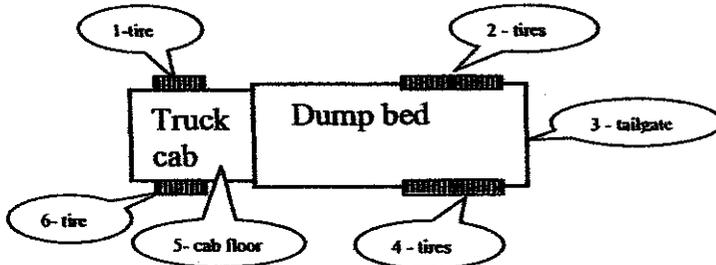
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



# NON-HAZARDOUS WASTE MANIFEST

96  
0643479

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Lincoln St Golden, CO 80401 Phone ( ) 303-273-2000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Cook St Golden, CO 80401 Phone ( ) 303-273-2000	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address NEW Hwy 10 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 00107 070000 YF 11910		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin				Signature <i>[Signature]</i>	
				Month	Day
				8	30
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Garcia				Signature <i>[Signature]</i>	
				Month	Day
				9	30
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

GENERATOR'S COPY

COM000033

518185

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
800203  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	ES8563	0000
WEIGHMASTER		
ES00056 Barbara Jo E		
DATE IN	TIME IN	
30 August 2007	0:39 am	
DATE OUT	TIME OUT	
30 August 2007	10:39 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
643479		

Gross Weight 78,600.00 lb  
 Tare Weight 38,580.00 lb  
 Net Weight 40,020.00 lb 20.01 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.01	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

96  
0643479

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Denver, CO 80202				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Grant St Golden, CO 80401 303-273-3000	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Illinois St Denver, CO 80202		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bealman		Signature		Month 8	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month 9	Day 30
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

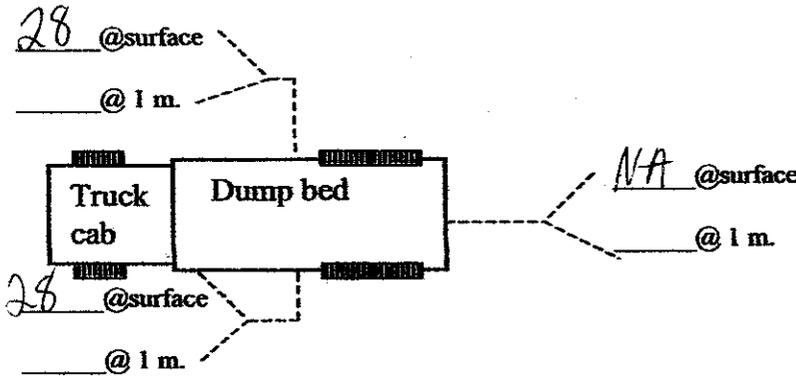
TRANSPORTER #1

CDM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1027 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

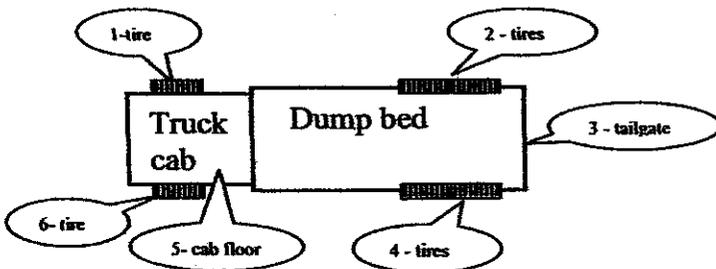
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



24

# NON-HAZARDOUS WASTE MANIFEST

## 0643478

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Lincoln St Golden, CO 80401 703-770-8986			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Ditch St Golden, CO 80401 303-273-2800		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name J De Grieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		18 Y		4 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman				8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Kurt Shannon				08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

24 315107

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 558545	GRID 0000
WEIGHMASTER 6300056 Barbara Jo S		
DATE IN 30 August 2007		TIME IN 10:44 am
DATE OUT 30 August 2007		TIME OUT 10:44 am
VEHICLE Y511915		ROLL OFF
REFERENCE 643478	ORIGIN	

Gross Weight 88,680.00 lb  
 Tare weight 37,200.00 lb      Inbound -  
 Net Weight 48,460.00 lb 22.74 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.74	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



24

# NON-HAZARDOUS WASTE MANIFEST

0643478

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Golden, CO 80401 303-271-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-271-3098		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name <b>JOE GRIEVE TRUCKING</b>		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
a. Norm Soil		0011707000 12-18-15		18. Containers No. Type 18 Y	
b.				19. Total Quantity Gallons	
c.				Tons	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Bergman</b>		Signature <i>[Signature]</i>		Month Day Year 8 30 17	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>KEVIN SHANNON</b>		Signature <i>[Signature]</i>		Month Day Year 8 30 17	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

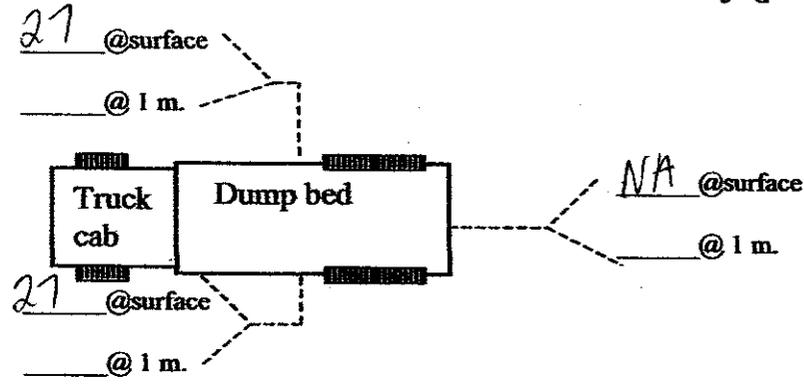
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1034 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: JD04

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

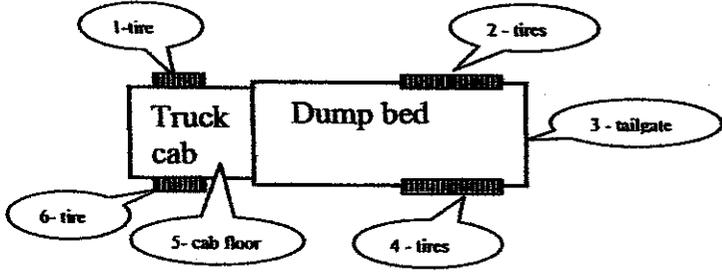
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	554 dpm	



04

# NON-HAZARDOUS WASTE MANIFEST

## 0592034

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of							
3. Generator's Name and Mailing Address 1500 Illinois St. Garden, CO 80131 303-275-3826			5. Generating Location (if different) Garden School of Mines Research Institute North West of 12th and Birch St Garden, CO 80131 303-275-3826								
4. Phone ( )		6. Phone ( )									
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone							
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone							
13. Designated T/S/D Facility Name and Site Address Garden, CO 80131		14. US EPA ID Number		15. Facility's Phone							
16. Waste Shipping Name and Description a. Non Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 001670709W1511015		18. Containers							
				19. Total Quantity		20. Unit					
				No.		Type		C. Cubic Yards		D. Tons	
21. Additional Descriptions for Materials Listed Above											
22. Special Handling Instructions and Additional Information											
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.											
Printed/Typed Name Steve Blanton			Signature		Month Day Year 30						
24. Transporter #1: Acknowledgement of Receipt of Materials											
Printed/Typed Name			Signature		Month Day Year						
25. Transporter #2: Acknowledgement of Receipt of Materials											
Printed/Typed Name Santiago Vargos			Signature		Month Day Year						
26. Discrepancy Indication Space											
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)											
Printed/Typed Name			Signature		Month Day Year						

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

GENERATOR'S COPY

COM000033

51517E

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
750603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 388567	GRID 0000
WEIGHMASTER 3500056 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 10:51 am	
DATE OUT 30 August 2007	TIME OUT 10:51 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592034	ORIGIN	

Gross Weight 77,820.00 lb  
Tare Weight 35,640.00 lb  
Net Weight 42,180.00 lb 21.09 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.09	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-30-07



# NON-HAZARDOUS WASTE MANIFEST

0592034

04

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Bluffs St Garden, CO 80131 (303) 475-1000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Lincoln St Garden, CO 80131 (303) 475-1000	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Rocky Mountain 1000 Bluffs St Garden, CO 80131		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Alum Sol		01-11-1995-1511045			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman				Signature 	
				Month	Day Year
				2	30 95
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vayso				Signature 	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

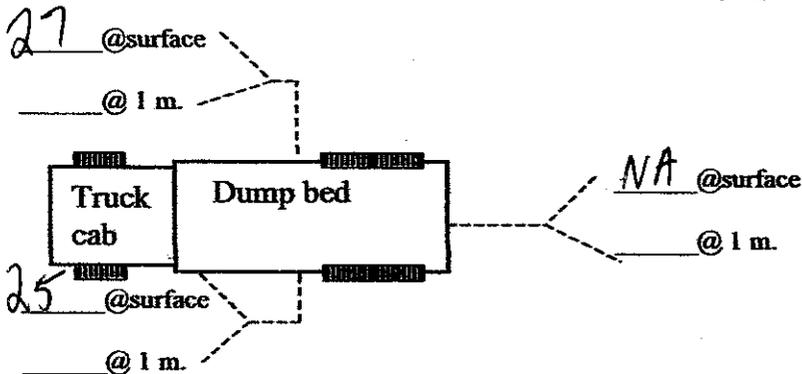
TRANSPORTER #1

COM00033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1042 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: 13

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

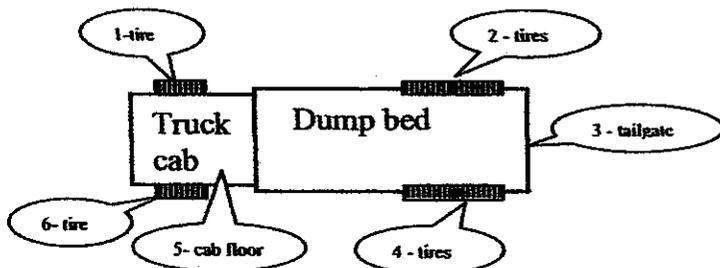
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

15  
0592035

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1520 Blake St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Blinn St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Boulder County		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity 20. Unit Wt/Vol	
a. Non-Haz		03167076087511315		18 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bralynn				Signature: [Signature]	
				Month Day Year: 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]				Signature: [Signature]	
				Month Day Year: 08 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month Day Year:	

GENERATOR'S COPY

COM00033

515177

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1800 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 588574	GRID 0000
WEIGHMASTER 8300056 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 11:02 am	
DATE OUT 30 August 2007	TIME OUT 11:02 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592035	ORIGIN	

Gross Weight 52,180.00 lb  
Tare Weight 38,700.00 lb  
Net Weight 13,480.00 lb 23.24 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

15  
0592035

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1000 W. 12th St Ocala, FL 32601 904-775-3900				5. Generating Location (if different) School of Mine Planning Institute West of 12th and East St Ocala, FL 32601 904-775-3900				
4. Phone ( )				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1000 W. 12th St Ocala, FL 32601			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Scrap metal			17. Allied Waste Approval # and Exp. Date 051181070007011215		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Containers	Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Buchanan				Signature 		Month Day Year 8 30 07		
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name 				Signature 		Month Day Year 08 30 07		
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month Day Year		

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

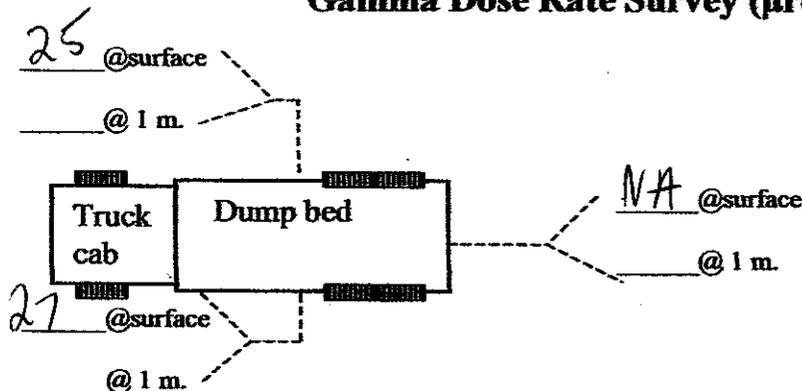
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1048 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 95

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

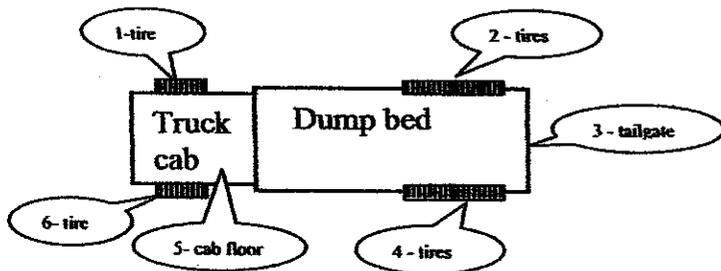
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	2220				22200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

75  
0592036

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Prince St Cody, WY 82401 307-273-3536				5. Generating Location (if different) Cody School of Mines Research Institute North West of 12th and Birch St. Cody, WY 82401 307-273-3990	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cody, WY 82401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. None Sent		C0107 070908 Y611215			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bergman				Signature 	
				Month Day Year 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Muel...				Signature 	
				Month Day Year 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR'S COPY

COM000033

515180

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract #: Y511915

SITE	TICKET	GRID
01	588576	0000
WEIGHMASTER		
300054 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	11:08 am	
DATE OUT	TIME OUT	
30 August 2007	11:08 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592036		

Gross Weight 75,280.00 lb  
Tare Weight 34,980.00 lb  
Net Weight 41,300.00 lb 20.90 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.90	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

75  
0592036

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 5500 Illinois St Golden, CO 80401 303-775-4080				5. Generating Location (if different) North West of 12th and Clark St Golden, CO 80401 303-775-4080					
4. Phone ( )			6. Phone ( )						
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Fossil Energy 18001 Hwy 70 Golden, CO 80401			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Drums	Cans	
a. Norm Sol			AW 07/02/04 Y511015			/	1	1	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Sue Berger				Signature <i>[Signature]</i>			Month	Day	Year
							30	07	07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Muel...				Signature <i>[Signature]</i>			Month	Day	Year
							30	07	07
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

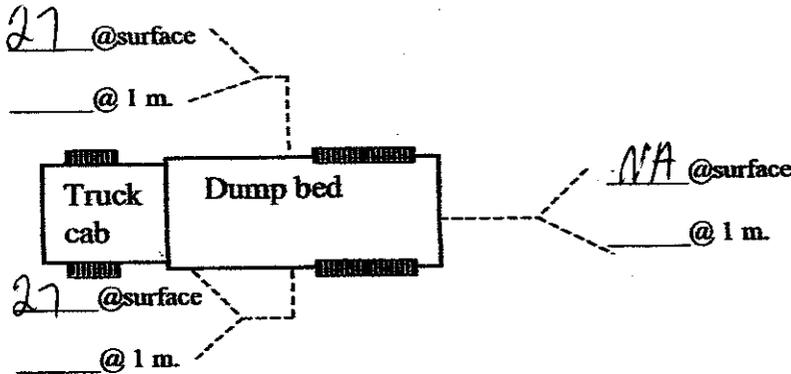
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1110 Surveyed by: CHicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

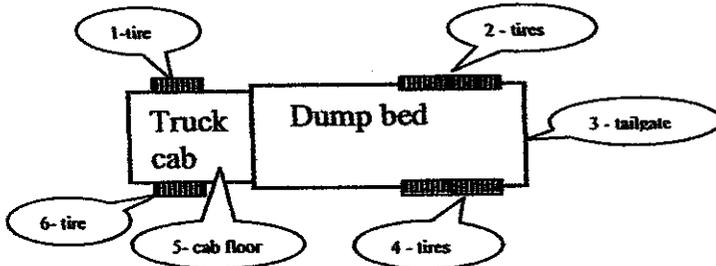
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

761  
0592047

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 15th St Golden, CO 80401 303-273-3949			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Pecos St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO 07 070001 01 1915		Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature	
				Month Day Year 8 30 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year 8 30 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

\$15.27

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80640  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 288572	GRID 0000
WEIGHMASTER 2800055 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 11:31 am	
DATE OUT 30 August 2007	TIME OUT 11:31 am	
VEHICLE YE11915	ROLL OFF	
REFERENCE 592047	ORIGIN	

GC Gross Weight 80,940.00 lb  
 Tare Weight 34,400.00 lb  
 net Weight 46,540.00 lb 23.27 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.27	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



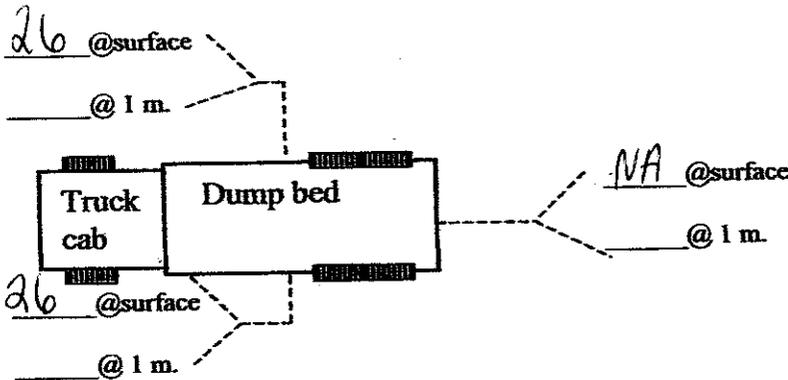
SIGNATURE *[Signature]*



# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1115 Surveyed by: C Hicks J Matson  
 Trucking Company: Grieve Truck license plate no. /state: JD01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

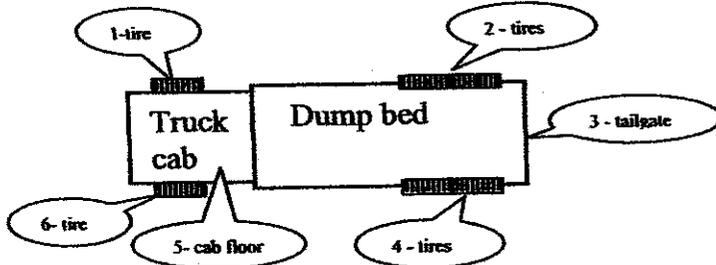
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

01  
0592045

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Oklahoma City, OK 73101 Phone ( ) 303-273-2444				5. Generating Location (if different) University School of Mines Research Institute North West of 12th and Dakota Oklahoma City, OK 73101 Phone ( ) 303-273-2444	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Oklahoma City, OK 73101		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day 30
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 8	Day 30
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature 		Month 8	Day 30
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515201

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
750603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588596	0000
WEIGHMASTER		
2000056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	11:34 am	
DATE OUT	TIME OUT	
30 August 2007	11:34 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592045		

Gross Weight 80,460.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 44,880.00 lb 22.44 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.44	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Mando R



# NON-HAZARDOUS WASTE MANIFEST

01  
0592045

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 600 Pheasant St. Indian, OK 80401 909 273-3646			5. Generating Location (if different) School of Marine Research Institute North West of 12th and Birch St Indian, OK 80401 909 273-3646		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 8701 W. 10 Indian, OK		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature 		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Brinkman			Signature 		Month Day Year 8 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Brinkman			Signature 		Month Day Year 8 30 07
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

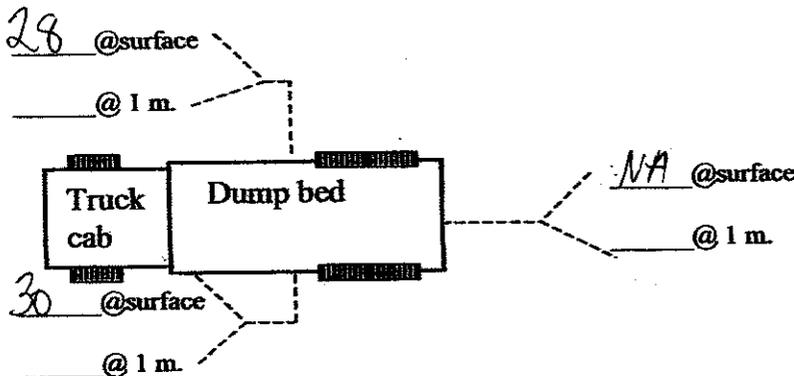
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1122 Surveyed by: C Hicks J Mattson

Trucking Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

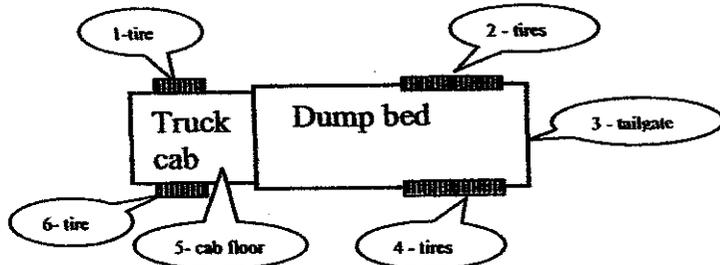
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

0582048

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 1st St Golden, CO 80401 303-273-3922			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3666		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address PO Box 103 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Metal Bolts		17. Allied Waste Approval # and Exp. Date CO 157075000 12/31/15		18. Containers	
				No.	Type
b.				18	Y
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month	Day Year
				8	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy		Signature 		Month	Day Year
				08	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

515210

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
980608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586605	0000
WEIGHMASTER		
8600056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	11:42 am	
DATE OUT	TIME OUT	
30 August 2007	11:42 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
892046		

GC Gross Weight 83,380.00 lb  
Tare Weight 36,540.00 lb Inbound -  
Net Weight 46,840.00 lb 23.43 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.43	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592046

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-1998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-1998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401 (School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Burn Soil		101571700001811915		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Bohman				8	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Chuck Foy				08	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

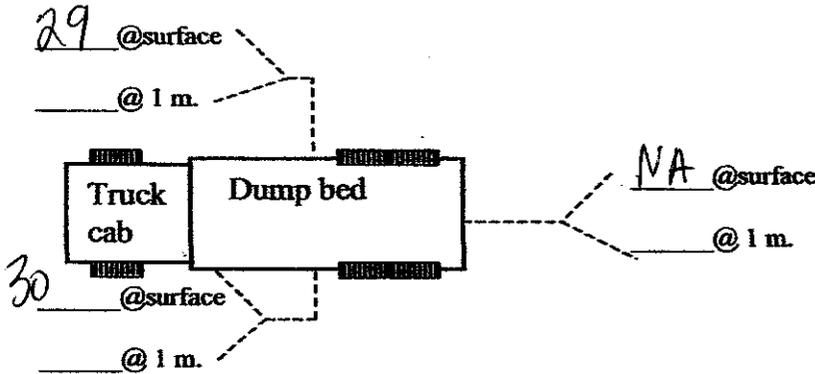
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/30/07 1131 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: 23

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

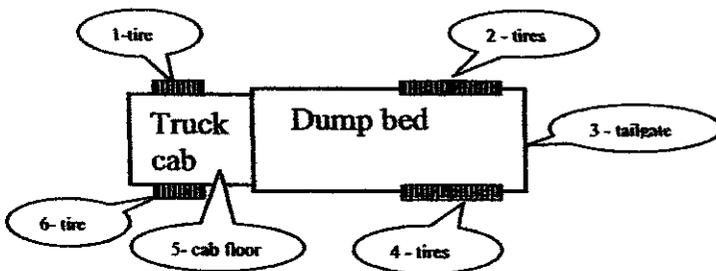
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

23  
0592037

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1100 Main St Golden, CO 80401 303-273-4444			5. Generating Location (if different) School of Mines Research Institute North West of 13th and West St Golden, CO 80401 303-273-4444				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 2500 Hwy 20 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Alum Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 004570594/511915		18. Containers			
				No.	Type	19. Total Quantity 0.0000	20. Unit Wt/Vol 0.0000
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 8 11 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name MARIL PHELAN			Signature 		Month Day Year 5 30 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

515223

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	558610	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	1:50 am	
DATE OUT	TIME OUT	
30 August 2007	11:50 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
592037		

Gross Weight 84,460.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 49,360.00 lb 24.58 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.58	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592037

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1530 Illinois St Golden, CO 80401 303-275-0681			5. Generating Location (if different) School of Mines Research Institute One West of 17th and Lincoln Golden, CO 80401 303-275-0681		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		020101073001511915		Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman			Signature		Month Day Year 8 30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARIL PHELAN			Signature		Month Day Year 8 30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

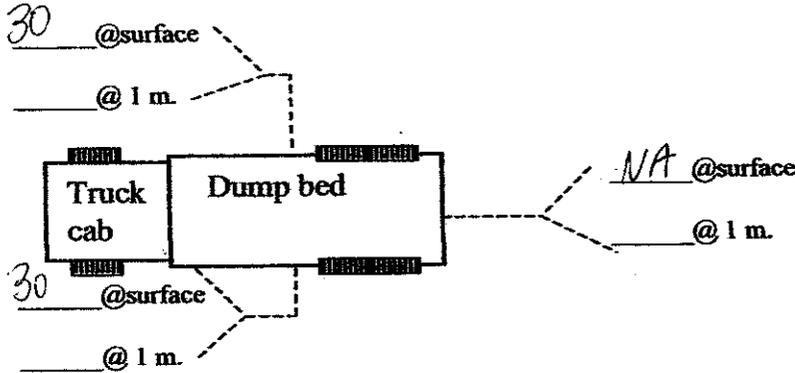
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1136 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

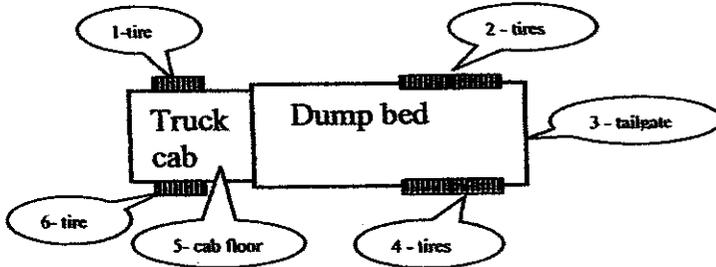
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	17 dpm	554 dpm



24

# NON-HAZARDOUS WASTE MANIFEST

## 0592032

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																					
3. Generator's Name and Mailing Address 1500 Birch St Golden, CO 80401 303-273-1100			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698																						
4. Phone ( )			6. Phone ( )																						
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone																					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone																					
13. Designated T/S/D Facility Name and Site Address 3030 N.W. 30th Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone																					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																					
a. Non-Haz		CO 07 0709 071010		<table border="1"> <thead> <tr> <th>No.</th> <th>Type</th> <th>19. Total Quantity (Drums)</th> <th>20. Unit Wt/Vol (Gallons)</th> </tr> </thead> <tbody> <tr> <td>18</td> <td>Y</td> <td>1</td> <td>Tons</td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		No.	Type	19. Total Quantity (Drums)	20. Unit Wt/Vol (Gallons)	18	Y	1	Tons	b.				c.				d.			
No.	Type	19. Total Quantity (Drums)	20. Unit Wt/Vol (Gallons)																						
18	Y	1	Tons																						
b.																									
c.																									
d.																									
21. Additional Descriptions for Materials Listed Above																									
22. Special Handling Instructions and Additional Information																									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																									
Printed/Typed Name <b>Steve Benjamin</b>			Signature 		Month Day Year <b>6 30 07</b>																				
24. Transporter #1: Acknowledgement of Receipt of Materials																									
Printed/Typed Name <b>Ken Shannon</b>			Signature 		Month Day Year <b>08 30 07</b>																				
25. Transporter #2: Acknowledgement of Receipt of Materials																									
Printed/Typed Name			Signature		Month Day Year																				
26. Discrepancy Indication Space																									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																									
Printed/Typed Name			Signature		Month Day Year																				

GENERATOR'S COPY

COM000033

24 513221

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511F15

SITE 01	TICKET 55861a	GRID 0000
WEIGHMASTER 5300055 Barbara Jo S		
DATE IN 30 August 2007	TIME IN 11:55 am	
DATE OUT 30 August 2007	TIME OUT 11:55 am	
VEHICLE Y511F15	ROLL OFF	
REFERENCE 572038	ORIGIN	

Gross Weight 84,400.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 47,200.00 lb 23.60 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.60	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kens*



# NON-HAZARDOUS WASTE MANIFEST

0592038

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1500 Highway 51 Garden, CO 81401 303-271-3344				5. Generating Location (if different) Schmidt Mines Research Institute North West of 12th and East St Garden, CO 81401 303-271-3398					
4. Phone ( )				6. Phone ( )					
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address 2071 Hwy 57 Garden, CO			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. <i>Iron Ore</i>			17. Allied Waste Approval # and Exp. Date <i>0017707000 041215</i>		18. Containers		19. Total Quantity	20. Unit	
					No.	Type	Tons	Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name <i>Steve Beckman</i>				Signature <i>[Signature]</i>			Month <i>6</i>	Day <i>30</i>	Year <i>07</i>
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name <i>Ken Shannon</i>			Signature <i>[Signature]</i>		
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name			Signature		
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

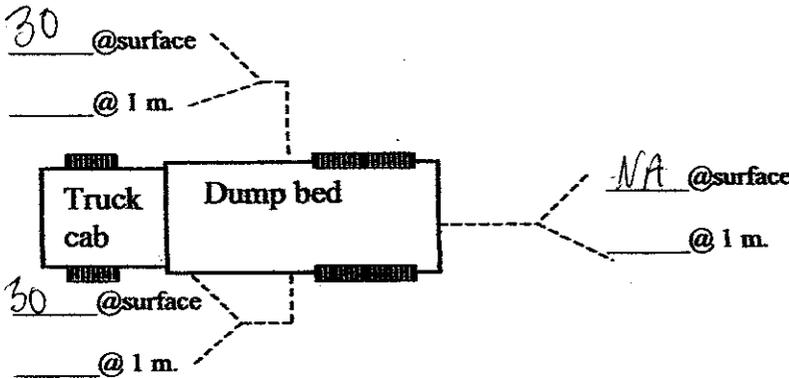
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1144 Surveyed by: C Hicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

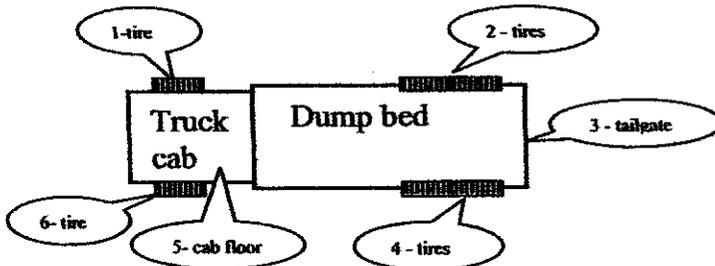
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

461  
0592039

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Blaine St Golden, CO 80401 303-271-3668				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Marsh St Golden, CO 80401 303-271-3668			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address PULP MILL 3000 Hwy 20 Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Harm Soil		001167 070903 1511015		18	K	1-Yards	Flow
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Berger				Signature: [Signature]			
				Month: 5 Day: 30 Year: 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Mike Murray				Signature: Mike Murray			
				Month: 7 Day: 30 Year: 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name:				Signature:			
				Month: Day: Year:			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:				Signature:			
				Month: Day: Year:			

GENERATOR'S COPY

COM000033





461

# NON-HAZARDOUS WASTE MANIFEST

## 0592039

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of													
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-277-0900				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 11th and 10th St Golden, CO 80401 303-277-0900													
4. Phone ( )				6. Phone ( )													
7. Transporter #1 Company Name				8. US EPA ID Number				9. Transporter #1's Phone									
10. Transporter #2 Company Name				11. US EPA ID Number				12. Transporter #2's Phone									
13. Designated T/S/D Facility Name and Site Address				14. US EPA ID Number				15. Facility's Phone									
16. Waste Shipping Name and Description				17. Allied Waste Approval # and Exp. Date				18. Containers		19. Total Quantity		20. Unit Wt/Vol					
								No. Type		Pounds		Cub Yards					
a. Warm Soil				CO 187 070008 7511345				18 K		7 Tons		Tons					
b.																	
c.																	
d.																	
21. Additional Descriptions for Materials Listed Above																	
22. Special Handling Instructions and Additional Information																	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																	
Printed/Typed Name: Steve Seaman						Signature: <i>[Signature]</i>			Month: 5			Day: 30			Year: 07		
24. Transporter #1: Acknowledgement of Receipt of Materials																	
Printed/Typed Name: Mike Murray						Signature: <i>[Signature]</i>			Month: 7			Day: 30			Year: 07		
25. Transporter #2: Acknowledgement of Receipt of Materials																	
Printed/Typed Name:						Signature:			Month:			Day:			Year:		
26. Discrepancy Indication Space																	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																	
Printed/Typed Name:						Signature:			Month:			Day:			Year:		

GENERATOR

TRANSPORTER

T/S/D FACILITY

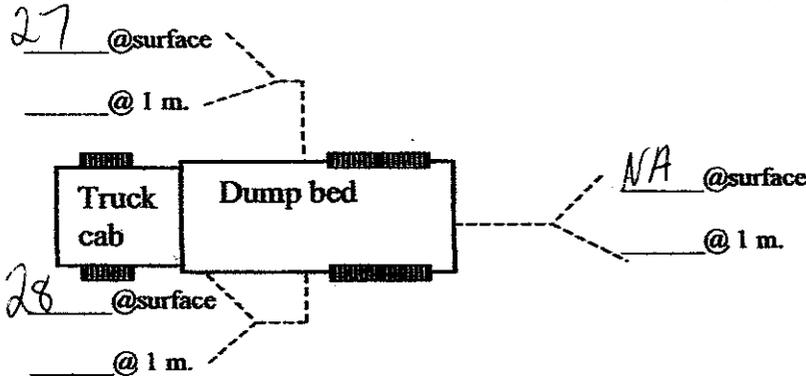
TRANSPORTER #1

COM000035

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1149 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

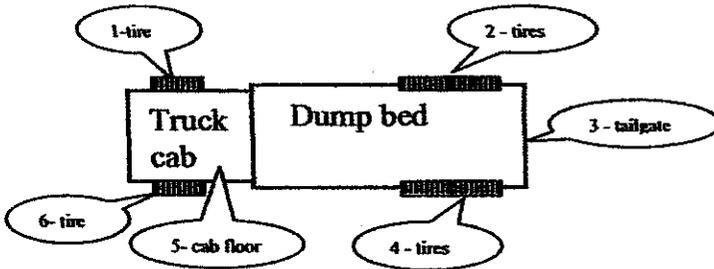
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

76  
0592040

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Golden, CO 80401 303-273-0000				5. Generating Location (if different) 1400 West of 12th and Dutch St Golden, CO 80401 303-273-0000	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Jay St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Slurry Soil		70167 10000 1/1/05			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benker				Signature <i>[Signature]</i>	
				Month	Day
				2	30
				Year	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Lopez				Signature <i>[Signature]</i>	
				Month	Day
				2	30
				Year	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day
				Year	

GENERATOR'S COPY

COM000033

315234

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
750603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 588429	GRID 0000
WEIGHMASTER 3800056 Barbara Jc S		
DATE IN 30 August 2007	TIME IN 12:08 pm	
DATE OUT 30 August 2007	TIME OUT 12:08 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592044	ORIGIN	

00 Gross Weight 79,460.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 42,880.00 lb 21.44 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.44	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



96

# NON-HAZARDOUS WASTE MANIFEST

## 0592040

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Hwy 48 S Golden, CO 80401 303-273-3500			5. Generating Location (if different) 1101 West of 12th and Quaker St Golden, CO 80401 303-273-3500		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 48 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm S #		181770918 12/11/15		19. Total Quantity	
b.				20. Unit	
c.				Wt/Vol	
d.				Containers	
21. Additional Descriptions for Materials Listed Above				Tons	
22. Special Handling Instructions and Additional Information				Tons	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name			Signature		Month Day Year
Steve Renner					8 30 15
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
Fernando Lopez					8 31 15
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

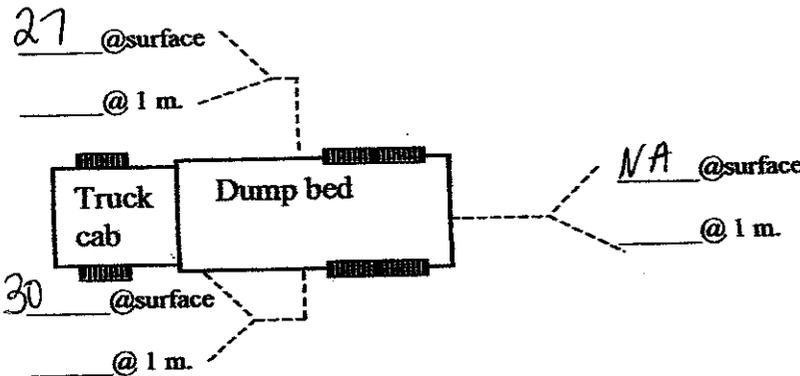
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1200 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griev Truck license plate no./state: JD04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

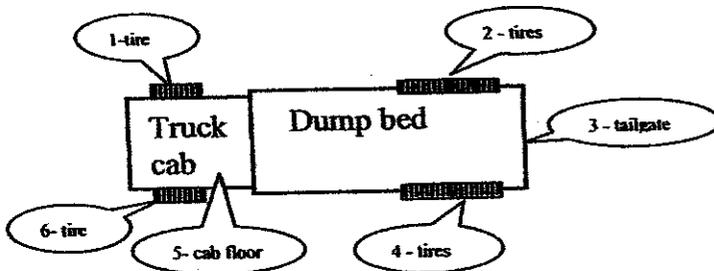
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm



# NON-HAZARDOUS WASTE MANIFEST

04  
0592041

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 11-30 Illinois St Garden, CO 80401 303-273-0488			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Garden, CO 80401 303-273-0488		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO 107 07908 Y01 1015		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman				8 30 94	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Sant'ogno Vorseas					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR'S COPY

COM000033

515242

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960605  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 888637	GRID 0000
WEIGHMASTER 800055 Barbara Jo S		
DATE IN 30 August 2007		TIME IN 7:22 pm
DATE OUT 30 August 2007		TIME OUT 12:22 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 592041	ORIGIN	

00 Gross Weight 78,060.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 42,420.00 lb 21.21 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.21	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Signature]* 8-30-07



# NON-HAZARDOUS WASTE MANIFEST

0592041

04

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1000 Hixie St Garden, CO 80401 303 773 3336				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Garden, CO 80401 303 773 3336				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1000 Hixie St Garden, CO 80401			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Alum Sol b. c. d.			17. Allied Waste Approval # and Exp. Date 2015/07/20/15/12/15		18. Containers		19. Total Quantity	20. Unit
					No.	Type	Ct/Drums	Wt/Vol
							Yards	Tons
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 8 30 17			
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Santiago Vargas			Signature 		Month Day Year			
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature		Month Day Year			
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

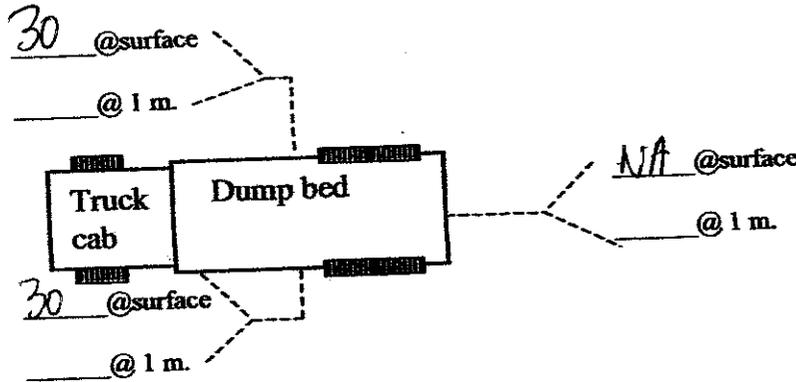
TRANSPORTER #1

COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/30/07 1208 Surveyed by: C Hicks J Mattson  
 Trucking Company: Griewe Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

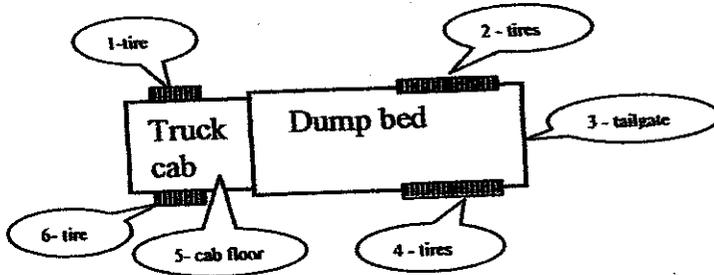
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 253 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	554 dpm

ST-RAD-GEN-006



# NON-HAZARDOUS WASTE MANIFEST

0643465

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute North West of 12th and Duch St Golden, CO 80401 303 273-3998				5. Generating Location (if different)				
4. Phone ( ) 303-273-3998				6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Cyanide Landfill 2070 Hwy 20 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Metal Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 10007070001311010		18. Containers				
				No.	Type	19. Total Quantity	20. Unit Wt/Vol	
						18	Drums	1000
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Steve Brinkman				Signature: [Signature]				
				Month: 08 Day: 30 Year: 07				
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name: [Signature]				Signature: [Signature]				
				Month: 08 Day: 30 Year: 07				
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature				
				Month Day Year				
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature				
				Month Day Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

313235

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558649	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
30 August 2007	12:43 pm	
DATE OUT	TIME OUT	
30 August 2007	12:43 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
643468		

00 Gross Weight 84,360.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 48,560.00 lb 24.28 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.28	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0643465

15

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines North West of 12th and Illinois St Golden, CO 80401 303-273-3060	
4. Phone ( ) 303-273-3060		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Front Range Landfill 2000 Hwy 90 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Normal Soil		0016712X00-511616		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Spina				Signature	
				Month	Day Year
				08	30 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Michael Colaco Lopez				Signature	
				Month	Day Year
				08	30 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000033

# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
JD 01	8/29	1200	1210	18
Ruiz 95		1200	1220	
Marquez 96		1220	1227	
JD 04		1225	1236	
Grieve 8		1230	1243	
Murray 461		1235	1253	
Grieve 24		1255	1301	
Grieve 23		1300	1310	
Grieve 12		1305	1319	
Collazo 13		1310	1327	
Marquez 961		1320	1336	
JD 01		1325	1343	
Ruiz 95		1340	1351	
JD 04		1345	1400	
Marquez 96		1400	1407	
Grieve 8		1400	1412	
Murray 461		1410	1425	
Grieve 24		1415	1432	
Grieve <del>22</del> 23		1425	1440	
Grieve 12		1435	1448	

77.2  
76.5  
77.5  
74.4  
80.9  
81.0  
83.1  
79.3  
79.3  
75.5  
76.0  
74.8

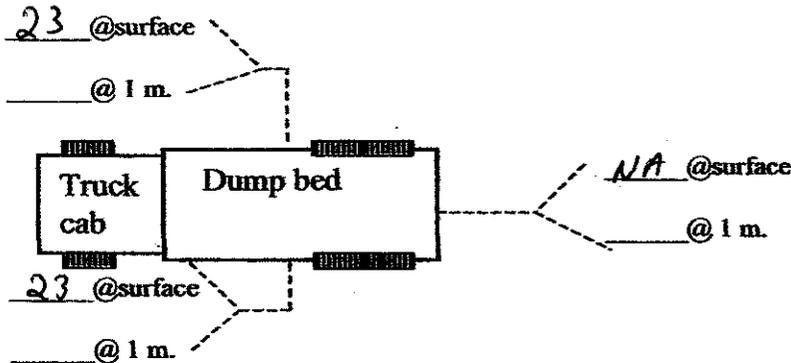


## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1210 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no. /state: 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

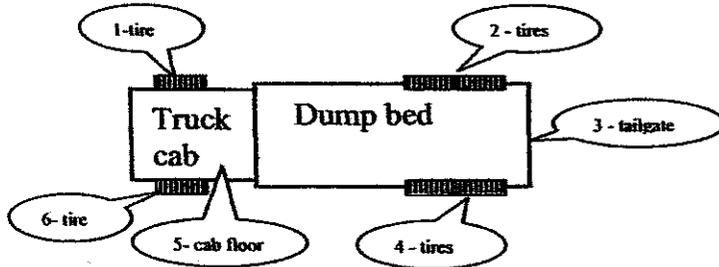
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



1001

# NON-HAZARDOUS WASTE MANIFEST

0592158

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Kansas St Golden CO 80401 303-271-1000				5. Generating Location (if different) School of Mines Research Institute North West of 13th and Lemah St. Golden CO 80401 303-271-3696	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 50 Golden CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Metal Shred		05111915		18 Y	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 8 29 02	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Joe W Ruiz		Signature <i>[Signature]</i>		Month Day Year 8 31 02	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

811873

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 80401  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	5282276	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	12:29 pm	
DATE OUT	TIME OUT	
29 August 2007	12:29 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592158		

Gross Weight 77,200.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 41,620.00 lb 20.81 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.81	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592158

J101

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Casper, WY 82401 307-235-3000			5. Generating Location (if different) Wyo. School of Mines Research Institute North West of 12th and Penn St Casper, WY 82401 307-235-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.				No. Type	
b.				18 Y	
c.				Tons	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Bushman				8 29 02	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Joe W. Roic				8 27 02	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

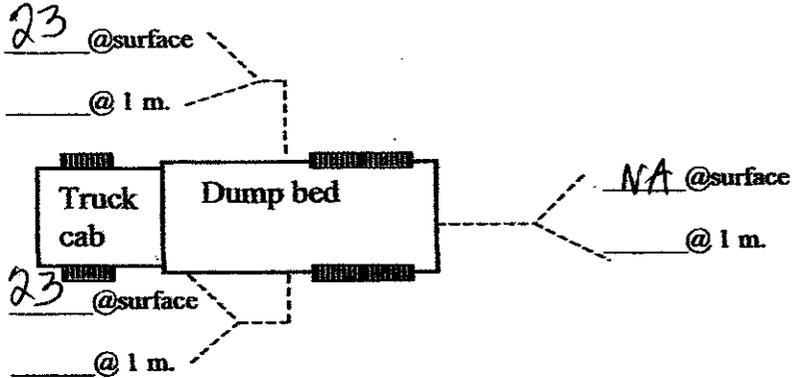
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1220 Surveyed by: Chicks, J Mattson

Trucking Company: Grieve Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

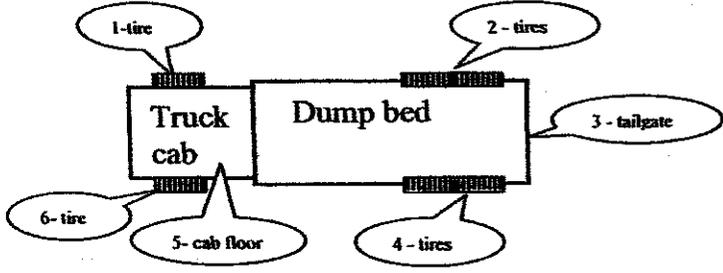
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_  
\_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592159

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 6400 Wagon St Golden, CO 80401 303-273-3630			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3630		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 9470 Hwy 95 Golden, CO 80401 # 1234567890		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non-Haz		COLE7049047511015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beninger				Signature	
				Month 8	Day 29
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

511877

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960608

COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558283	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN		TIME IN
29 August 2007		12:39 pm
DATE OUT		TIME OUT
29 August 2007		12:39 pm
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
992159		

00 Gross Weight 76,500.00 lb  
 Tare Weight 36,960.00 lb  
 Net Weight 39,520.00 lb 19.76 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.76	TN	SW-DONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_





# NON-HAZARDOUS WASTE MANIFEST

# 0592159

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1001 Evans St Golden, CO 80401 Phone (303) 771-3600			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-0000		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1001 Evans St Golden, CO 80401 Phone: (303) 771-3600		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Iron Ore		30117770938 0511010			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Braken				Signature: [Signature]	
				Month: 8 Day: 29 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]				Signature: [Signature]	
				Month: Day: Year:	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

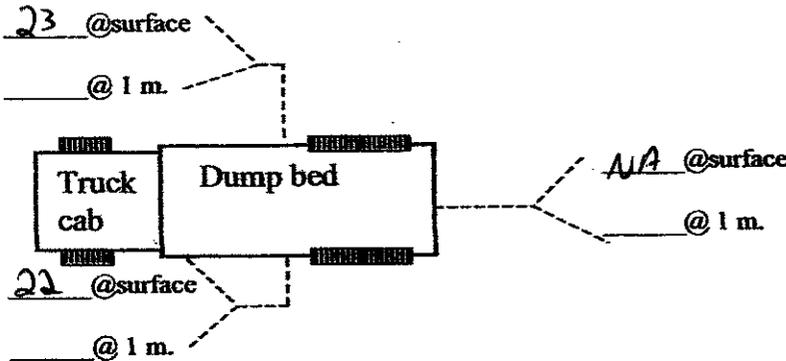
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1227 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

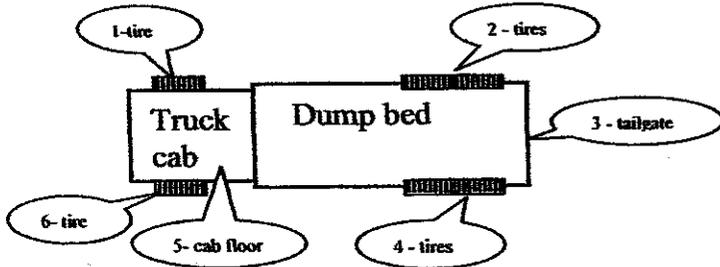
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

96  
0592180

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1510 19th St Golden, CO 80401 303-773-3908			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Dahl St Golden, CO 80401 303-773-3908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		2012/07/25/03 1511617		7 Drums	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Smith		<i>[Signature]</i>		7/29/12	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Loma		<i>[Signature]</i>		8/29/12	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

00M000033

511888

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 780602  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 7511915

SITE	TICKET	GRID
01	588298	0000
WEIGHMASTER		
S00056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	1:04 PM	
DATE OUT	TIME OUT	
29 August 2007	1:04 PM	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
592160		

00 Gross Weight 77,540.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 40,960.00 lb 20.48 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.48	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592130

76

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1400 Blaine St Golden, CO 80441 303-275-3946				5. Generating Location (if different) North West of 14th and Carol St Golden, CO 80401 303-275-3946					
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Containers	Containers	
a.									
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name: Steve Benham				Signature: [Signature]			Month: 7	Day: 29	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name: Fernando Gomez				Signature: [Signature]			Month: 8	Day: 29	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name:				Signature:			Month:	Day:	Year:
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name:				Signature:			Month:	Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

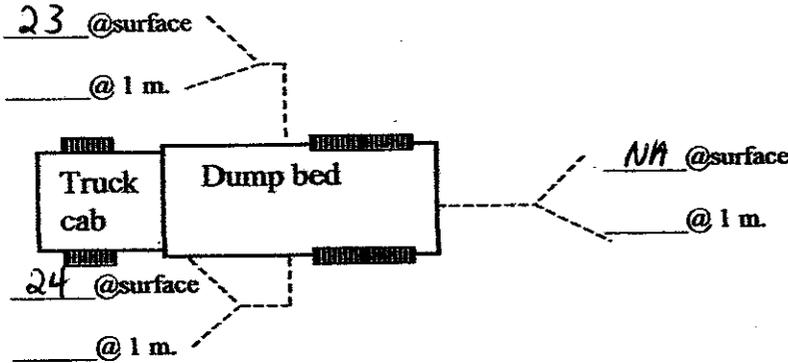
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1236 Surveyed by: C Hicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

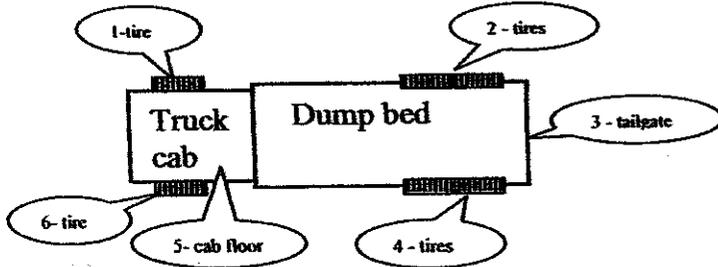
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

J004  
0592161

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1550 West St Cedar, CO 81401 303-278-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Cedar, CO 81401 303-278-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Non Sol		05109/2008 Y511915		1 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: <i>Steve Johnson</i>				Signature: <i>[Signature]</i>	
				Month: 6 Day: 29 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: <i>Harold Mansour</i>				Signature: <i>[Signature]</i>	
				Month: 8 Day: 20 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

511804

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588279	0000
WEIGHMASTER		
8800054 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	1:07 pm	
DATE OUT	TIME OUT	
29 August 2007	1:07 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572161		

Contract: Y511915

00 Gross Weight 74,350.00 lb  
Tare Weight 35,640.00 lb  
Net Weight 38,740.00 lb 19.37 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.37	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

1004  
0592161

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1300 Illinois St Golden, CO 80401 303-273-3050				5. Generating Location (if different) New School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3050	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		CO 001020008 12/15/16		6 29 07	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Seaman				Signature: [Signature]	
				Month: 6 Day: 29 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]				Signature: [Signature]	
				Month: 6 Day: 29 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

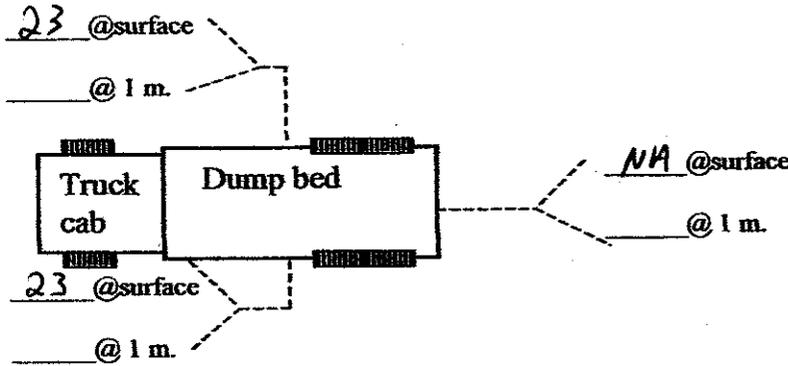
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1243 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

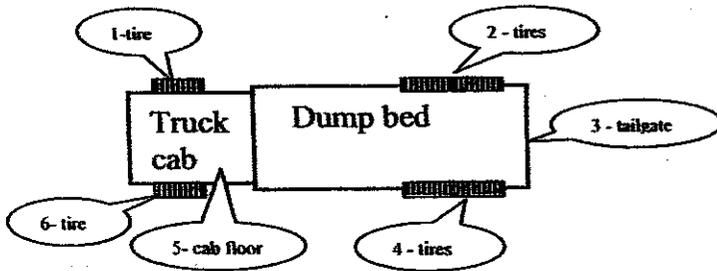
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592188

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 17th St Golden, CO 80401 303-275-3100				5. Generating Location (if different) School of Mines Research Institute Name: West of 17th and Birch St Golden, CO 80401 303-275-3100	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3100 N. 32nd Denver, CO 80216		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Dirt		17. Allied Waste Approval # and Exp. Date 00107030703 (E11015)		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blum				Signature <i>[Signature]</i>	
				Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy				Signature <i>[Signature]</i>	
				Month Day Year 08/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

322897

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
930603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558002	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	1:09 pm	
DATE OUT	TIME OUT	
29 August 2007	1:09 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	

GG Gross Weight 80,880.00 lb  
 Tare Weight 36,540.00 lb      Inbound ---  
 Net Weight 44,340.00 lb 22.17 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.17	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0592166

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1977 Strada St Golden, CO 80401 303-275-3480			5. Generating Location (if different) Colorado School of Mines - Research Institute North West of 12th and Grand St Golden, CO 80401 303-275-3998					
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone				
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone				
13. Designated T/S/D Facility Name and Site Address Waste Management 1977 Strada St, Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 07-01-2004 to 01-31-15		18. Containers				
				19. Total Quantity		20. Unit		
				No.	Type	Quantity	Wt/Vol	
				a. None		184	Yards	Tons
				b.				
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Steve Bowman			Signature: <i>[Signature]</i>		Month Day Year: 8/29/07			
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name: Chuck Foy			Signature: <i>[Signature]</i>		Month Day Year: 8/29/07			
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name:			Signature:		Month Day Year:			
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name:			Signature:		Month Day Year:			

GENERATOR

TRANSPORTER

T/S/D FACILITY

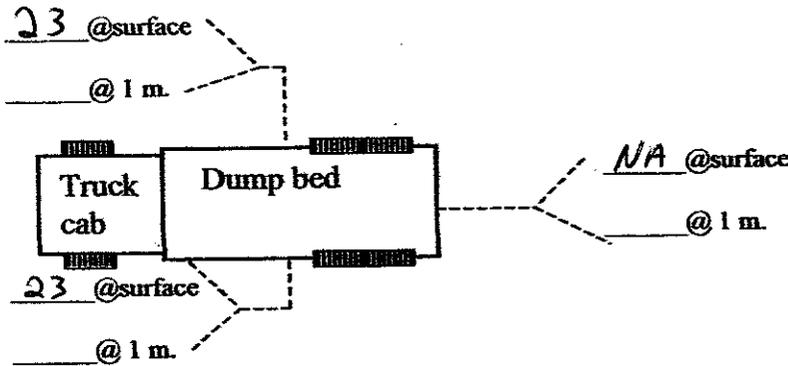
TRANSPORTER #1

COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1253 Surveyed by: CHicks, J Matson  
 Trucking Company: Gniere Truck license plate no. /state: 4601

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

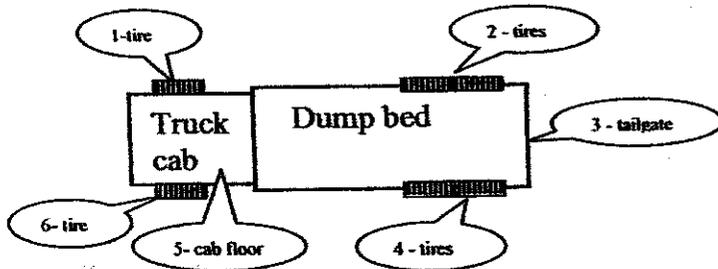
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

461  
0592152

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1300 W. 9th St Golden, CO 80401 303-273-3000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3500				
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Cyanide Leach Golden, CO 80401 School of Mines Research Institute		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit	
				No.	Type	Pounds	Gallons	
				a. Dirt Soil	15	4	6750	1-Tons
				b.				
				c.				
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Bennett				Signature		Month 8	Day 29	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
Printed/Typed Name Mike Murray				Signature			5	07
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
Printed/Typed Name				Signature				
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

GENERATOR'S COPY

321309

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 588314	GRID 0000
WEIGHMASTER K500054 Barbara Jo S		
DATE IN 29 August 2007		TIME IN 1:03 pm
DATE OUT 29 August 2007		TIME OUT 1:32 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 592122	ORIGIN	

Gross Weight 81,000.00 lb  
 Tare Weight 34,260.00 lb      Inbound --  
 Net Weight 46,740.00 lb 23.37 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.37	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

461  
0592132

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 W. 12th St Columbia, SC 29201 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Broad St Columbia, SC 29201 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.		0117-1913-1913-		16	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Benham				12 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
W. Le Murray				12 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

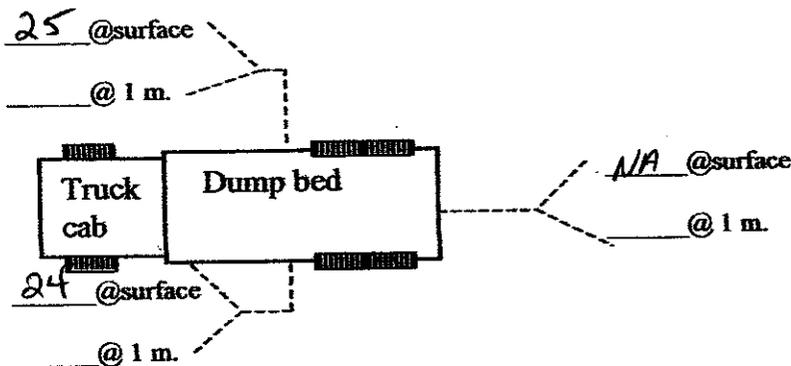
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1301 Surveyed by: CHicks, J Matson

Trucking Company: Gniewe Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

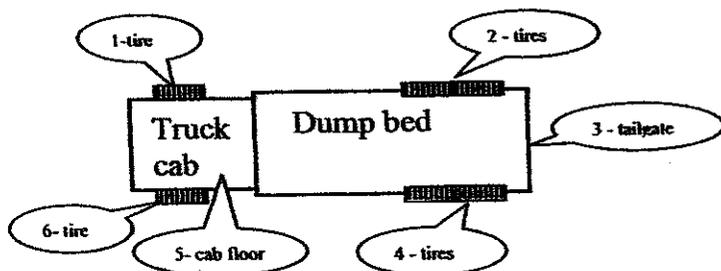
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592163

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Columbus, OH 43041 614-270-1500			5. Generating Location (if different) Columbus School of Arms Research Institute North West of 12th and Birch St Columbus, OH 43041 614-273-0998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <b>J De Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Columbus Landfill 500 Hwy 30 Columbus, OH 43041		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. <b>Warm Sol</b>		07187-073003 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>J De Grieve</b>		Signature <i>J De Grieve</i>		Month 8	Day Year 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>		Signature <i>Ken Shannon</i>		Month 08	Day Year 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033





# NON-HAZARDOUS WASTE MANIFEST

0592163

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1200 W. 1st St Golden, CO 80401 Phone (303) 273-3900				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3900	
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a.		18 Y		Units Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Joe Grieve</b>				Signature <i>[Signature]</i>	
				Month Day Year <b>8 29 07</b>	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>				Signature <i>[Signature]</i>	
				Month Day Year <b>10 29 07</b>	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

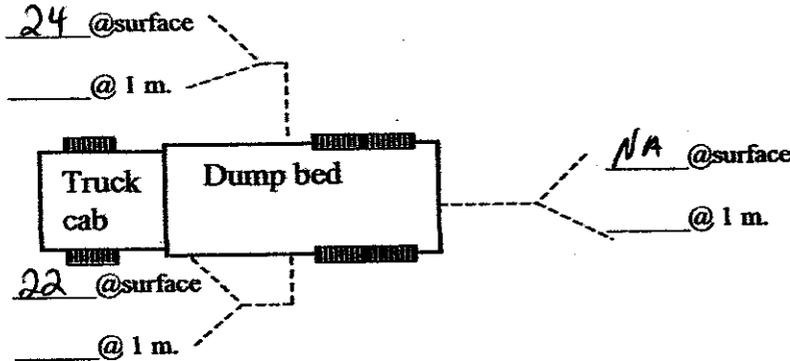
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1310 Surveyed by: Chicks, J Matson  
 Trucking Company: Gniere Truck license plate no./state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

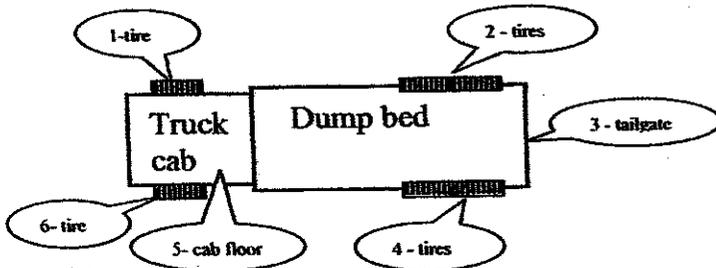
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592165

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Maple St Orlando, FL 32801 Phone ( ) 305-273-3446				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Park St Orlando, FL 32801 305-273-3446	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Hums Box		0010/07095 0511915		19. Total Quantity 20. Unit Wt/Vol	
b.				No. Type	
c.				Q. Cubic Yards R. Tons	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B...				Signature	
				Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN				Signature	
				Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR'S COPY

COM000033

511913

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	568318	0000
WEIGHMASTER		
S00056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	1:39 pm	
DATE OUT	TIME OUT	
29 August 2007	1:39 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592145		

Gross Weight 79,320.00 lb  
 Tare Weight 35,100.00 lb      Inbound ---  
 Net Weight 44,220.00 lb 22.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.11	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592165

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Dime St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				WT/Vol	
a.		2016-04-03-151915		1	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Benjamin				1 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
MARK PHILAN				8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

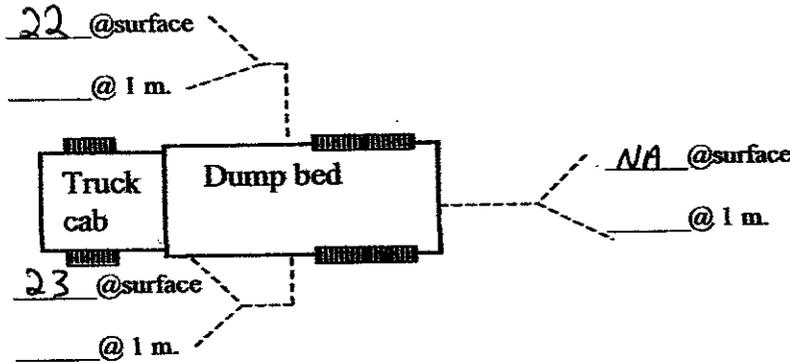
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1319 Surveyed by: CHicks, J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

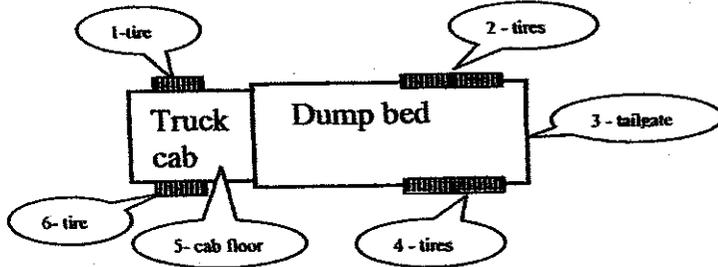
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592164

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 12400 North Golden, CO 80401 303-773-1000				5. Generating Location (if different) School of Mines Research Institute North West of 10th and North St Golden, CO 80401 303-273-3900			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name GOLDEN TRUCKING / 12		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address MONTANA		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Normal b. c. d.		17. Allied Waste Approval # and Exp. Date 0000000000000000		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Gene Beckman				Signature 			
				Month Day Year 8 21 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Gene Beckman				Signature 			
				Month Day Year 8 21 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature			
				Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature			
				Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511915 / 2

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558320	0000
WEIGHMASTER		
6200056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	1:45 pm	
DATE OUT	TIME OUT	
29 August 2007	1:43 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592164		

00 Gross Weight 79,300.00 lb  
 Tare Weight 37,700.00 lb      Inbound --  
 Net Weight 41,600.00 lb 20.80 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.80	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592164

1d

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name Greene Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1000 Hwy 80 Golden, CO APPROVAL # 560903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 687070908 YS1915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						Y-Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Benham		Signature		Month	Day Year		
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year		
Printed/Typed Name Drew Green		Signature		8	27 07		
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year		
Printed/Typed Name		Signature					
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

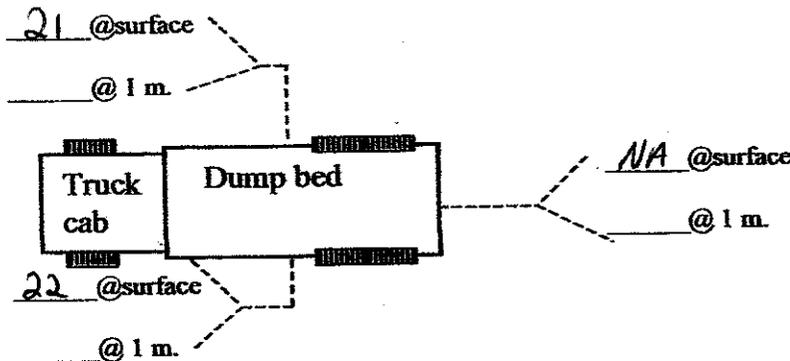
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1327 Surveyed by: CHicks, J Mattson

Trucking Company: Gniere Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

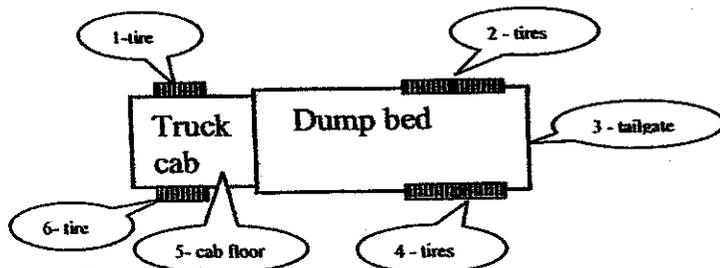
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

13  
0592147

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1000 Flamingo St Golden, CO 80401				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-6908	
4. Phone ( ) 303-273-6908		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facilities / Address R&D Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Sol		05127 076001 S11016			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bergman				Signature: [Signature]	
				Month Day Year: 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Rafael Calaza Lopez				Signature: [Signature]	
				Month Day Year: 08 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511915

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	538362	0000
WEIGHMASTER		
Y500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	1:57 pm	
DATE OUT	TIME OUT	
29 August 2007	1:57 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592147		

Gross Weight 75,460.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 39,760.00 lb 19.88 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.88	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592147

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 3001 1/2 Ave. S. Golden, CO 80401 303-275-0400				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Buckley Golden, CO 80402 303-275-6000				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 3500 14th St Golden, CO 80401			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	Drums	Tons	
a.		10/07/99 151605				7/6/99	Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Eric Benjamin				Signature: [Signature]		Month: 8	Day: 29	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name: Rafael Collazo Lopez				Signature: [Signature]		Month: 08	Day: 29	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name:				Signature:		Month:	Day:	Year:
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name:				Signature:		Month:	Day:	Year:

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

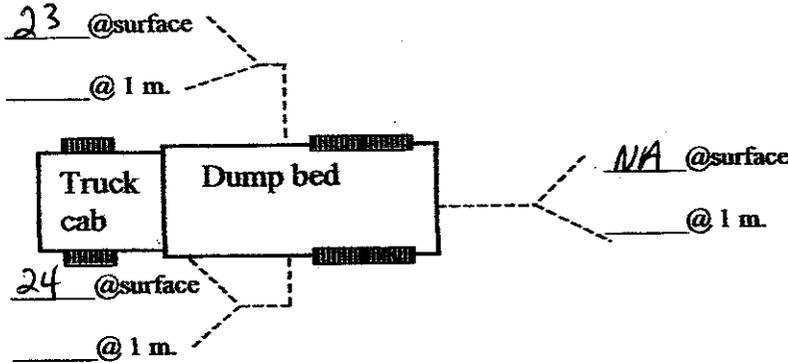
TRANSPORTER #1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1336 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

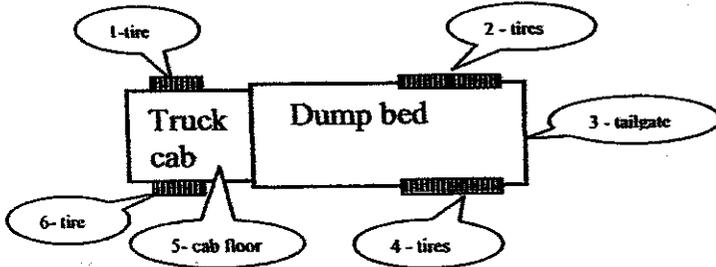
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

4161  
0582148

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1200 Atlantic St Golden, CO 80401 303-773-3800				5. Generating Location (if different) Rock School of Mineral Research Institute North West of 12th and I-70 St Golden, CO 80401 303-773-3800			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 2100 W. 20th GOLDEN, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 0000000000 (5/1/01)		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						7 Yards	7-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>			
				Month	Day		
				8	29		
				Year	07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Thomson				Signature <i>[Signature]</i>			
				Month	Day		
				8	29		
				Year	07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature			
				Month	Day		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature			
				Month	Day		
				Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033





# NON-HAZARDOUS WASTE MANIFEST

761  
0592148

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address University of Colorado Department of Geology 1002 Lincoln Dr Boulder, CO 80502				5. Generating Location (if different) School of Mines Research Institute North West of 13th and Lincoln Boulder, CO 80502 303-441-6000					
4. Phone ( )				6. Phone ( )					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address University of Colorado 1002 Lincoln Dr Boulder, CO 80502			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit W/Vol	
					No.	Type	Drums	Gallons	
a.									
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name: Steve Beahm				Signature: [Signature]			Month: 8	Day: 29	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name: [Name]				Signature: [Signature]			Month: 8	Day: 29	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name:				Signature:			Month:	Day:	Year:
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name:				Signature:			Month:	Day:	Year:

GENERATOR

TRANSPORTER

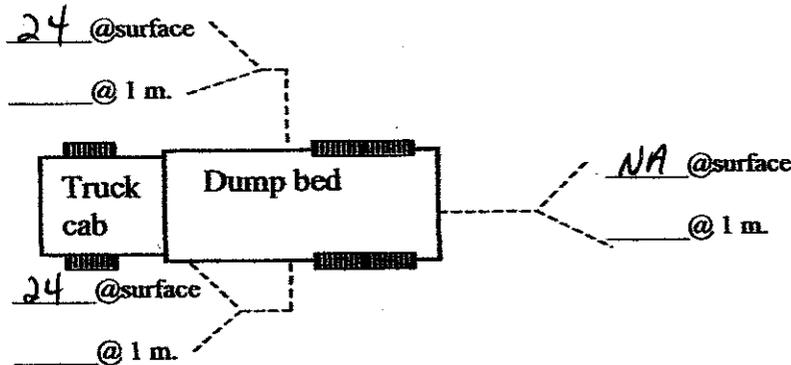
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1343 Surveyed by: CHicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

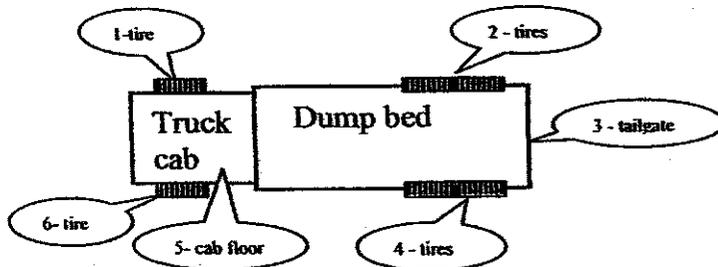
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592149

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 Phone ( ) 303-273-3988			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3988				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 201870709081511815		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						4	1-ton
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month Day Year 12 29 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Jose A Ruiz		Signature <i>[Signature]</i>		Month Day Year			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511935

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
730603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588540	0000
WEIGHMASTER		
250005a Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:07 pm	
DATE OUT	TIME OUT	
29 August 2007	2:07 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592149		

Gross Weight 74,840.00 lb  
Tare Weight 35,580.00 lb  
Net Weight 39,260.00 lb 19.63 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.63	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592149

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 600 North St Golden, CO 80401 Phone (303) 270-1044				5. Generating Location (if different) University of Colorado Research Institute North West of 12th and Grant St Golden, CO 80401 Phone (303) 270-3958			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 400 East St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 2010/01/01 - 2010/12/31		18. Containers			
				No.	Type	19. Total Quantity Pallets	20. Unit Wt/Vol Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve [unclear]		Signature [Signature]		Month 05	Day 11		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Jose A Ruiz		Signature [Signature]		Month	Day		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

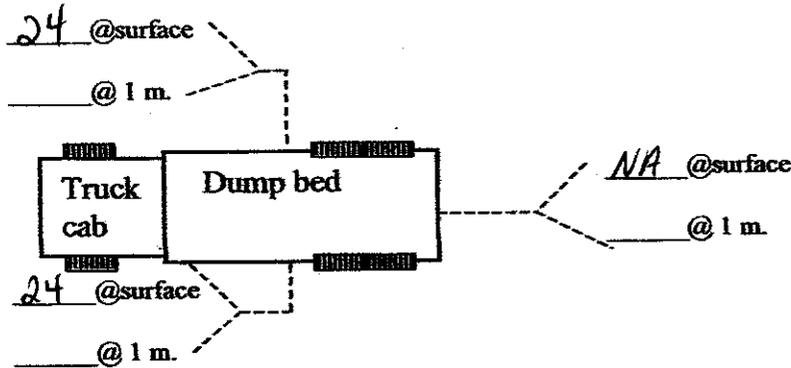
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1351 Surveyed by: CHicks, J Matson  
 Trucking Company: Gnere Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

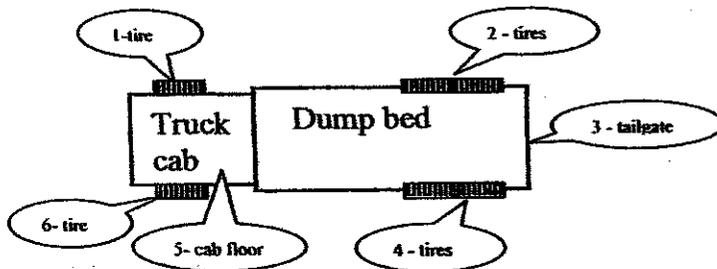
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

45  
0592150

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1340 Birch St Golden, CO 80401 303-773-6600				5. Generating Location (if different) University of Colorado Research Institute North West of 12th and Finn St Golden, CO 80401 303-773-3098	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3040 Hwy 90 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 00187-07208-YES-1011		18. Containers	
				No.	Type
a.				7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaton				Signature <i>[Signature]</i>	
				Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Michael...				Signature <i>[Signature]</i>	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511936

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558341	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:10 pm	
DATE OUT	TIME OUT	
29 August 2007	2:10 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592130		

Gross Weight 74,880.00 lb  
Tare Weight 36,980.00 lb  
Net Weight 37,900.00 lb 18.75 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.75	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

0592150

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1491 Davis St Suffolk County NY 11963-0807				5. Generating Location (if different) SUNY School of Marine Research Institute North West of 12th and Smith St Cooper Landing NY 12730-3908	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>				Signature <i>[Signature]</i>	
				Month Day Year <i>8/29/07</i>	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Name]</i>				Signature <i>[Signature]</i>	
				Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

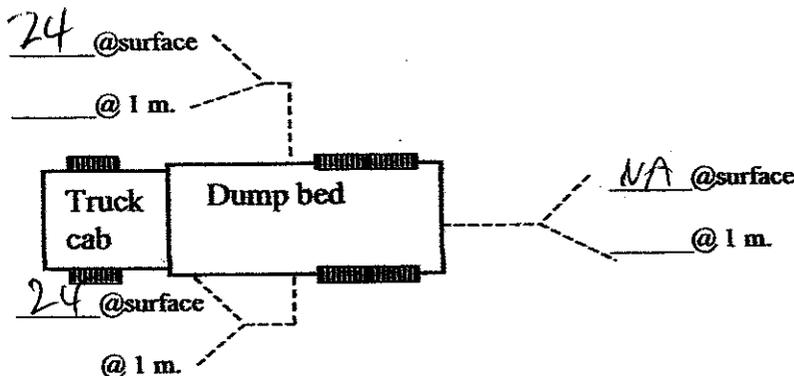
TRANSPORTER #1

CQM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1400 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gneve Truck license plate no. /state: 04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

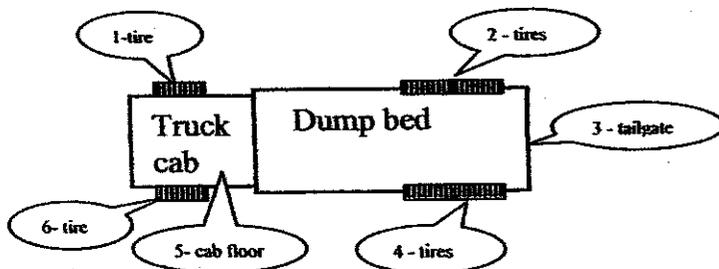
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2200				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

J1004  
0592151

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 Illinois St Golden, CO 80401 303-273-3639			5. Generating Location (if different) Coch School of Mines Research Institute North West of 13th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Coch School of Mines 800 N. New St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <u>Normal Soil</u>		17. Allied Waste Approval # and Exp. Date 00187 (07/08) - 5/19/15		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No.	
				Type	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <u>Steve Scoville</u>		Signature <i>[Signature]</i>		Month Day Year <u>8/29/15</u>	
24. TRANSPORTER #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <u>[Name]</u>		Signature <i>[Signature]</i>		Month Day Year <u>8/29/15</u>	
25. TRANSPORTER #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. FACILITY OWNER or OPERATOR: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511942

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588347	0000
WEIGHMASTER		
1600056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:19 pm	
DATE OUT	TIME OUT	
29 August 2007	2:19 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592151		

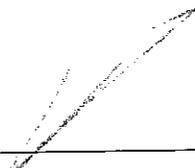
00 Gross Weight 71,240.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 35,600.00 lb 17.80 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.80	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

7004  
0592151

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 15111 Highway 5 Littleton, CO 80120 970-273-3326			5. Generating Location (if different) Earth School of Mines Research Institute Monte Vista 1.2th and 12th St Littleton, CO 80120 970-273-3326						
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Earth School of Mines 15111 Highway 5 Littleton, CO 80120		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. Iron Shavings b. c. d.		17. Allied Waste Approval # and Exp. Date 07-107-154(0) 12/15/10		18. Containers					
				19. Total Quantity		20. Unit Wt/Vol			
				No.		Type		Drums	
								Yards	
								Tons	
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Seaman			Signature <i>[Signature]</i>		Month Day Year 8/29/07				
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name H. ...			Signature <i>[Signature]</i>		Month Day Year 8/29/07				
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name			Signature		Month Day Year				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name			Signature		Month Day Year				

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

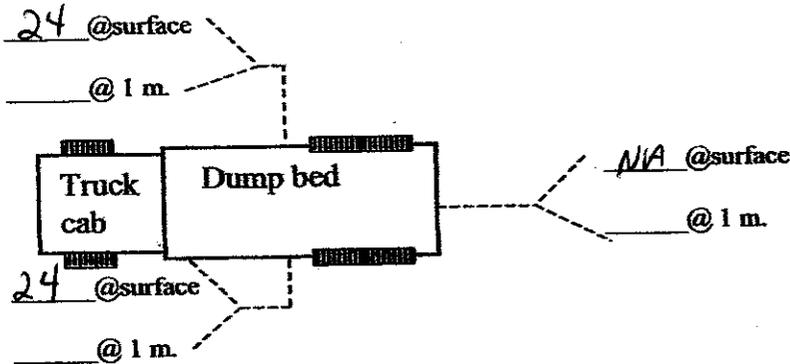
TRANSPORTER #1

QOM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1407 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

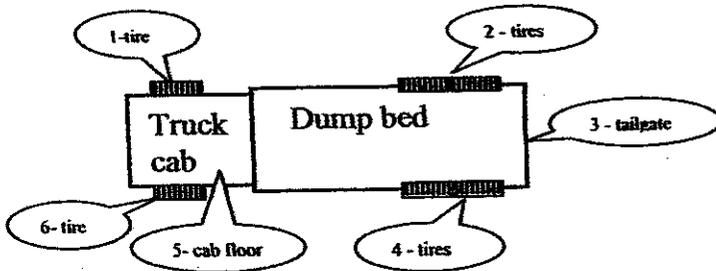
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592156

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 1st St Golden, CO 80401 303-273-3008				5. Generating Location (if different) School of Mines Research Institute North West of 12th and 13th St Golden, CO 80401 303-273-3008	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6001 Hwy 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		001610006-91015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Br...				Signature <i>[Signature]</i>	
				Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando...				Signature <i>[Signature]</i>	
				Month Day Year 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511943

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585345	0000
WEIGHMASTER		
#500056 Barbara Jo B		
DATE IN	TIME IN	
29 August 2007	2:24 pm	
DATE OUT	TIME OUT	
29 August 2007	2:24 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592156		

00 Gross Weight 75,580.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 39,000.00 lb 19.50 TN

Inbound ---

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.50	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0592156

76

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1900 Lincoln St Golden, CO 80401 303-279-6600			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Lincoln St Golden, CO 80401 303-279-6600		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6900 Hwy 8 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		0.0000000000000000			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Johnson				Signature <i>[Signature]</i>	
				Month	Day
				8	29
				Year	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Lopez				Signature <i>[Signature]</i>	
				Month	Day
				3	21
				Year	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

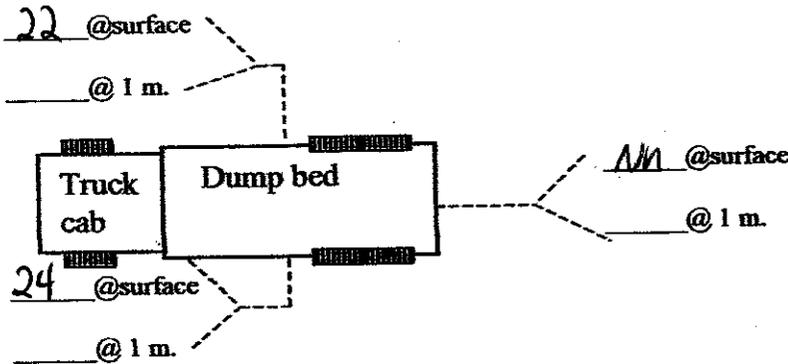
TRANSPORTER #1

COM000933

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1412 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

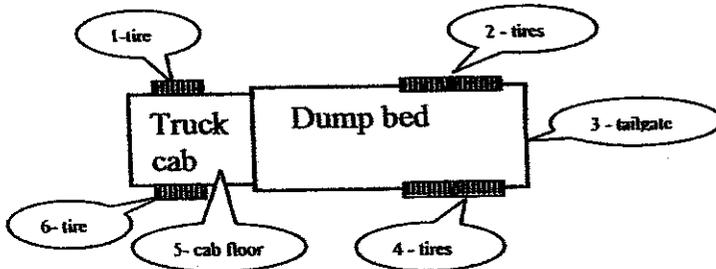
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592152

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-0160				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Park St Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 20701 Hwy 93 Golden, CO			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Tons	Gallons
a. Material			0018707400 8/1/15		18	Y	Yards	T-Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beckman			Signature 			Month 8	Day 29	Year 03
24. Transporter #1: Acknowledgement of Receipt of Materials			Printed/Typed Name Chuck Foy			Signature 		
25. Transporter #2: Acknowledgement of Receipt of Materials			Printed/Typed Name			Signature		
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature			Month	Day	Year

GENERATOR'S COPY

COM000033

511847

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
760408  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	582352	0000
WEIGHMASTER		
R500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:30 pm	
DATE OUT	TIME OUT	
29 August 2007	2:30 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592152		

00 Gross Weight 79,540.00 lb  
Tare Weight 36,540.00 lb Inbound -  
Net Weight 43,000.00 lb 21.50 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.50	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592152

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1400 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Saville Landfill 8500 Hwy 50 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm. Soil		CO18787002 1511015		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature	
				Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy				Signature	
				Month Day Year 08 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

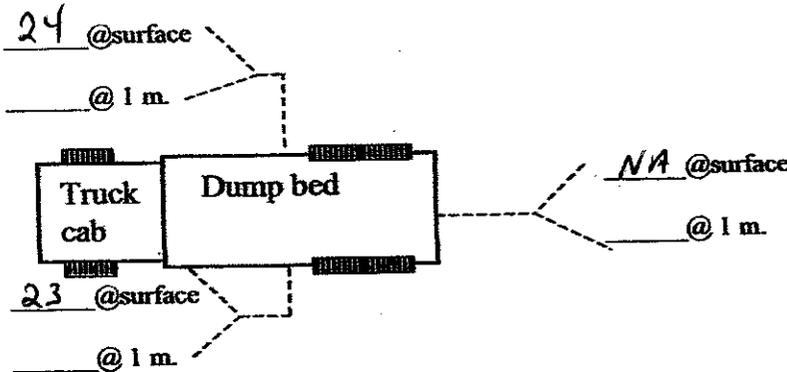
CPM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1425 Surveyed by: C Hicks, J Mattson

Trucking Company: Grieve Truck license plate no. /state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

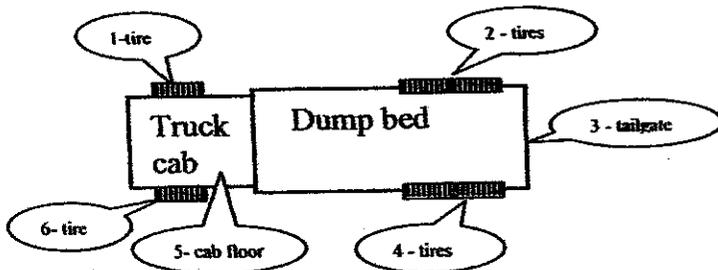
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

461  
0592155

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1600 Bruce St Golden, CO 80401 303-273-3000				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3936	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6900 Hwy 37 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Metal Soil		CO 07 07263 1511615		16	Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>	
				Month Day Year 5 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Muceay				Signature <i>[Signature]</i>	
				Month Day Year 5 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511955

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585335	0000
WEIGHMASTER		
000056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:41 pm	
DATE OUT	TIME OUT	
29 August 2007	2:41 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592155		

Gross Weight 79,300.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 44,040.00 lb 22.02 TN

Inbound ---

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.02	TN	SM-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

0592155

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 2070 W. 1st St Golden, CO 80401 303-273-3396				5. Generating Location (if different) School of Mines Research Institute North West of 12th and I Denst St Golden, CO 80401 303-273-3408	
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Recycling 39701 Hwy 391 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		NO LIST 70000 1511115		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brainer		<i>[Signature]</i>		8 29 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mike Mueay		<i>[Signature]</i>		8 29 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

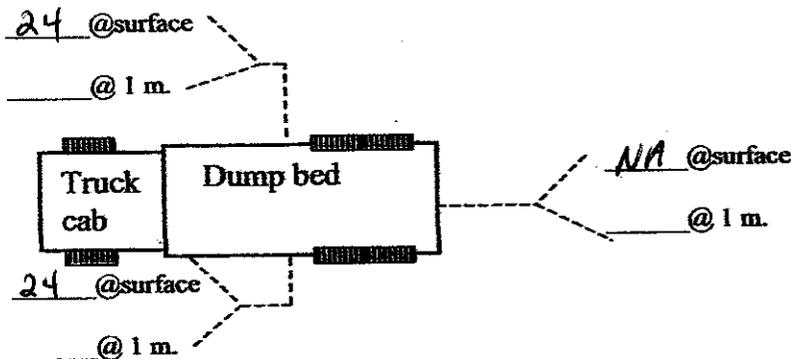
T/S/D FACILITY

TRANSPORTER #1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1432 Surveyed by: CHicks, J Matson  
 Trucking Company: Gniere Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

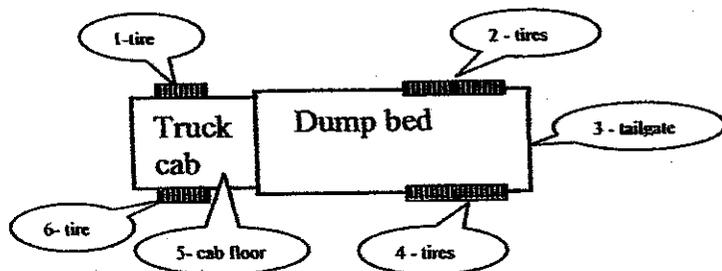
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

34  
0592153

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 BIRCH ST COLUMBIA, SC 29917 Phone (803) 273-0989				5. Generating Location (if different) Campus, School of Marine Research Institute North West of 12th and Forest COLUMBIA, SC 29917 Phone (803) 273-0989	
7. Transporter #1 Company Name <b>Joe Grievetracking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address FACILITY NAME RICKY RD 33 COLUMBIA, SC 29917		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non Sol		17. Allied Waste Approval # and Exp. Date 2004070004 11/1/04		18. Containers	
				No.	Type
b.				18	Y
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Bingham</b>				Signature <i>[Signature]</i>	
				Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>				Signature <i>[Signature]</i>	
				Month Day Year 08/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR'S COPY

CGM000033

24 511915

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586335	0000
WEIGHMASTER		
1800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:48 pm	
DATE OUT	TIME OUT	
29 August 2007	2:48 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592153		

00 Gross Weight 80,480.00 lb  
 Tare Weight 37,200.00 lb Inbound --  
 Net Weight 43,280.00 lb 21.64 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.64	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *K. Keas*



# NON-HAZARDOUS WASTE MANIFEST

24  
0592153

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1540 Illinois St Golden, CO 80401 303-272-3666				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and East of Golden, CO 80401 303-272-3666			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name <b>Joe Grievetrucking</b>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1540 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a.				18	Y	Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <b>Steve Bergman</b>				Signature		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>Ken Shannon</b>				Signature		Month Day Year 08/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

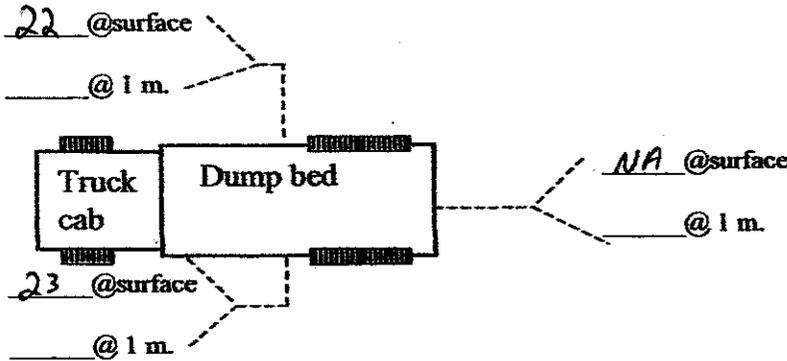
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1440 Surveyed by: Chicks, J Mattson

Trucking Company: Gniere Truck license plate no./state: 23

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

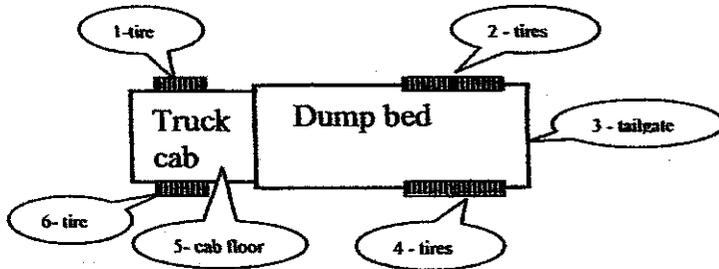
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592154

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 Blake St. Golden, CO 80401 303-273-3354				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Bath St Golden, CO 80401 303-273-3358	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1800 Blake St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		CO-LS7-0700081511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beaman				Signature: [Signature]	
				Month Day Year: 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: MARIC PHELAN				Signature: [Signature]	
				Month Day Year: 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511958

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contractr Y811915

SITE	TICKET	GRID
01	582341	0000
WEIGHMASTER		
H000056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	2:56 pm	
DATE OUT	TIME OUT	
29 August 2007	2:56 pm	
VEHICLE	ROLL OFF	
Y811915		
REFERENCE	ORIGIN	
592154		

00 Gross Weight 82,560.00 lb  
 Tare Weight 35,100.00 lb Inbound -  
 Net Weight 47,460.00 lb 23.73 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.73	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592154

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1971 Illinois St. Golden, CO 80401 303-273-0900			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3955		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No.	
				Type	
a.				7 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beaman</i>			Signature <i>[Signature]</i>		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Mark Phelan</i>			Signature <i>[Signature]</i>		Month Day Year 8/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

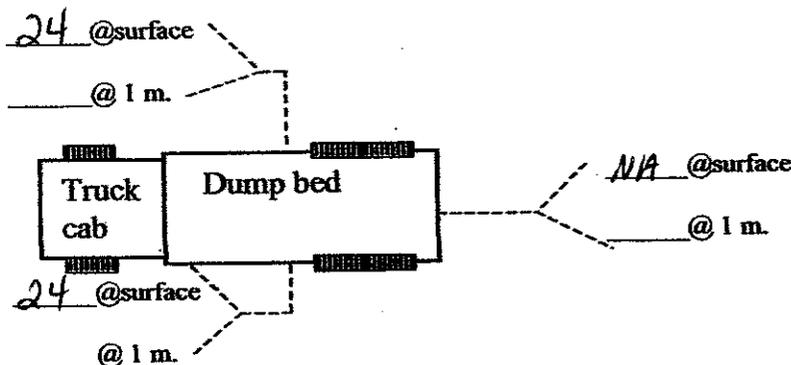
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1448 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 12

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

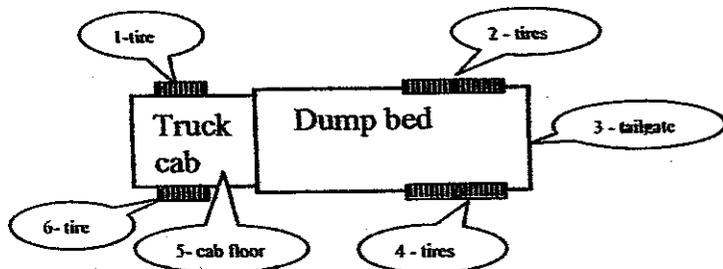
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2260		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592063

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 450 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3095		
4. Phone ( ) 303-273-4000			6. Phone ( )		
7. Transporter #1 Company Name Greene Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foundry Landfill SOA, May 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Heavy Soil		17. Allied Waste Approval # and Exp. Date 20167679084514515		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beaman			Signature 		Month Day Year 8 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Drew Olson			Signature 		Month Day Year 8 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511981

FOOTHILLS LANDFILL  
2700 HIGHWAY 93  
GOLDEN  
CO  
806608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	328367	0000
WEIGHMASTER		
7500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	3:05 pm	
DATE OUT	TIME OUT	
29 August 2007	3:05 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592063		

Gross Weight 62,300.00 lb  
Tare Weight 37,700.00 lb  
Net Weight 44,600.00 lb 22.30 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.30	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



12  
SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0592063

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303 273 3900		
4. Phone ( ) 303-273-3900			6. Phone ( )		
7. Transporter #1 Company Name Gravel Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontiers Landfill 2200 Hwy 93 Golden, CO ACCOUNT # 000003 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non: Soil		CO 167 070908 Y511815		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 8 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Don J. Olson			Signature		Month Day Year 8 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

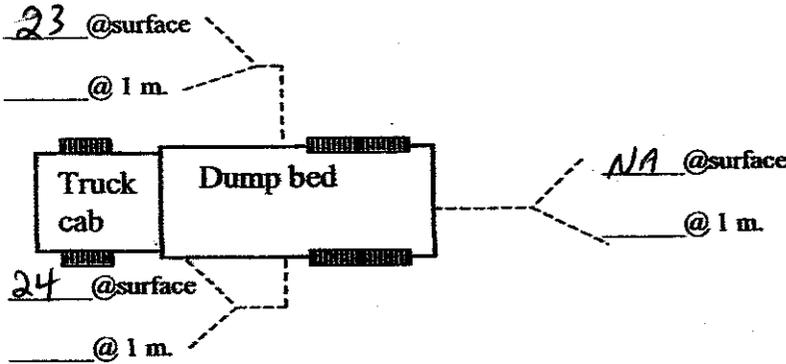
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1455 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

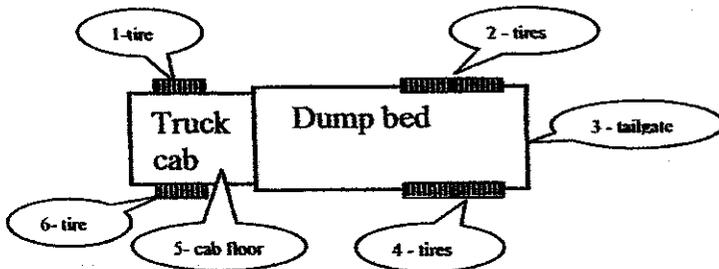
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

10  
0592062

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St Golden, CO 80401 303-273-0000			5. Generating Location (if different) School of Mines Research Institute North West of 120 <sup>th</sup> and Fenchel St Golden, CO 80401 303-273-0000		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1570 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Waste		0510710000 Y011010		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benken			Signature <i>[Signature]</i>		Month Day Year 12/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Walter Colares Lopez			Signature <i>[Signature]</i>		Month Day Year 08/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511915

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760693  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588371	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	3:14 pm	
DATE OUT	TIME OUT	
29 August 2007	3:14 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572042		

Gross Weight 82,600.00 lb  
Tare Weight 35,700.00 lb Inbound --  
Net Weight 46,900.00 lb 23.45 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.45	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

10  
0592062

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address 1977 Grand St Garden City, CO 80441 303-275-2500				5. Generating Location (if different) School of Mines Research Institute North West of 17th and Birch St Garden, CO 80441 303-275-2500				
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone *			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Allied Waste			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Hazardous			17. Allied Waste Approval # and Exp. Date 30117707087511015		18. Containers		19. Total Quantity	20. Unit
					No.	Type	Drums	Wt/Vol
b.					18			Tons
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brakman			Signature <i>[Signature]</i>			Month Day Year 12/29/07		
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Thomas Colloredo Lopez			Signature <i>[Signature]</i>			Month Day Year 08/29/07		
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name			Signature			Month Day Year		
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name			Signature			Month Day Year		

GENERATOR

TRANSPORTER

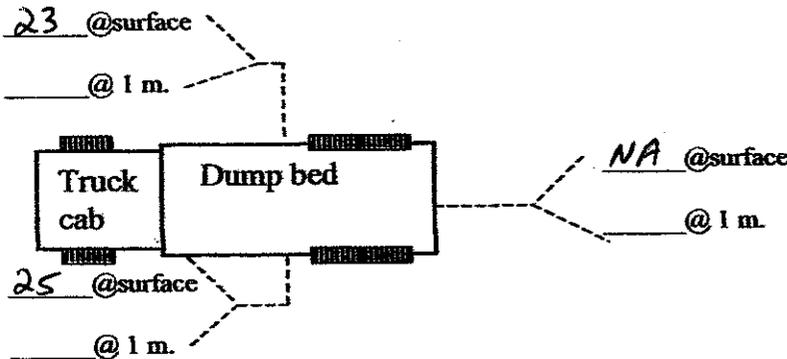
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1503 Surveyed by: Chicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 961

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

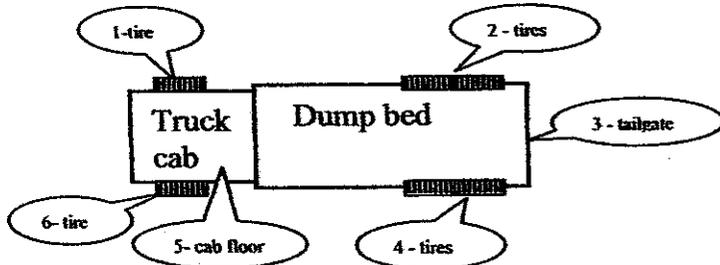
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592139

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Ditchell Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Heavy Soil		00167970001511015		19. Total Quantity 20. Unit Wt/Vol	
b.				Drums Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bingham			Signature <i>[Signature]</i>		Month Day Year 2 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]			Signature <i>[Signature]</i>		Month Day Year 2 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511971

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
750608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585377	0000
WEIGHMASTER		
K50005c Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	3:22 pm	
DATE OUT	TIME OUT	
29 August 2007	3:22 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592139		

Gross Weight 79,380.00 lb  
 Tare Weight 34,400.00 lb Inbound -  
 Net Weight 44,980.00 lb 22.49 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.49	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE A. M.



# NON-HAZARDOUS WASTE MANIFEST

# 0592139

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Blaine St Ordnance, CO 80401 303-473-0600			5. Generating Location (if different) School of Mines Research Institute North West of 12th and South St Ordnance, CO 80401 303-473-0600		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortina Landfill 20701 Hwy 50 Ordnance, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Waste Soil		001671700005511015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benjamin			Signature:		Month Day Year: 2/19/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year: 2/19/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

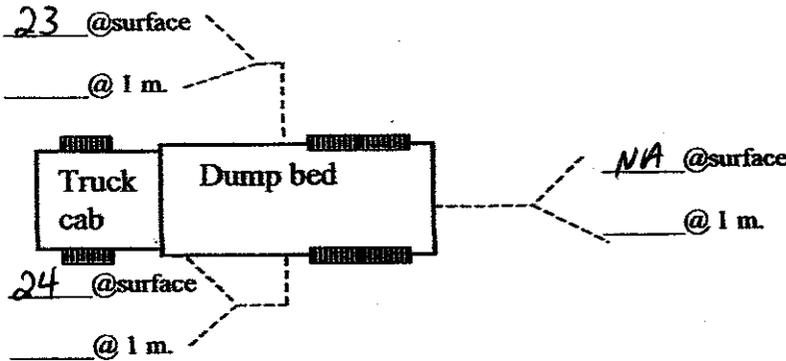
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1511 Surveyed by: C Hicks, J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

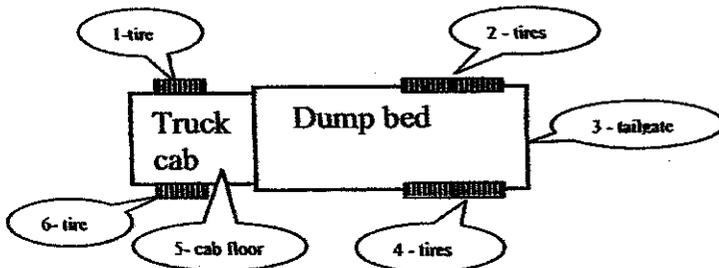
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

7001  
0592140

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1770 Lincoln St Golden, CO 80401 303-273-3600			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Grand Golden, CO 80401 303-273-3900				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Allied Waste 1000 Hwy 20 Golden, CO 80401 # 303-273-3600 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Arsenic Soil		CO 887 070508 15111915		18	X	Y-Yards	T-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name: Steve Beckman			Signature:		Month Day Year 1 29 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name: Jose A Ruiz			Signature:		Month Day Year 1 29 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name:			Signature:		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name:			Signature:		Month Day Year		

GENERATOR'S COPY

COM00033

511977

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558383	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	3:36 pm	
DATE OUT	TIME OUT	
29 August 2007	3:36 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592140		

Gross Weight 26,890.00 lb  
 Tare Weight 35,580.00 lb Inbound --  
 Net Weight 41,000.00 lb 20.65 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.65	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

7001  
0592140

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Illinois St. Golden, CO 80401 303-273-3636			5. Generating Location (if different) Colorado School of Mines Research Institute North West at 12th and Birch St Golden, CO 80401 303-273-3636		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address South Platte Landfill Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Normal Soil		70167670001711375		18 Y 7 Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkowski			Signature 		Month Day Year 1 29 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Jose W Ruiz			Signature 		Month Day Year 3 19 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

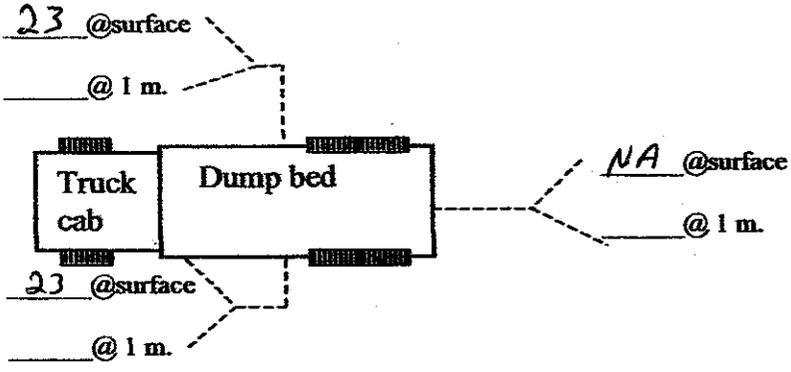
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1519 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

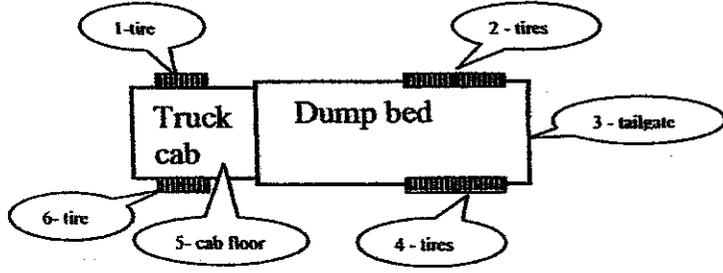
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

95  
0592141

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Ogden, CO 84401 4. Phone ( ) 303-273-3666			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Harvard Ogden, CO 84401 303-273-3668 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fountain Valley 1500 Hwy 92 Ogden, CO 84401 14. US EPA ID Number		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Metal Shill		COLLEGE 7511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beatty			Signature: <i>[Signature]</i>		Month Day Year: 8/29/04
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Albert Ruiz			Signature: <i>[Signature]</i>		Month Day Year: 8/29/04
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR'S COPY

COM000033

511978

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588354	0000
WEIGHMASTER		
S00052 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	3:37 pm	
DATE OUT	TIME OUT	
29 August 2007	3:37 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592141		

Gross Weight 76,540.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 39,560.00 lb 19.78 TN

Included -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.78	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

95  
0592141

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Illinois St Golden, CO 80401 303-273-5000			5. Generating Location (if different) North West of 12th and Birch St Golden, CO 80401 303-273-5000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a. Iron Soil		0011707093-011015		7 Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Berman				Signature [Signature]	
				Month Day Year 5 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Signature]				Signature [Signature]	
				Month Day Year 8 21 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

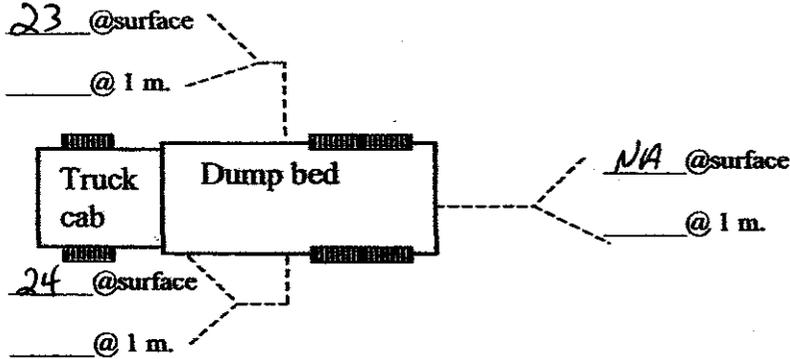
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1525 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniewe Truck license plate no. /state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

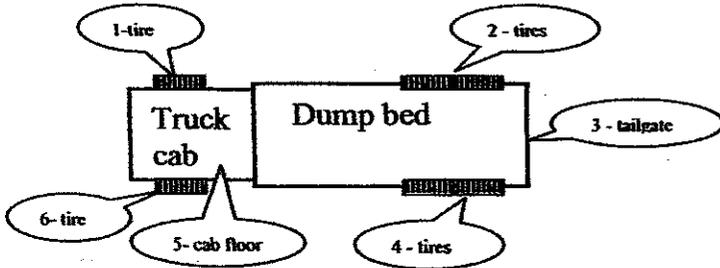
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592142

1204

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1907 Higgins St Golden, CO 80401 303-273-3950			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3950		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 May St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Heavy Soil		03150370001511315			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beal			Signature <i>[Signature]</i>		Month Day Year 2/19/02
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Heather Kasper			Signature <i>[Signature]</i>		Month Day Year 2/19/02
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000030

511980

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588586	0000
WEIGHMASTER		
SC0056 Barbara Jo E		
DATE IN	TIME IN	
29 August 2007	3:40 pm	
DATE OUT	TIME OUT	
29 August 2007	3:40 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592142		

Gross Weight 75,680.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 40,040.00 lb 20.02 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.02	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

1204  
0592142

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1305 Illinois St Golden, CO 80401 303-273-3000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000			
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Heavy Soil b. c. d.		17. Allied Waste Approval # and Exp. Date AW-107-01204-05/10/15		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						7 YARDS	TONS
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Berthous				Signature <i>[Signature]</i>			
				Month Day Year 7 29 03			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Heather Meyer				Signature <i>[Signature]</i>			
				Month Day Year 8 1 03			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature			
				Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature			
				Month Day Year			

GENERATOR

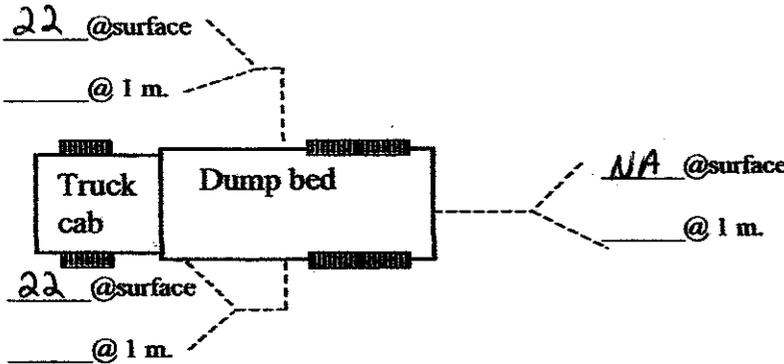
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1534 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

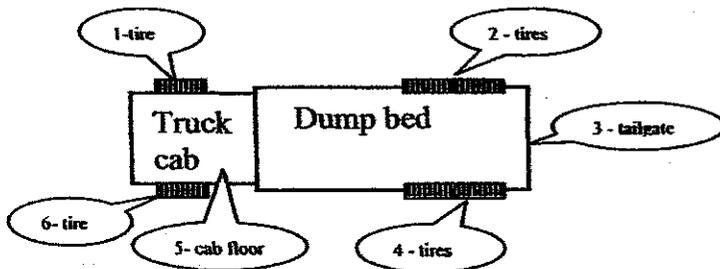
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 210				> 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

# 0592143

96

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1810 W. 10th St Golden, CO 80401 303-273-3054			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dicks St Golden, CO 80401 303-273-3054		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Control 2010 Hwy 28 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Normal Soil		COLE 07960 1011915		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bertram		Signature: <i>[Signature]</i>		Month Day Year: 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando Barrera		Signature: <i>[Signature]</i>		Month Day Year: 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

511985

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
740603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	528391	0000
WEIGHMASTER		
160056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	3:50 pm	
DATE OUT	TIME OUT	
29 August 2007	3:50 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592143		

Gross Weight 79,960.00 lb  
Tare Weight 36,580.00 lb Inbound -  
Net Weight 43,380.00 lb 21.69 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.69	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592143

96

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Environmental Science 1000 W. 12th St Denver, CO 80202 303-733-0008				5. Generating Location (if different) Environmental Science at Ames Research Institute North West of 12th and Grand Lakewood, CO 80401 303-733-0008	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Environmental Science 1000 W. 12th St Lakewood, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Soil		01101070000 10/10/01			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Berkman				Signature: <i>[Signature]</i>	
				Month: 8 Day: 29 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando Herrera				Signature: <i>[Signature]</i>	
				Month: 8 Day: 29 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

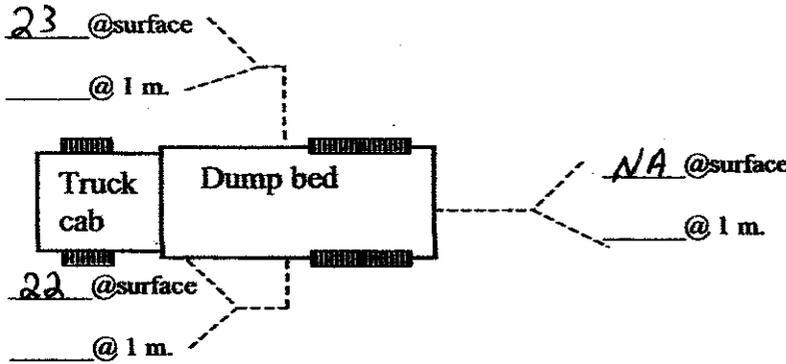
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1542 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

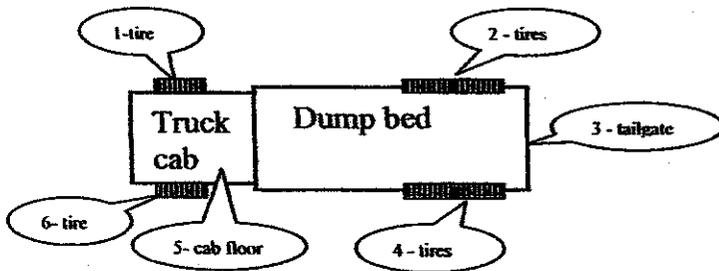
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592146

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-273-3330			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Green St. Golden, CO 80401 303-273-3330		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8000 N. New Rd. Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Heavy Soil		CSC 127-070906 Y5-10-15		18 Y	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]			Signature [Signature]		Month Day Year 6 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Fay			Signature [Signature]		Month Day Year 08 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR'S COPY

COM000033

511992

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588399	0020
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	4:03 pm	
DATE OUT	TIME OUT	
29 August 2007	4:03 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592146		

Gross Weight 21,140.00 lb  
 Tare Weight 36,540.00 lb      Inbound --  
 Net Weight 44,600.00 lb 22.30 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.30	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

8  
0592146

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3993			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3993		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St. Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. News Sol		CO 107 030908 YS 11015		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman				6 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Fay				08 09 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
Gordon H. ...				8 29 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

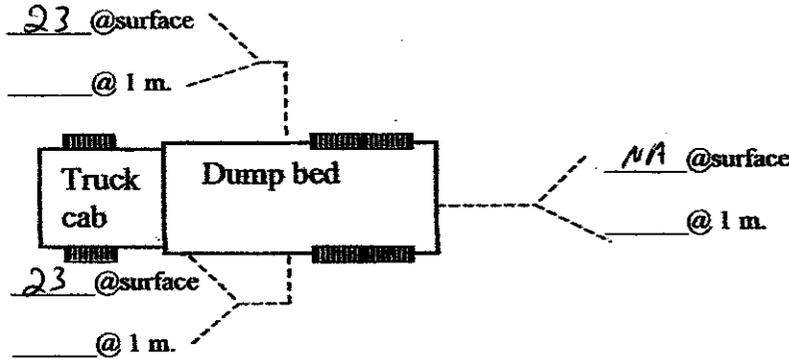
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1550 Surveyed by: Chicks, J Mattson  
 Trucking Company: Gniewe Truck license plate no./state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

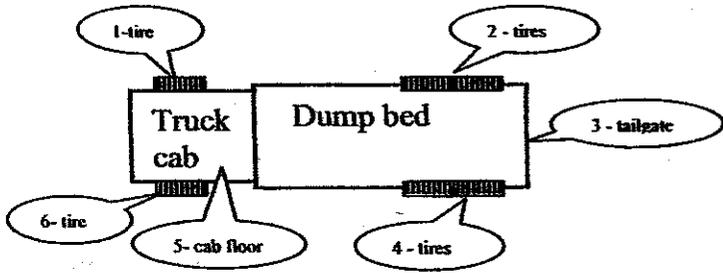
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

461  
0592144

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1300 W. 1st St G. L. Inc. CO 80401 303-271-3600			5. Generating Location (if different) School of Water Research Institute North West of 13th and Birch St Denver, CO 80401 303-271-3600				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Poudre Canyon 8000 Hwy 40 (Between CO-147 and #20000 towards summit of Arapahoe)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Heavy Oil b. c. d.		17. Allied Waste Approval # and Exp. Date CO 147 07008 10/19/15		18. Containers			
				No.	Type	19. Total Quantity 1000 lbs	20. Unit Wt/Vol Trucks
				16			
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman			Signature <i>[Signature]</i>		Month Day Year 8 29 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Mike Murray			Signature <i>[Signature]</i>		Month Day Year 8 29 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

00000033

511988

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	589403	0000
WEIGHMASTER		
K500036 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	4:09 am	
DATE OUT	TIME OUT	
29 August 2007	4:09 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592144		

Contract: Y511915

Gross Weight 80,040.00 lb  
Tare Weight 34,260.00 lb  
Net Weight 45,780.00 lb 22.89 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.89	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

461  
0592144

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1200 Lincoln St. Suite 100 Denver, CO 80202 303-733-3000				5. Generating Location (if different) School of Law North West of 12th and Grand Denver, CO 80202 303-733-3000					
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Drum	Drums	
a. Non Sol			POLYETHYLENE 1/2 1975		18		4000	Gals	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Brinkman					Signature <i>[Signature]</i>		Month 8	Day 29	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Mike Murray					Signature <i>[Signature]</i>		Month 8	Day 29	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature		Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name					Signature		Month	Day	Year

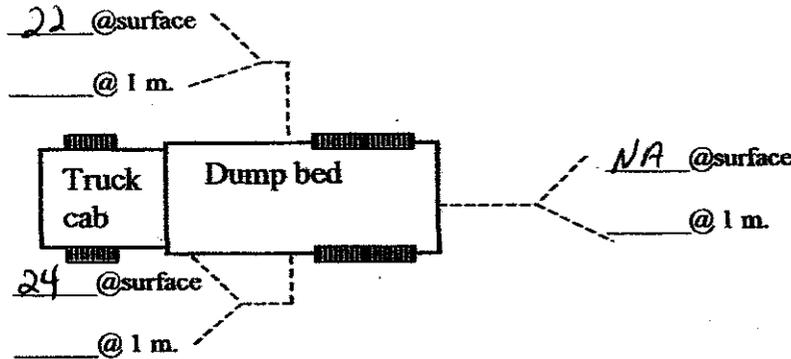
GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1558 Surveyed by: Chicks, J Mattson

Trucking Company: Gniewe Truck license plate no./state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

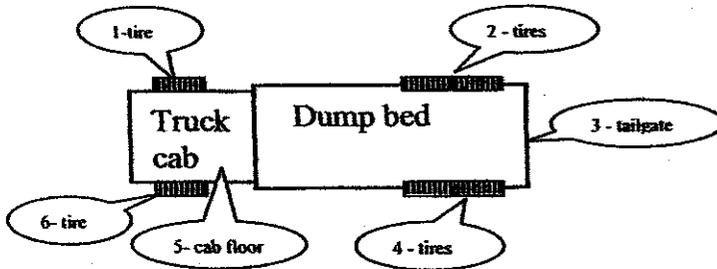
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

24  
0592052

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address 1500 Riverside St Golden, CO 80401 303-273-3368			5. Generating Location (if different) School of Mines Research Institute North West of 12th and North Golden, CO 80401 303-273-3368										
4. Phone ( )			6. Phone ( )										
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone									
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone									
13. Designated T/S/D Facility Name and Site Address 3000 Hwy 92 Golden, CO		14. US EPA ID Number		15. Facility's Phone									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers									
a. <b>Fluor dust</b>		0067 07040 1511315		<table border="1"> <tr> <th>No.</th> <th>Type</th> <th>19. Total Quantity</th> <th>20. Unit</th> </tr> <tr> <td></td> <td></td> <td>6 Yards</td> <td>7 Tons</td> </tr> </table>		No.	Type	19. Total Quantity	20. Unit			6 Yards	7 Tons
No.	Type	19. Total Quantity	20. Unit										
		6 Yards	7 Tons										
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name <b>Steve Benner</b>			Signature <i>[Signature]</i>		Month Day Year 8/29/07								
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name <b>Ken Shannon</b>			Signature <i>[Signature]</i>		Month Day Year 08/29/07								
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name			Signature		Month Day Year								
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name			Signature		Month Day Year								

GENERATOR'S COPY

COM000033

14 511915

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
806008  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	528406	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	4:14 pm	
DATE OUT	TIME OUT	
29 August 2007	4:14 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592052		

Gross Weight 83,660.00 lb  
 Tare Weight 37,200.00 lb      Inbound --  
 Net Weight 46,460.00 lb 23.23 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.23	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Ker*



# NON-HAZARDOUS WASTE MANIFEST

24  
0592052

Please print or type.

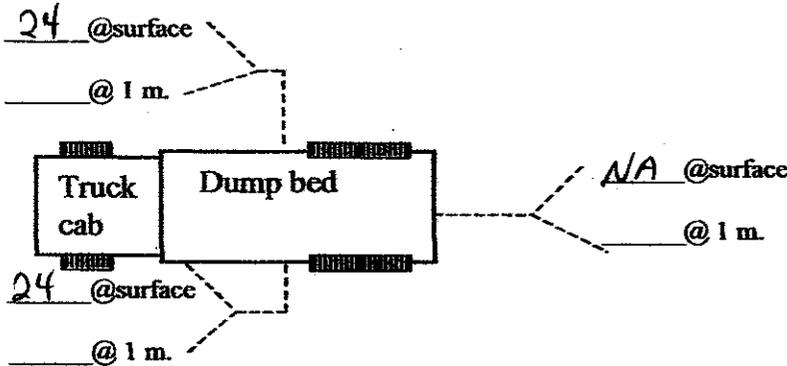
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3288			5. Generating Location (if different) Servco of Mines Research Institute North West of 13th and Lincoln Golden, CO 80401 303-273-3088		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <b>Normal soil</b>		17. Allied Waste Approval # and Exp. Date 10167-00003-0511015		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Siege Benner</b>			Signature <i>Siege Benner</i>		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>			Signature <i>Ken Shannon</i>		Month Day Year 08/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 1605 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniere Truck license plate no. /state: 23

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

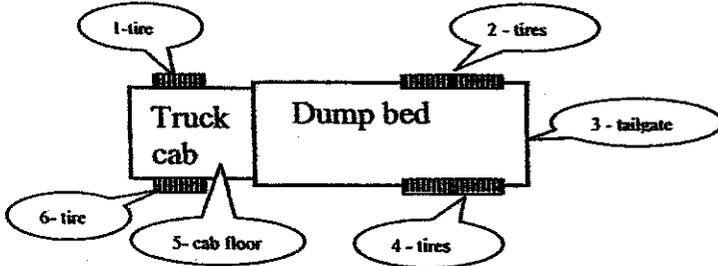
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592145

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1000 N. 1st St. Golden, CO 80401 303-773-1000				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Broadway Golden, CO 80401 303-773-1000	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Rocky Mountain 6200 Hwy 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Haz		0015707000 Y511015		19. Total Quantity 5 Drums	
b.				20. Unit Wt/Vol 5 Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Brennan				Signature: [Signature]	
				Month: 6 Day: 29 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Mark Phelan				Signature: [Signature]	
				Month: 8 Day: 29 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

512000

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558407	0000
WEIGHMASTER		
R500036 Barbara Jo E		
DATE IN	TIME IN	
29 August 2007	4:20 pm	
DATE OUT	TIME OUT	
29 August 2007	4:20 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592145		

Gross Weight 82,820.00 lb  
Tare Weight 35,100.00 lb  
Net Weight 47,720.00 lb 23.86 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.86	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592145 <sup>25</sup>

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address 1000 West St DUNDY, CO 80631 303 773 8841				5. Generating Location (if different) School of Mines Research Institute 1000 West 117th and Harold DUNDY, CO 80611 303 773 8841									
4. Phone ( )				6. Phone ( )									
7. Transporter #1 Company Name				8. US EPA ID Number				9. Transporter #1's Phone					
10. Transporter #2 Company Name				11. US EPA ID Number				12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address 1000 West 117th and Harold DUNDY, CO 80611				14. US EPA ID Number				15. Facility's Phone					
16. Waste Shipping Name and Description a. Metal Sol				17. Allied Waste Approval # and Exp. Date CO 187-1A/3A 10/1/1915				18. Containers		19. Total Quantity		20. Unit Wt/Vol	
								No.		Type		G Drums	
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Beaman				Signature 				Month 8		Day 29		Year 17	
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name Mark Phelan				Signature 				Month 8		Day 29		Year 17	
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name				Signature				Month		Day		Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000033

Pile B 8/29/07

## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Griewe 8	8/29/07	0700	0715	18
Murray 461		0700	0721	
Griewe 24		0700	0727	
Griewe 23		0700	0733	
Griewe 12		0700	0740	
Collazo 13		0700	0748	
Marquez 961		0710	0757	
JD01		0710	0803	
Ruiz 95		0720	0810	
Marquez 96		0720	0816	
JD 04		0720	0822	
Griewe 8		0820	0830	
Murray 461		0825	0837	
Griewe 24		0830	0843	
Griewe 23		0835	0849	
Griewe 12		0840	0856	
Collazo 13		0900	0910	
Marquez 961		0905	0920	
JD01		0920	0926	
Ruiz 95		0925	0931	

80  
77.8  
81.6  
82.4  
82.0  
81.4  
82.2  
79.3  
77.9  
80.0  
74.5  
83.1  
78.6  
81.2  
81.7  
83.3  
80.9  
78.8  
76.8  
76.5

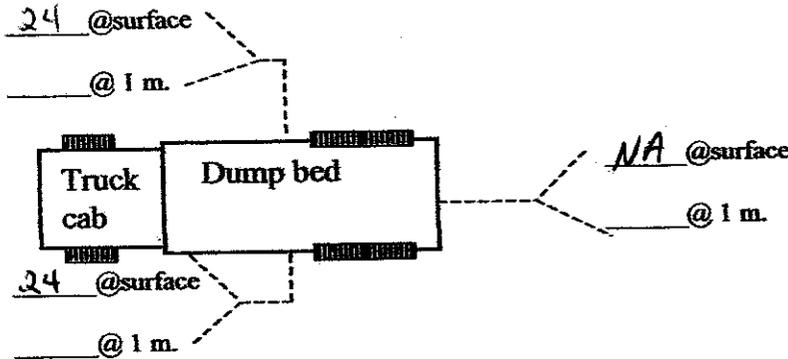
# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Marquez 96	8/29	0925	0937	18	78.2
JD 04		0935	0943		75.3
Grieve 8		0940	0951		81.6
Murray 461		0945	0958		79.5
Grieve 24		0950	1005		81.7
Grieve 23		0955	1013		83.3
Grieve 12		0955	1020		81.8
Collazo 13		1005	1027		81.1
Marquez 961		1027	1035		80.2
JD 01		1035	1043		80.1
Ruiz 95		1040	1047		79.0
Marquez 96		1045	1052		79.0
JD 04		1050	1059		75.5
Grieve 8		1050	1107		84.1
Murray 461		1100	1117		80.9
Grieve 24		1105	1123		80.7
Grieve 23		1110	1130		81.6
Grieve 12		1115	1138		83.5
Collazo 13		1130	1149		80.7
Marquez 961	↓	1140	1201	↓	81.1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0715 Surveyed by: Chicks, J Mattson  
 Trucking Company: Gniere Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

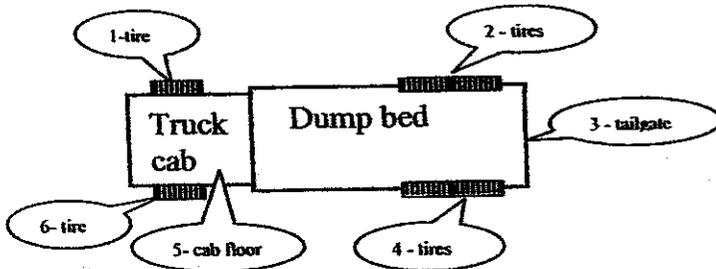
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592196

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1001 Bluffs St Golden, CO 80401 303-270-3430			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Barth St Golden, CO 80401 303-270-3868		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1001 Bluffs St Golden, CO 80401 ADVISORY # 1001 (Golden School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		C 1167 070015 (011316)		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature	
				Month Day Year 12 . 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Fay				Signature	
				Month Day Year 08 27 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

011500

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 558192	GRID 0000
WEIGHMASTER		
8000056 Barbara Jo S		
DATE IN 29 August 2007	TIME IN 7:30 am	
DATE OUT 29 August 2007	TIME OUT 7:30 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592192	ORIGIN	

Contract: Y511915

00 Gross Weight 80,020.00 lb  
 Tare Weight 36,540.00 lb      Inbound ---  
 Net Weight 43,480.00 lb 21.74 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.74	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592196

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of													
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998														
4. Phone ( )		6. Phone ( )															
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone													
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone													
13. Designated T/S/D Facility Name and Site Address Frontline Can Mill 5500 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone													
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers													
a. Num Sol		071107 070905 Y511915		<table border="1"> <tr> <th colspan="2">18. Containers</th> <th>19. Total Quantity</th> <th>20. Unit Wt/Vol</th> </tr> <tr> <th>No.</th> <th>Type</th> <th>Drums</th> <th>Gallons</th> </tr> <tr> <td>18</td> <td>Y</td> <td>7</td> <td>Tons</td> </tr> </table>		18. Containers		19. Total Quantity	20. Unit Wt/Vol	No.	Type	Drums	Gallons	18	Y	7	Tons
18. Containers		19. Total Quantity	20. Unit Wt/Vol														
No.	Type	Drums	Gallons														
18	Y	7	Tons														
b.																	
c.																	
d.																	
21. Additional Descriptions for Materials Listed Above																	
22. Special Handling Instructions and Additional Information																	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																	
Printed/Typed Name		Signature		Month Day Year													
Steve Brinkman				8 07													
24. Transporter #1: Acknowledgement of Receipt of Materials																	
Printed/Typed Name		Signature		Month Day Year													
Chuck Fox				08 29 07													
25. Transporter #2: Acknowledgement of Receipt of Materials																	
Printed/Typed Name		Signature		Month Day Year													
26. Discrepancy Indication Space																	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																	
Printed/Typed Name		Signature		Month Day Year													
Curtis...				08 29 07													

GENERATOR

TRANSPORTER

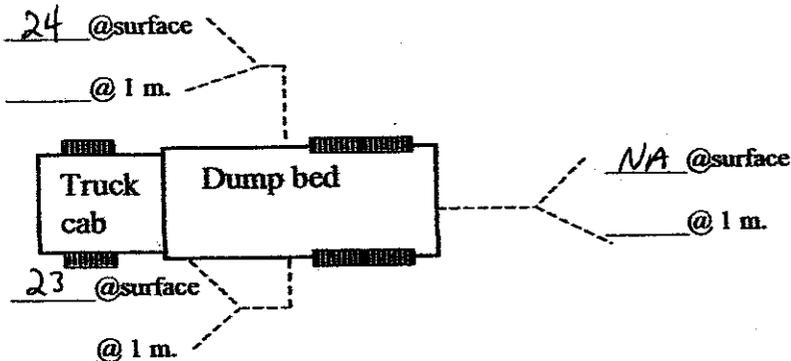
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0721 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniere Truck license plate no. /state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

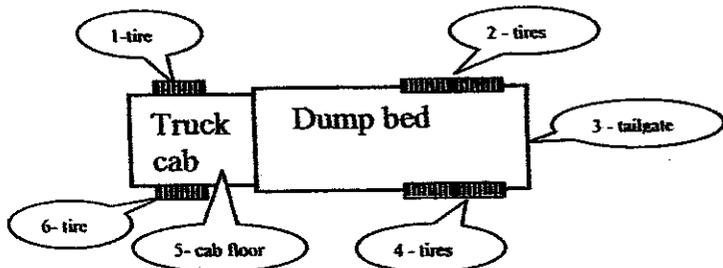
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

461  
0592195

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St. Golden, CO 80401 303-771-1046			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-771-3048		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado State 2000 Hwy 52 Golden, CO 80401 (Allied Waste # 0592195 - Colorado Dept of Env)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Empty Box		17. Allied Waste Approval # and Exp. Date CO 057-0008 12/31/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benken			Signature:		Month Day Year: 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Mike Murray			Signature:		Month Day Year: 8/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR'S COPY

COM09033

311803

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
980403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	288095	0000
WEIGHMASTER		
500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	7:39 am	
DATE OUT	TIME OUT	
29 August 2007	7:37 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592195		

Gross Weight 77,720.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 43,500.00 lb 21.76 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.76	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592195

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Canton, OH 44701 303 777-1000			5. Generating Location (if different) School of Mass Research Institute North West of 12th and Grand Canton, OH 44701 303 777-1000		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Hatchell Landfill 6000 Hwy 39 Canton, OH 44701		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
a. Iron Sulfide		No. Type		Quantity Unit	
		2016-0008 151315		YARDS TONS	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Berkman			Signature:		Month Day Year: 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Mike Hance			Signature:		Month Day Year: 8/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

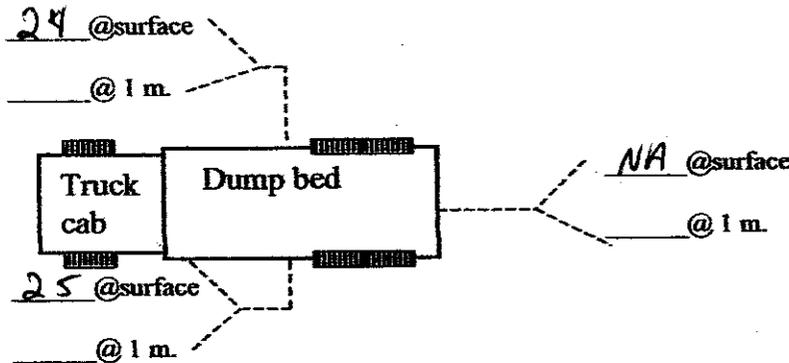
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0727 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

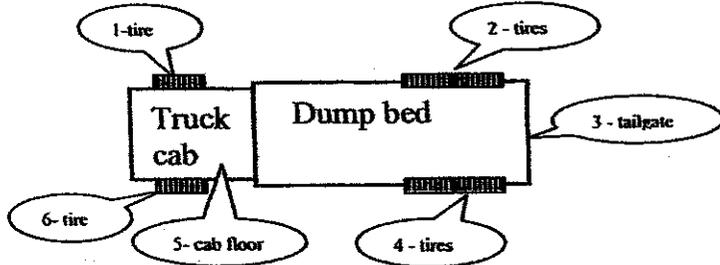
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

24  
0592187

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1100 Illinois St Golden, CO 80401 303-277-3888			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-277-3888		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name <b>Joe Grieve trucking</b>		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1600 Hill St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Metal Scrap		COLEP 070000 Y811010		18 Y	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Benham</b>		Signature <i>[Signature]</i>		Month Day Year <b>8/29/07</b>	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>		Signature <i>[Signature]</i>		Month Day Year <b>08/29/07</b>	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

24 511700

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	538102	0000
WEIGHMASTER		
8800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	7:45 am	
DATE OUT	TIME OUT	
29 August 2007	7:45 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592187		

Gross Weight 51,640.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 44,440.00 lb 22.22 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.22	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KERS



24

24

# NON-HAZARDOUS WASTE MANIFEST

0592187

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address School of Mines Research Institute North West # 170 and Birch St. Golden, CO 80401 Phone (303) 271-2008			5. Generating Location (if different)				
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Lambert Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Non-Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 001010000000000000		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				18	Y	Y Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <b>Steve Benson</b>		Signature <i>[Signature]</i>		Month Day Year <b>8/29/07</b>			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>Ken Shannon</b>		Signature <i>[Signature]</i>		Month Day Year <b>8/29/07</b>			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

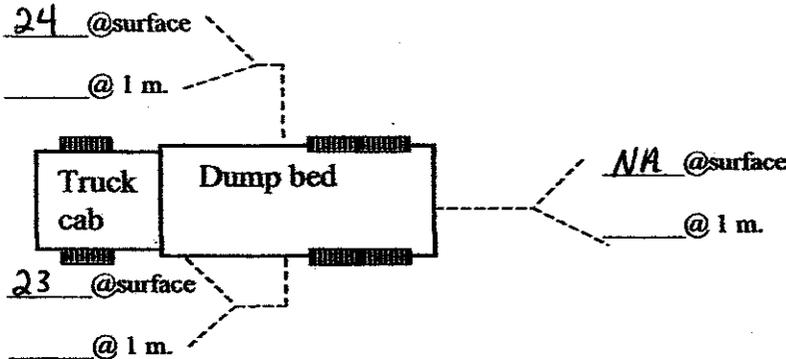
TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0733 Surveyed by: Chicks, J Mattson

Trucking Company: Grievle Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

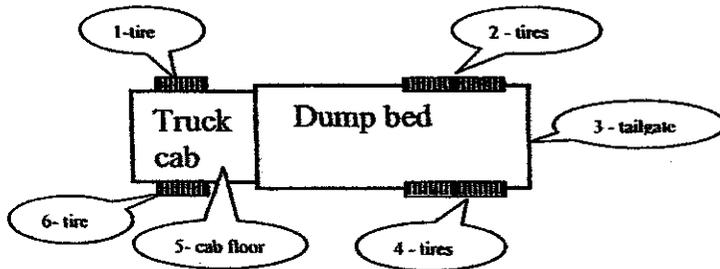
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592188

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1400 Lincoln St Golden, CO 80401 303-272-6000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-272-6000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1400 Lincoln St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date 05/11/06 to 05/11/10		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name MARK PHELAN		Signature 	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

GOM00033

511704

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
930603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588100	0000
WEIGHMASTER		
08/29/07 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	7:55 AM	
DATE OUT	TIME OUT	
29 August 2007	7:55 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592188		

Contract: Y511915

Gross Weight 82,400.00 lb  
Tare Weight 35,100.00 lb  
Net Weight 47,300.00 lb 23.65 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.65	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

23  
0592198

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 300 Main St Oxford, CT 06457 860-273-3100			5. Generating Location (if different) Yale School of Medicine Research Institute North West at 420 and Birch St Garden, CT 06407 860-273-3300						
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone					
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone					
13. Designated T/S/D Facility Name and Site Address 300 Main St Garden, CT 06407		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description a. Non Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 0511015		18. Containers					
				19. Total Quantity		20. Unit Wt/Vol			
				No.		Type		Quantity	
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Brinkman			Signature 		Month Day Year 8/29/07				
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature 		Month Day Year 8/29/07				
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name			Signature		Month Day Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

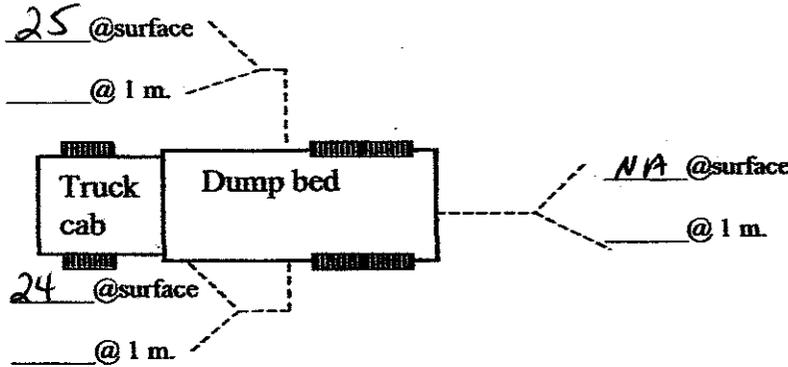
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0740 Surveyed by: Chicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

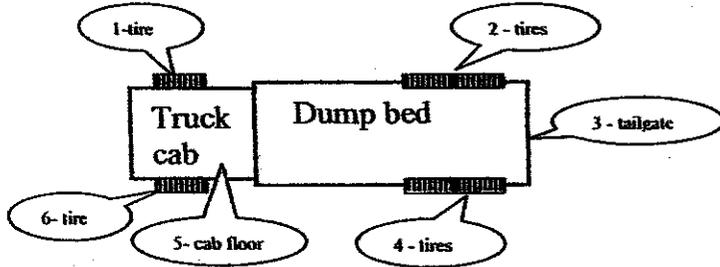
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0592189

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 (Street) Golden, CO 80401 303-773-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-773-3000		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Beverly Trucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado Landfill 3000 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Heavy Soil		00157079000611045		19. Total Quantity No. Type	
b.				20. Unit Wt/Vol	
c.				18 18	
d.				Yards Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bankman		Signature		Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Bankman		Signature		Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR'S COPY

CCM000033

611735

R.

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
80600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588107	0000
WEIGHMASTER		
000054 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	7:58 am	
DATE OUT	TIME OUT	
29 August 2007	7:58 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592189		

Contract: Y511915

Gross Weight 53,020.00 lb  
Tare Weight 37,700.00 lb  
Net Weight 15,320.00 lb 22.16 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.16	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

12  
0592189

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Beaver Trucking #112</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Institute Landfill 8000 Hwy 93 Golden, CO 80401 # 888888 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Nam Soil		CO L57 070908 Y511916		18	7 Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				8	29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Scott Allen</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				5	21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				5	21 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

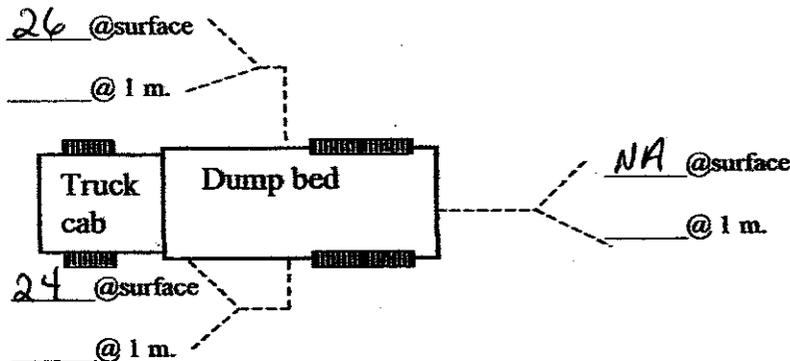
COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0748 Surveyed by: CHicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

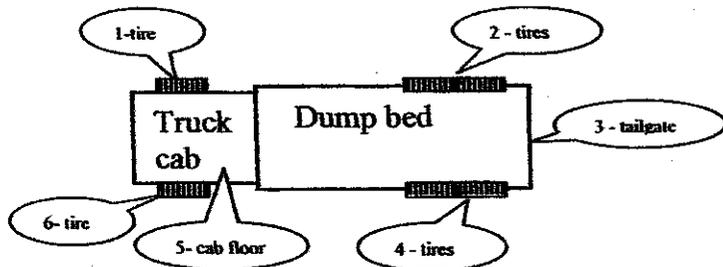
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

13  
0592190

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1900 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 17th and East St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 2890 1/2 Ave 90 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit W/Vol	
a. Iron Soil		2014702009 1511315		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman				Signature	
				Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR'S COPY

COM000033

511709

FOOTHILLS LANDFILL  
8900 HIGHWAY 98  
GOLDEN  
CO  
80608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	589111	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	8:05 am	
DATE OUT	TIME OUT	
29 August 2007	8:05 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592190		

Gross Weight 81,440.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 45,740.00 lb 22.87 TN

Inbounds -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.87	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0592190

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 8th St Garden, CO 80401 303-273-1466			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Garden, CO 80401 303-273-0906		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 W. 8th St Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Heavy Steel		AW-001-0001-001		7	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benkovic			Signature:		Month Day Year: 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Marco Colloredo Lopez			Signature:		Month Day Year: 08/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

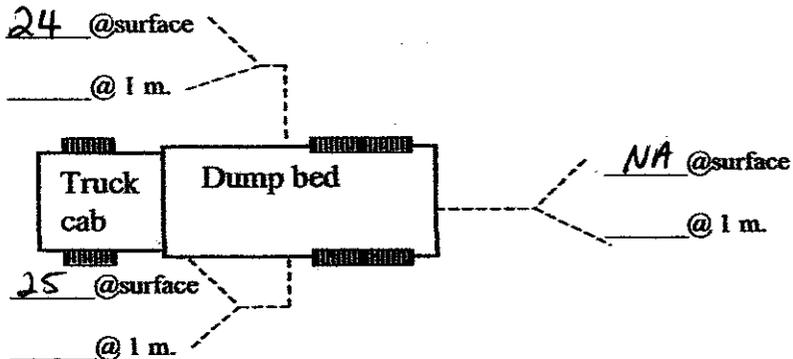
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0757 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

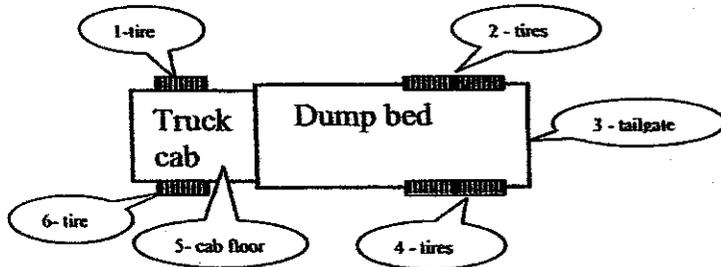
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0592191

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Union St Golden, CO 80401 303-271-3900			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Dear St Golden, CO 80401 303-271-3900		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 12000 Hwy 93 Golden, CO		17. Allied Waste Approval # and Exp. Date 0219707000 1/5/1915		18. Containers	19. Total Quantity
16. Waste Shipping Name and Description		No.	Type	Cubic Yards	Unit Wt/Vol Tons
a. Non Sol					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beerman			Signature <i>[Signature]</i>		Month Day Year 8 24 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Beerman			Signature <i>[Signature]</i>		Month Day Year 8 24 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033

521711

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80606  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contracts: Y511915

SITE	TICKET	GRID
01	Y511915	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	8:17 am	
DATE OUT	TIME OUT	
29 August 2007	8:17 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592191		

Gross Weight 82,200.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 47,800.00 lb 23.90 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.90	TN	SUB-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
<b>TENDERED</b>
<b>CHANGE</b>
<b>CHECK NO.</b>



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

961  
0592191

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Illinois St Golden, CO 80401 Phone (303) 273-3800			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Duch St Golden, CO 80401 Phone (303) 273-3800		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1000 Hwy 30 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Schuman			Signature <i>[Signature]</i>		Month Day Year 8 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]			Signature <i>[Signature]</i>		Month Day Year 8 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

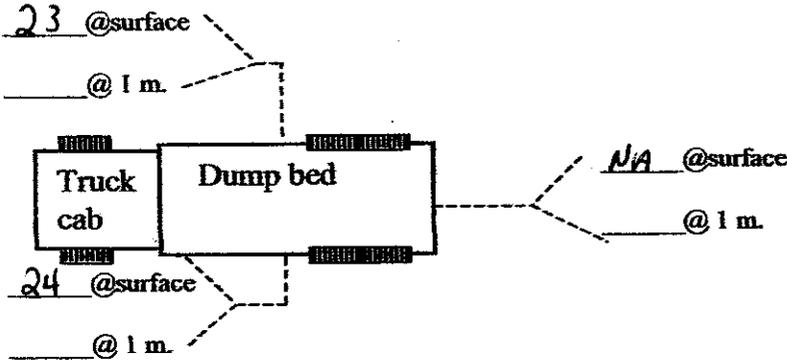
TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0803 Surveyed by: C Hicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10 mrem/hr, survey is complete.)

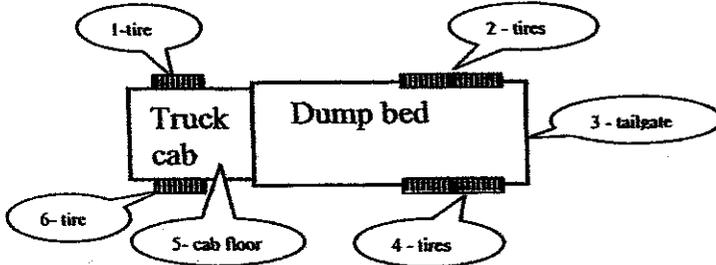
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

J001  
0592192

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1507 Evans St Golden, CO 80401 303-275-3896			5. Generating Location (if different) School of Mines Research Institute North West of 17th and Broad St Golden, CO 80401 303-275-3896		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1507 Evans St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Marc. Sol		0710708008101015		18 4 1 Yards 1 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
JOSE W Ruiz				8 21 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511714

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	529116	0000
WEIGHMASTER		
5200054 Barbers Jo S		
DATE IN	TIME IN	
29 August 2007	8:22 AM	
DATE OUT	TIME OUT	
29 August 2007	8:22 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
570192		

Gross Weight 79,260.00 lb  
Tare Weight 35,560.00 lb  
Net Weight 43,680.00 lb 21.84 TH

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.84	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



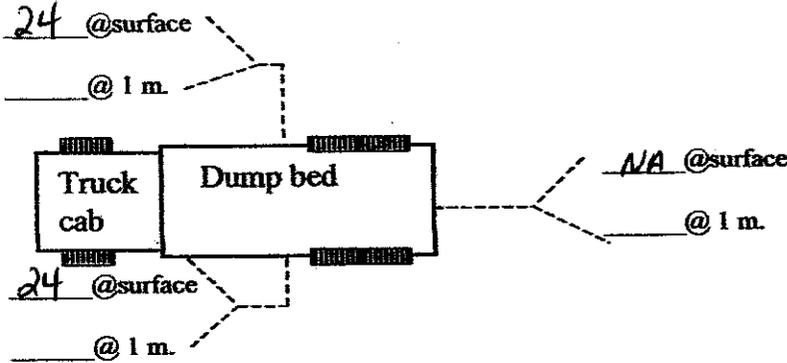
SIGNATURE *[Signature]*



## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0810 Surveyed by: Chicks, J Mattson  
 Trucking Company: Gniewl Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

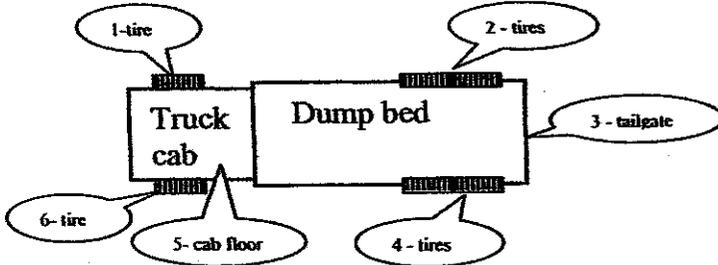
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592194

75

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3500			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Grand Golden, CO 80401 303-273-3500				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Waste Prod b. c. d.		17. Allied Waste Approval # and Exp. Date CO16707008 06/1/95		18. Containers			
				No.	Type	19. Total Quantity C/Drums	20. Unit Wt/Vol C/Drums
						Y Yards	T Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brakman			Signature		Month Day Year 6/29/97		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year 6/29/97		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

511717

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588119	0000
WEIGHMASTER		
8200056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	8:27 am	
DATE OUT	TIME OUT	
29 August 2007	8:27 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592194		

Contract: Y511915

Gross Weight 77,920.00 lb  
Tare Weight 36,980.00 lb  
Net Weight 40,940.00 lb 20.47 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.47	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_





# NON-HAZARDOUS WASTE MANIFEST

75  
0592194

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1070 W. 10th St Greeley, CO 80639 970-271-9000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Bruce Golden, CO 80401 303-273-3624		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Greeley, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Storm Sol		17. Allied Waste Approval # and Exp. Date 00187 03/07/05 - 01/01/06		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature 		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark [unclear]		Signature 		Month Day Year 5/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

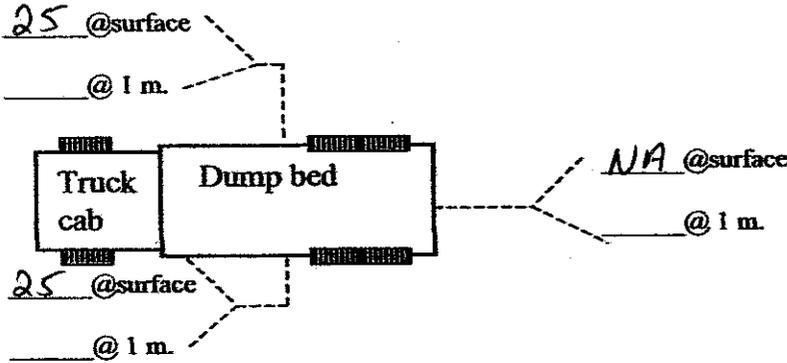
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0816 Surveyed by: Chicks, J Mattson

Trucking Company: Gnere Truck license plate no./state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

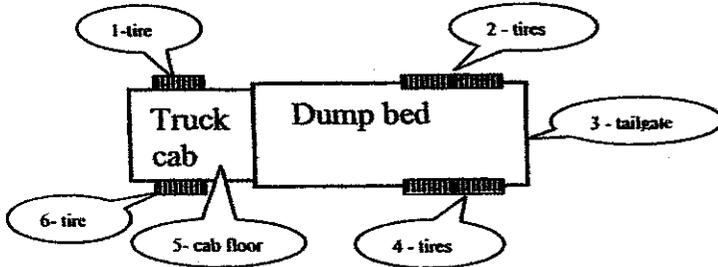
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

16  
0592193

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 Phone ( ) 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Iron Ore		10172790087E1010		19. Total Quantity 20. Unit No. Type Gallons Liters	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benhman				Signature [Signature]	
				Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Torres				Signature [Signature]	
				Month Day Year 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

511722

SITE	TICKET	GRID
01	506124	0000
WEIGHMASTER		
ESCOOBS Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	04:02 am	
DATE OUT	TIME OUT	
29 August 2007	04:32 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592193		

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 804608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

Gross Weight 77,960.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 43,380.00 lb 21.69 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.69	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *James Orr*



# NON-HAZARDOUS WASTE MANIFEST

0592193

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1570 Wilbur St Jordan, CO 80401 303-273-3556			5. Generating Location (if different) School of Mining Research Institute North West of 12th and Birch St Jordan, CO 80401 303-273-3556		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 2800 Hwy 30 Jordan, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Iron Saw		C018707/008/0511014		19. Total Quantity 20. Unit Wt/Vol	
b.				No. Type	
c.				Drums Drums	
d.				Yards Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Bankman				8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Luna				8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

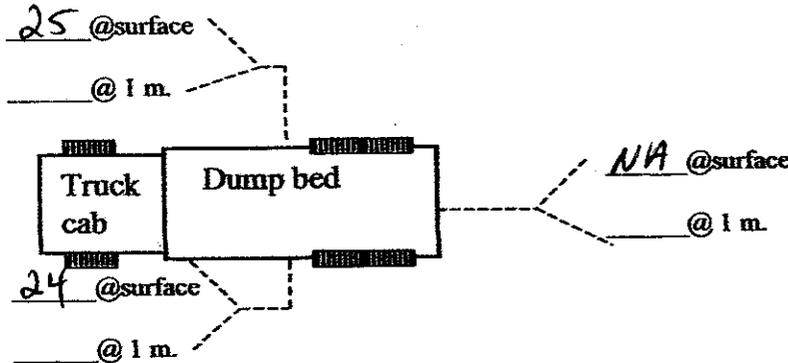
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0822 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

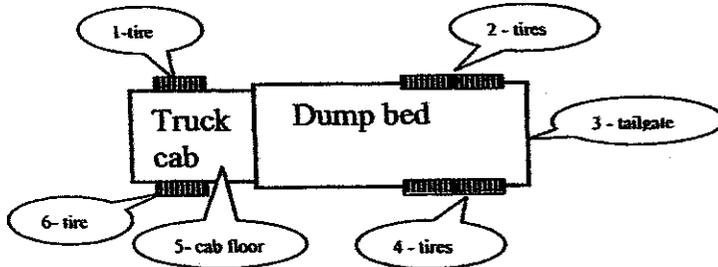
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592206

JDO4

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 W. 39th St Golden, CO 80401 Phone (303) 733-3399			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3999		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 W. 39th St Golden, CO		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
		No. Type		Cylinders Drums	
a. Heavy Soil		1		1 Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature <i>[Signature]</i>		Month Day Year 8/29/07

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

GM000033

511728

FOOTHILLS LANDFILL  
8905 HIGHWAY 93  
GOLDEN  
CO  
740608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588128	0000
WEIGHMASTER		
6500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	8:39 am	
DATE OUT	TIME OUT	
29 August 2007	8:39 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592206		

Contract: Y511915

Gross Weight 74,540.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 38,900.00 lb 17.45 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.45	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592206

JDO4

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1100 University Blvd Columbia, MD 21046 Phone (301) 371-3900			5. Generating Location (if different) Johns Hopkins School of Mines Research Institute North West of 12th and Green St Columbia, MD 21041 Phone (301) 273-3900		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1100 University Blvd Columbia, MD 21046		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Normal Soil		AW 1107000 YS11315		19. Total Quantity 4 drums	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman			Signature 		Month Day Year 12/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature 		Month Day Year 12/29/07

GENERATOR

TRANSPORTER

T/S/D FACILITY

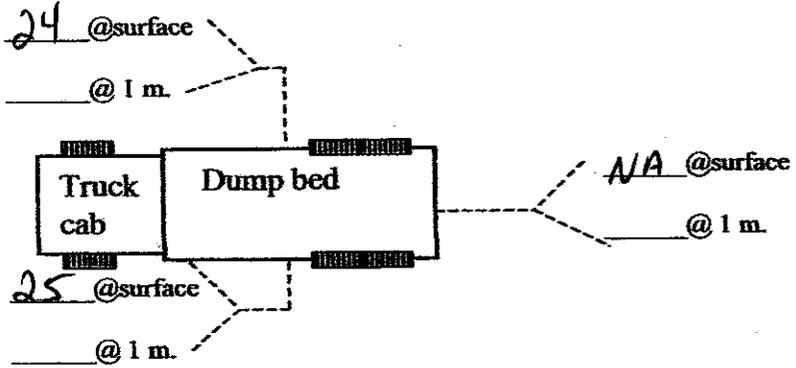
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0830 Surveyed by: Chicks, J Mattson  
 Trucking Company: Gniere Truck license plate no./state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

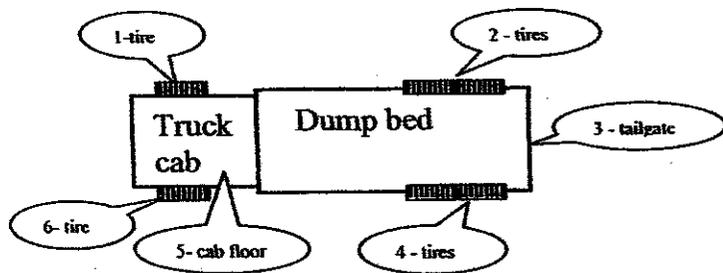
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592205

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 10000 W. 1st St Golden, CO 80401 303-273-3906			5. Generating Location (if different) North School of Mine Research Institute North West of 136th and Lynch St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Facility Name 3000 Hwy 103 Golden, CO 80401 # 900004 of Colorado Springs (Hazard)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Normal Soil		00127070001-511015		18 4 Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature	
				Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy				Signature	
				Month Day Year 08/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR'S COPY

COM00033

511733

Foothills Landfill  
 8700 Highway 93  
 Golden  
 CO  
 80608  
 Colorado School of Mines  
 1500 Illinois St  
 Golden, CO 80401

SITE	TICKET	GRID
01	588135	0000
WEIGHMASTER		
2500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	8:48 am	
DATE OUT	TIME OUT	
29 August 2007	8:48 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592205		

Contract: Y511915

Gross Weight 23,120.00 lb  
 Tare Weight 34,540.00 lb  
 Net Weight 46,580.00 lb 23.27 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.27	TN	SU-CONT SDIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0592205

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Football Field 8000 Hwy 93 Golden, CO ACCOUNT # 900011 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 03157070900 1511015		18. Containers			
				No.	Type	19. Total Quantity	20. Unit
						Drums	Gallons
				18	4	Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month Day Year			
Steve Brinkman				08/29/07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
Chuck Foy				08/29/07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

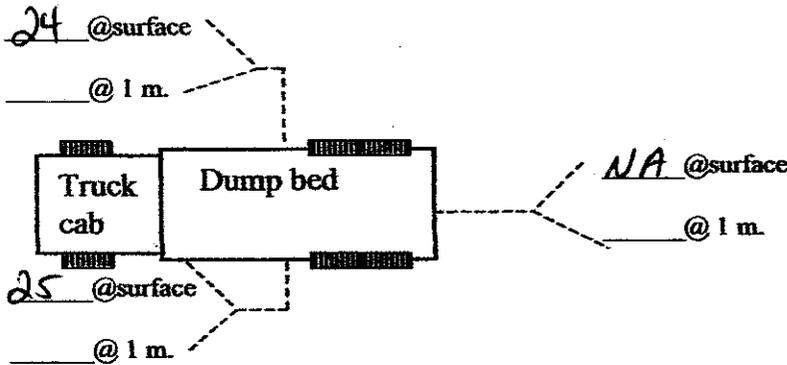
TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0837 Surveyed by: Chicks, J Mattson

Trucking Company: Gnere Truck license plate no./state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

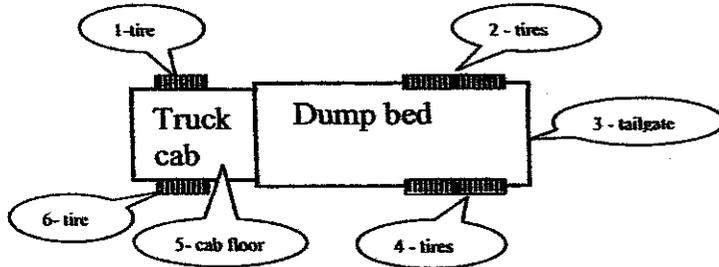
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592204

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-373-0908			5. Generating Location (if different) Cristoforo Colombo School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-373-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 95 Golden, CO		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit Wt/Vol	
a. Alum Soil		201670917211915		18 4 Yards Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 2 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray			Signature		Month Day Year 2 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

059000033

312735

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	758137	0000
WEIGHMASTER		
6500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	8:53 am	
DATE OUT	TIME OUT	
29 August 2007	8:53 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
59220		

Gross Weight 78,600.00 lb  
Tare Weight 34,260.00 lb  
Net Weight 44,340.00 lb 22.17 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.17	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LP	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592204

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 15th St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Name Sol		APR 23 2007		18 4	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Branson			Signature <i>[Signature]</i>		Month Day Year 8 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray			Signature <i>[Signature]</i>		Month Day Year 8 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

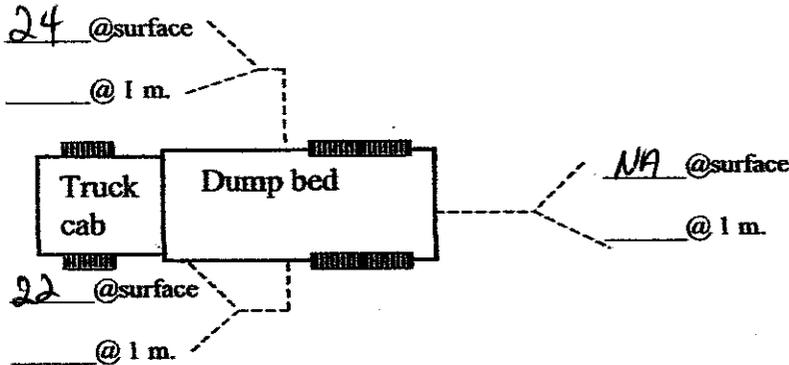
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0843 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

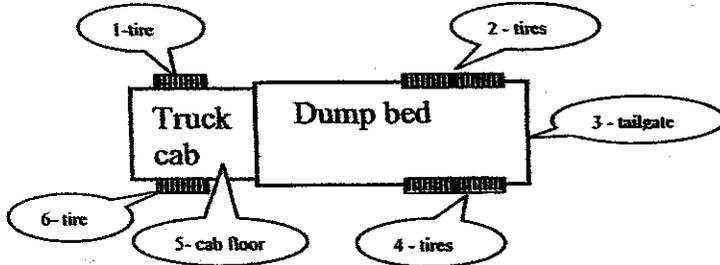
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592203

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Nicole St Golden, CO 80401 303-273-3600			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dick St Golden, CO 80401 303-273-1600		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 39721 Hwy 104 Golden, CO		17. Allied Waste Approval # and Exp. Date CO-107-03008 7/5/10/15		18. Containers	
16. Waste Shipping Name and Description a. <b>Waste Soil</b>		19. Total Quantity 7 Yards		20. Unit Wt/Vol Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Brinkman</b>			Signature		Month Day Year <b>8/29/07</b>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannon</b>			Signature		Month Day Year <b>8/29/07</b>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

24

511738

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 930603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	SR8140	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	9:00 am	
DATE OUT	TIME OUT	
29 August 2007	9:00 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592203		

Gross Weight 81,220.00 lb  
 Tare Weight 37,200.00 lb  
 net Weight 44,020.00 lb 22.01 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.01	TR	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KERS



24

24

# NON-HAZARDOUS WASTE MANIFEST

## 0592203

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 Olive St Greeley, CO 80639 313-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 17th and Broad St Greeley, CO 80601 313-273-3000		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Greeley, CO		17. Allied Waste Approval # and Exp. Date CO187070903 12/1/95		18. Containers	
16. Waste Shipping Name and Description a. <i>Steel Slat</i>		19. Total Quantity 18 Yards		20. Unit Wt/Vol 7009	
b.		c.		d.	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>		Signature <i>[Signature]</i>		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Shannon</i>		Signature <i>[Signature]</i>		Month Day Year 08/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

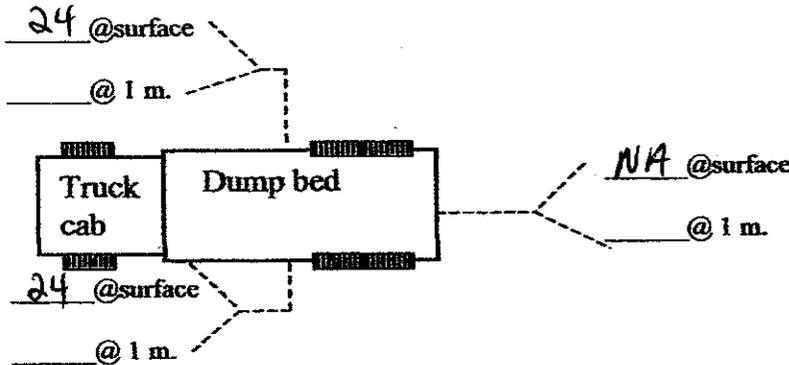
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0849 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniere Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

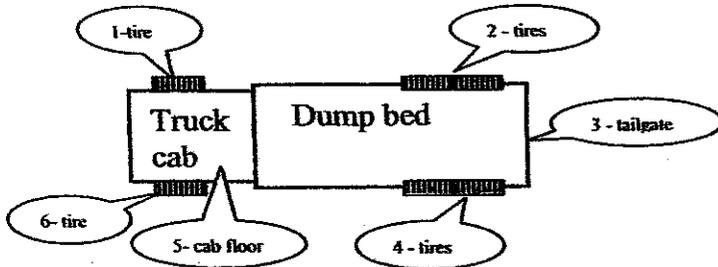
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



23

# NON-HAZARDOUS WASTE MANIFEST

0592202

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1577 Illinois St Golden, CO 80401 303-279-3550			5. Generating Location (if different) Woodward School of Mines Research Institute North West of 120 and North St Golden, CO 80401 303-279-3928				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Columbia Energy 3810 Hwy 10 Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Non-Hal		17. Allied Waste Approval # and Exp. Date CO 007 07008 MS17415		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 8/29/07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name MARIL PHELAN		Signature 		Month Day Year 8/29/07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511741

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
740806  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588143	0000
WEIGHMASTER		
8900056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	9:05 am	
DATE OUT	TIME OUT	
29 August 2007	9:05 am	
VEHICLE	ROLL OFF	
Y811915		
REFERENCE	ORIGIN	
570202		

Contract: Y811915

Gross Weight 81,660.00 lb  
Tare Weight 35,100.00 lb      Inbound -  
Net Weight 46,560.00 lb 23.28 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.28	TN	SL-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

0592202

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1200 W. 4th Denver, CO 80202 303-733-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-271-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1200 W. 4th Denver, CO 80202		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Metal Soil		05-07-03/08-01-10-15			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
MARIL PHELAN				8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

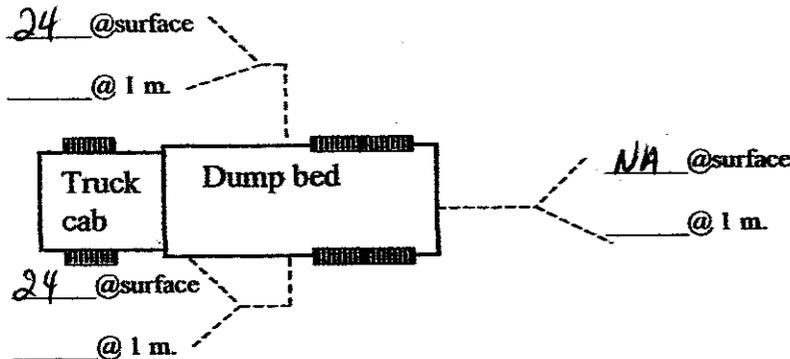
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0856 Surveyed by: Chicks, J Mattson

Trucking Company: Grievle Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

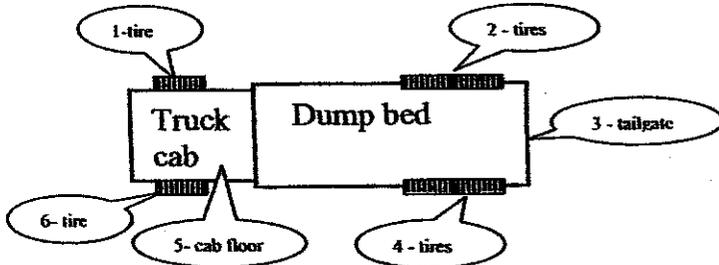
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0582201

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1540 W. 13th St Golden, CO 80401 303-273-3966			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 13th and Birch St Golden, CO 80401 303-273-3966		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Greene Trucking #1/d.		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1540 W. 13th St Golden, CO 80401 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		20. Unit Wt/Vol	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
a. Non-Hal		No. Type		Drums Cans	
b.		10 100 Gallon		Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman		Signature		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR'S COPY

COM000033

511745

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	558145	0000
WEIGHMASTER		
0300056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	7:18 am	
DATE OUT	TIME OUT	
29 August 2007	7:13 am	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
592201		

Gross Weight 33,320.00 lb  
Tare Weight 37,700.00 lb  
Net Weight 45,620.00 lb 22.81 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.81	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



12

# NON-HAZARDOUS WASTE MANIFEST

# 0592201

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Greene Trucking #12.		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8800 Hwy 99 Golden, CO ACCOUNT # 000003 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date 031617 070900 1511915		18. Containers No. Type	
16. Waste Shipping Name and Description a. Normal Soil		19. Total Quantity 0 Drums Y-Yards		20. Unit Wt/Vol 3 Gallons Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bankman		Signature 		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Jim Clark		Signature 		Month Day Year 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #2

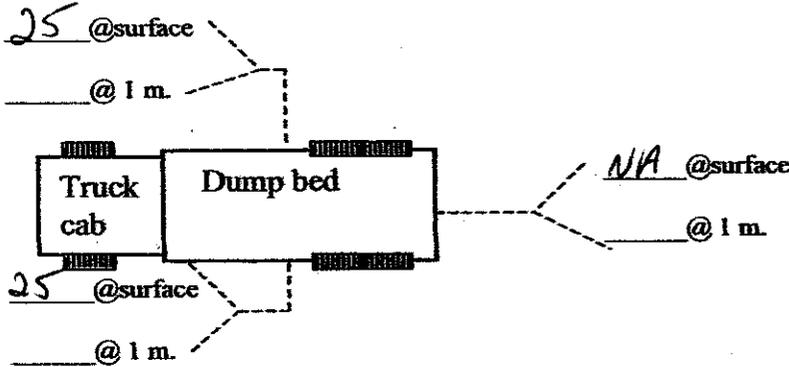
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0910 Surveyed by: CHicks, J Mattson

Trucking Company: Grieve Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

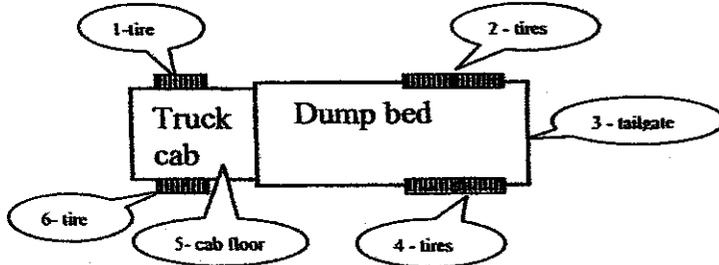
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592200

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1510 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 17th and Chabot Golden, CO 80401 303-273-1600		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1510 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Iron Sulfide		00197035807511010			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Benkowski				5	29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Rafael Colazo Lopez				08	29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511754

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	538157	0000
WEIGHMASTER		
K500054 Barbara Jo S		
DATE IN	TIME IN	
27 August 2007	9:30 am	
DATE OUT	TIME OUT	
27 August 2007	9:30 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
592200		

Gross Weight 80,900.00 lb  
 Tare Weight 35,700.00 lb      Inboard --  
 Net Weight 45,200.00 lb 22.60 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.60	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592200

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Windsor St Golden, CO 80401 303-273-3900			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Board St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address SCHOOL OF MINES RESEARCH INSTITUTE 1500 WINDSOR ST GOLDEN, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rafael Lopez		Signature		Month Day Year 08/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

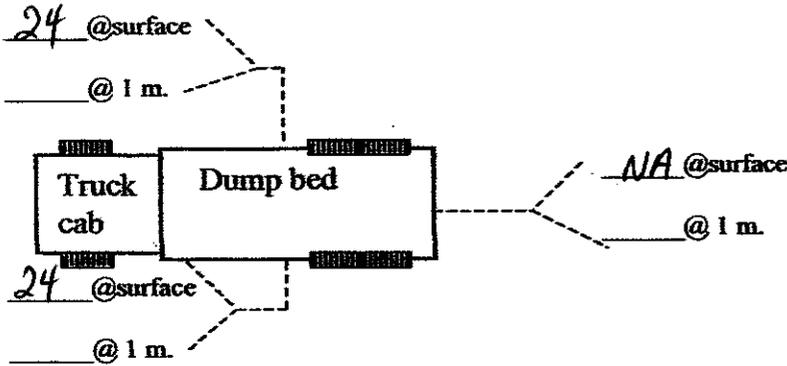
GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0920 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniere Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

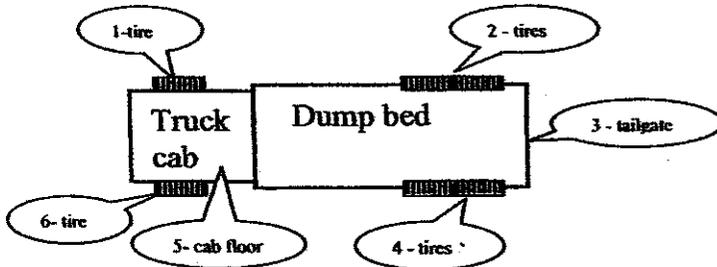
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0592198

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1470 Illinois St. Golden, CO 80401 303 273-3593			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Evans St Golden, CO 80401 303 273-3505		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 10001 Hwy 97 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		001187/021900/7511015			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benhman			Signature 		Month Day Year 3 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Dennis Miller			Signature 		Month Day Year 4 2 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511782

FOOTHILLS LANDFILL  
 3900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	556145	0000
WEIGHMASTER		
BEO0056 Barbara Jo S		
DATE IN	TIME IN	
27 August 2007	7:40 AM	
DATE OUT	TIME OUT	
27 August 2007	9:40 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592193		

Gross Weight 76,820.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 44,420.00 lb 22.21 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.21	TN	SM-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE A. M.



# NON-HAZARDOUS WASTE MANIFEST

961  
0592198

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Hill St Golden, CO 80401 303 773 2666			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dr. St Golden, CO 80401 303 773 3808		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hill St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non Sol		0010707030 Y511615		19. Total Quantity No. Type 7 Tons	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman		Signature 		Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name James ...		Signature 		Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

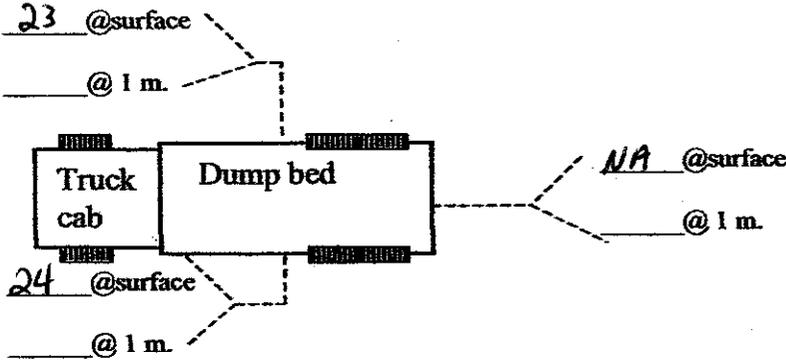
TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0926 Surveyed by: CHicks, J Mattson

Trucking Company: Gniewe Truck license plate no./state: 9 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

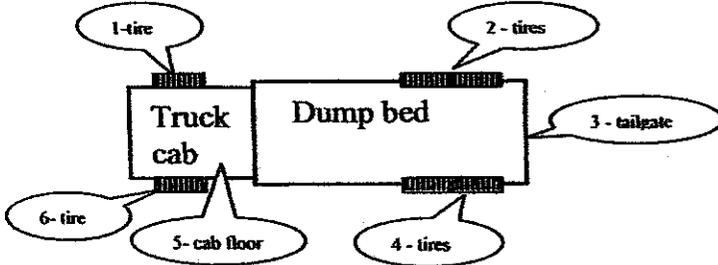
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592199

JDO1

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Wagon St Golden, CO 80401 303-273-3800			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Deak St Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Wagon St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non-Sol		CO 107 070306 1E11915		19. Total Quantity 20. Unit Wt/Vol	
				No. Type	
				10 Y	
				Y-barrels Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman		Signature: <i>[Signature]</i>		Month Day Year: 7/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Jose W Ruiz		Signature: <i>[Signature]</i>		Month Day Year: 6/21/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month Day Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month Day Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

621738

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588171	0000
WEIGHMASTER		
1500056 Barbara Jo E		
DATE IN	TIME IN	
29 August 2007	9:45 am	
DATE OUT	TIME OUT	
29 August 2007	9:45 am	
VEHICLE	ROLL OFF	
YS1191E		
REFERENCE	ORIGIN	
592199		

Contract: YS1191E

Gross Weight 76,760.00 lb  
Tare Weight 35,580.00 lb  
Net Weight 41,180.00 lb 20.59 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.59	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0592199

1001

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Hillside St Golden, CO 80401 303-273-3996			5. Generating Location (if different) School of Mines Research Institute North West at 17th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hillside St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Metal Slat		17. Allied Waste Approval # and Exp. Date 01/08/08-08/31/08		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 7/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Jose W Ruiz			Signature 		Month Day Year 8/2/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

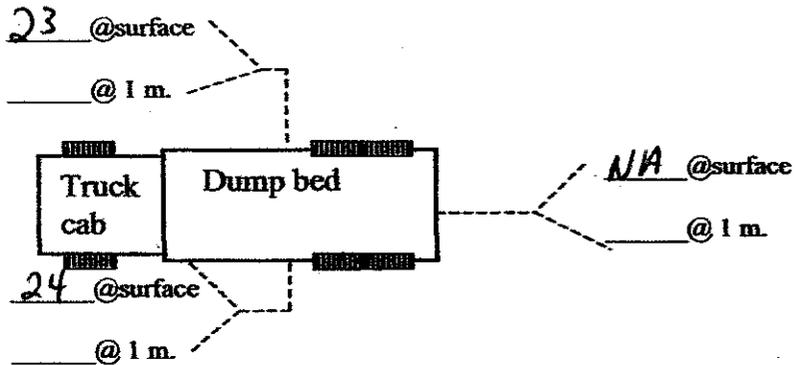
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0931 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniere Truck license plate no./state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

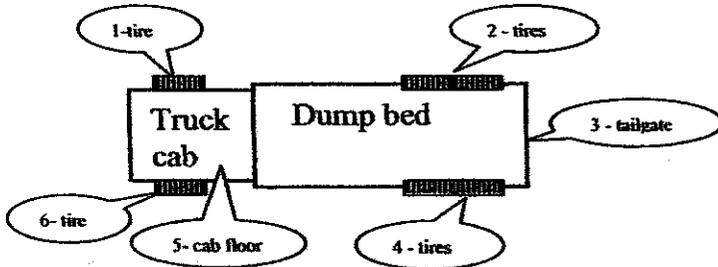
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



95

# NON-HAZARDOUS WASTE MANIFEST

## 0592177

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 W. 10th St Golden, CO 80401 303-273-3936			5. Generating Location (if different) School of Mines Research Institute North West of 17th and Grant St Golden, CO 80401 303-273-3936		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Proterra Corbin 8500 Hwy 20 Golden, CO 80401 (ACCOUNT # 104225 Colorado District of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		CO 162 070000 1111915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brakman				5	29 23
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Mark				3	21 23
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511772

FOOTHILLS LANDFILL  
3900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	588175	0000
WEIGHMASTER		
BS00056 Barbara Jo B		
DATE IN		TIME IN
29 August 2007		9:51 am
DATE OUT		TIME OUT
29 August 2007		9:51 am
VEHICLE		ROLL OFF
YS11915		
REFERENCE	ORIGIN	
592177		

Gross Weight 76,520.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 39,540.00 lb 19.77 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.77	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



75

# NON-HAZARDOUS WASTE MANIFEST

## 0592177

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Birch St Garden, CO 80131 303-275-3500			5. Generating Location (if different) School of Mines Research Institute South West of 12th and Birch St Garden, CO 80131 303-275-3500		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				No.	
				Type	
				C. Drums	
				G. Gallons	
a. Non Sol		0010700000191015		Yards	
b.				Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman				Signature	
				Month Day Year 8 29 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year 7 17 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

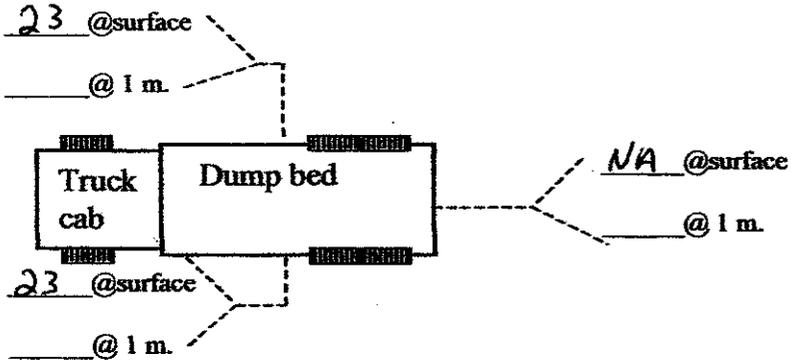
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 0937 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no./state: 96

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

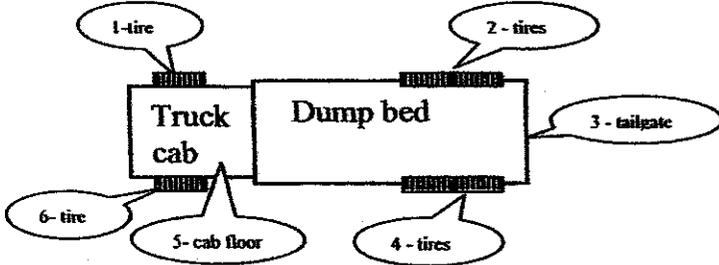
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



76

# NON-HAZARDOUS WASTE MANIFEST

0592178

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1100 Private St Golden, CO 80401 303-270-3690			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Byron St Golden, CO 80401 303-270-3690		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Allied Waste 1500 Hwy 57 Golden, CO ALLIED WASTE (SCHOOL OF MINES)		17. Allied Waste Approval # and Exp. Date 021127 070308 12/11/15		18. Containers	
16. Waste Shipping Name and Description a. Non Sol		19. Total Quantity 7 Yards		20. Unit Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 7/29/08
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Hernandez			Signature <i>[Signature]</i>		Month Day Year 8/29/08
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511773

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558177	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	9:57 am	
DATE OUT	TIME OUT	
29 August 2007	9:57 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592178		

Gross Weight 78,240.00 lb  
 Tare Weight 36,580.00 lb Inbound -  
 Net Weight 41,660.00 lb 20.83 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.83	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

96  
0592178

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1210 Birch St Golden, CO 80401 303-273-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone			
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Scales b. c. d.		17. Allied Waste Approval # and Exp. Date		18. Containers			
				19. Total Quantity		20. Unit Wt/Vol	
				No.	Type	Gal/Drums	Gal/Drums
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Benham		Signature <i>[Signature]</i>		Month Day Year 8/29/97			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Fernando Luna		Signature <i>[Signature]</i>		Month Day Year 8/29/97			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

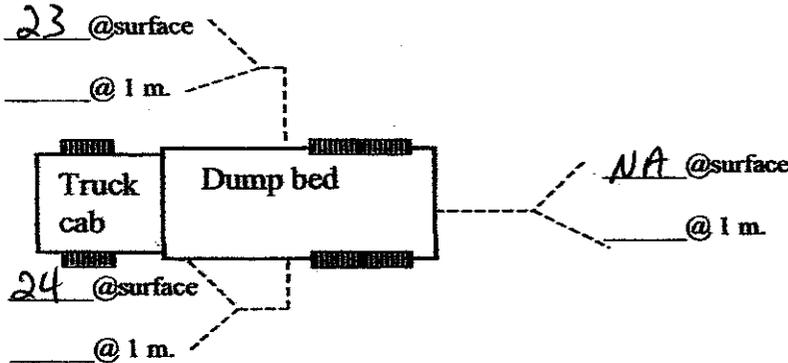
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0943 Surveyed by: CHicks, J Mattson

Trucking Company: Gnive Truck license plate no. /state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

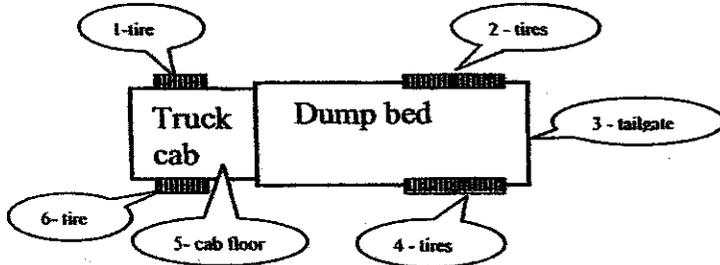
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

JDD04  
0592179

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1540 Platte St Golden, CO 80401 303-271-3330			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Inca St Golden, CO 80401 303-271-3330		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1700 W. 12th St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Acetic Sol b. c. d.		17. Allied Waste Approval # and Exp. Date 03107430906 10/1/05		18. Containers	
				No.	Type
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve R. [Signature]		Signature [Signature]		Month Day Year 08 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name PETER MANOZ		Signature [Signature]		Month Day Year 08 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR'S COPY

COM000033

511777

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	535181	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	10:03 am	
DATE OUT	TIME OUT	
29 August 2007	10:03 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592179		

Contract: Y511915

Gross Weight 75,280.00 lb  
Tare weight 35,640.00 lb  
Net Weight 39,640.00 lb 19.82 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.82	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE



# NON-HAZARDOUS WASTE MANIFEST

JD04  
0592179

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 1st St Tulsa, OK 74101 4. Phone ( ) 918-773-8000				5. Generating Location (if different) University of Oklahoma Health Sciences Center North West of 12th and District Oklahoma City, OK 73101 6. Phone ( ) 405-270-1000	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Spartan Landfill 10000 S. 10th St Tulsa, OK 74114		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. b. c. d.		17. Allied Waste Approval # and Exp. Date 00167-00018-011015		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No.	
				Type	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve B. Adams				Signature: [Signature]	
				Month: 07, Day: 29, Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Victor Adams				Signature: [Signature]	
				Month: 08, Day: 29, Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:				Signature:	
				Month: , Day: , Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:				Signature:	
				Month: , Day: , Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

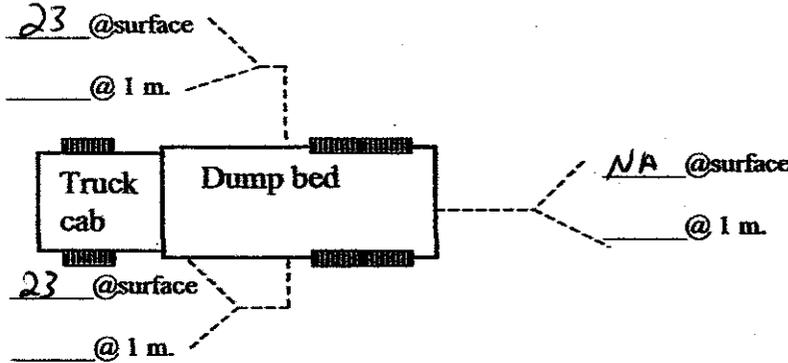
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 0951 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gnere Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

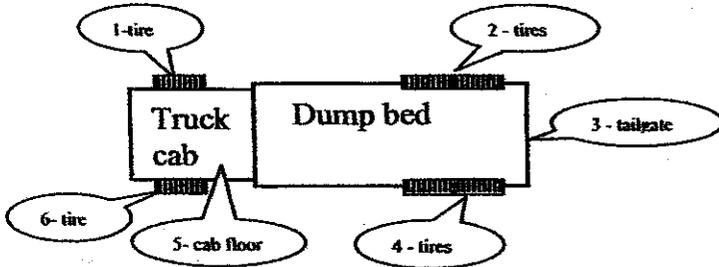
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 µrem/hr	α 2.0 cpm	β 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

0592180

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1700 Illinois St Golden, CO 80401 303-279-3600			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Brock Golden, CO 80401 303-279-3600				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Slurry Sol		17. Allied Waste Approval # and Exp. Date 03167102830 1211015		18. Containers		19. Total Quantity 6.44 tons	20. Unit Wt/Vol 7-Tons
				No.	Type		
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Barkman				Signature 		Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Foy				Signature 		Month Day Year 08 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

521793

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	526137	0000
WEIGHMASTER		
RSC0056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	10:09 am	
DATE OUT	TIME OUT	
29 August 2007	10:09 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592180		

Contract: Y511915

Gross Weight 81,620.00 lb  
Tare Weight 36,540.00 lb  
Net Weight 45,080.00 lb 22.54 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.54	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0592180

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of																									
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 430 271 3904			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Decatur Golden, CO 80401 430 271 3904																										
4. Phone ( )		6. Phone ( )																											
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone																									
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone																									
13. Designated T/S/D Facility Name and Site Address School of Mines Research Institute		14. US EPA ID Number		15. Facility's Phone																									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers																									
a. Non Sol		18000000000000000000		<table border="1"> <thead> <tr> <th colspan="2">18. Containers</th> <th>19. Total Quantity</th> <th>20. Unit Wt/Vol</th> </tr> <tr> <th>No.</th> <th>Type</th> <th>Drums</th> <th>Containers</th> </tr> </thead> <tbody> <tr> <td>18</td> <td>Y</td> <td>18</td> <td>Tons</td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		18. Containers		19. Total Quantity	20. Unit Wt/Vol	No.	Type	Drums	Containers	18	Y	18	Tons	b.				c.				d.			
18. Containers		19. Total Quantity	20. Unit Wt/Vol																										
No.	Type	Drums	Containers																										
18	Y	18	Tons																										
b.																													
c.																													
d.																													
21. Additional Descriptions for Materials Listed Above																													
22. Special Handling Instructions and Additional Information																													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																													
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 8 29 07																									
24. Transporter #1: Acknowledgement of Receipt of Materials																													
Printed/Typed Name Chuck Foy		Signature 		Month Day Year 08 29 07																									
25. Transporter #2: Acknowledgement of Receipt of Materials																													
Printed/Typed Name		Signature		Month Day Year																									
26. Discrepancy Indication Space																													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																													
Printed/Typed Name		Signature		Month Day Year																									

GENERATOR

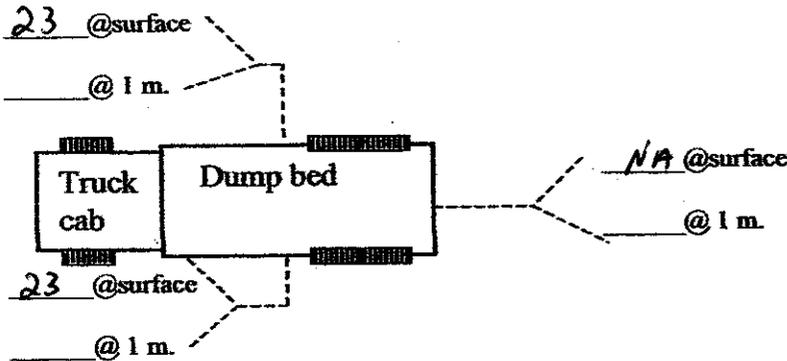
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 0958 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

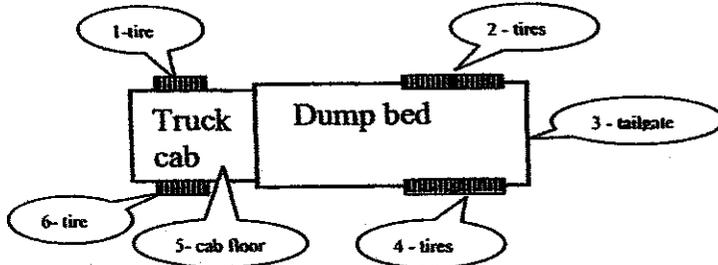
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

461  
0592181

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address 1500 Main St Golden, CO 80401 Phone ( ) 303-273-6000				5. Generating Location (if different) North Branch of Green Mountain Institute North West of 12th and I Street Golden, CO 80401 Phone ( ) 303-273-6000					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address 1500 Main St Golden, CO 80401			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit	
					No.	Type	Gallons	Gallons	
a. Motor Oil			011070900 05/19/15		15	4	Gallon	1-Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name <i>Sicre Beckman</i>				Signature <i>[Signature]</i>			Month	Day	Year
							8	29	15
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name <i>[Name]</i>				Signature <i>[Signature]</i>			Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR'S COPY

CGM000033





# NON-HAZARDOUS WASTE MANIFEST

461  
0592181

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 170 Adams St Orem, UT 84401 801-225-3498			5. Generating Location (if different) North West of 12th and Orchard Orem, UT 84401 801-225-3498				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Procter & Gamble 5500 May St Orem, UT 84401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date AW-1670-0008 03/1/95		18. Containers			
				No.	Type	19. Total Quantity P. Containers	20. Unit Wt/Vol G. Containers
a.				15	4	Y. Containers	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brannon			Signature 		Month Day Year 8/29/95		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Mike Miller			Signature 		Month Day Year 8/29/95		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

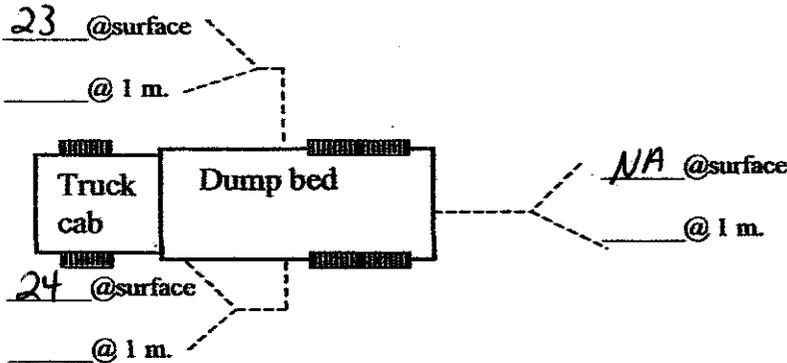
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1005 Surveyed by: CHicks, J Mattson

Trucking Company: Gnive Truck license plate no./state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

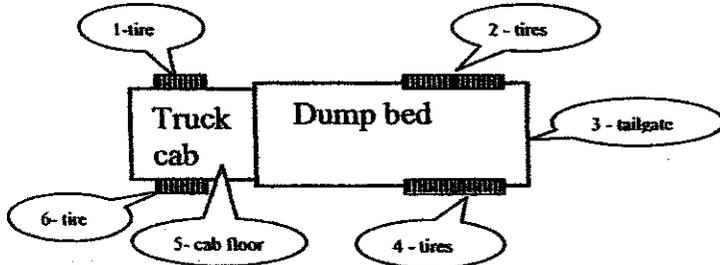
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



24

# NON-HAZARDOUS WASTE MANIFEST

0592182

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1377 Winton St Gadsden, MO 60401 303-273-3990			5. Generating Location (if different): North School of Lines Research Institute North West of 10th and Birch St Gadsden, MO 60401 303-273-3990		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 15151 N. ALLEN AVE # 100 Gadsden, MO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. <i>Waste Oil</i>		17. Allied Waste Approval # and Exp. Date <i>CO 167 1009/2-15-1315</i>		18. Containers	
				No.	Type
				<i>18</i>	<i>Y</i>
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Blinn</i>		Signature <i>[Signature]</i>		Month	Day Year
				<i>8</i>	<i>29</i> <i>04</i>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Shannon</i>		Signature <i>[Signature]</i>		Month	Day Year
				<i>08</i>	<i>29</i> <i>07</i>
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY





NON-HAZARDOUS WASTE MANIFEST

0592182

24

Please print or type.

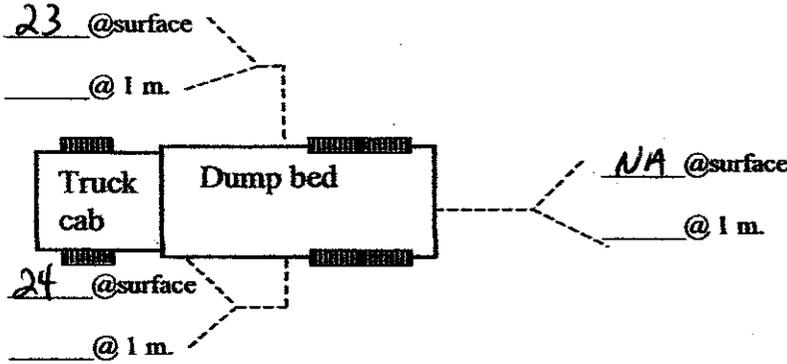
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1501 13th St Golden, CO 80401 303-278-3990			5. Generating Location (if different) School of Mine Research Institute 4 miles West of 12th and Bird St Golden, CO 80401 303-278-3990				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name J DeGrievé Trucking		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address B-40-144-90 Golden, CO		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Soil b. c. d.		17. Allied Waste Approval # and Exp. Date 0016703004111316		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				18	Y	18 tons	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Bratman		Signature <i>[Signature]</i>		Month Day Year 7 29 04			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Lee Shannon		Signature <i>[Signature]</i>		Month Day Year 08 29 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 1013 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gneve Truck license plate no. /state: 23

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

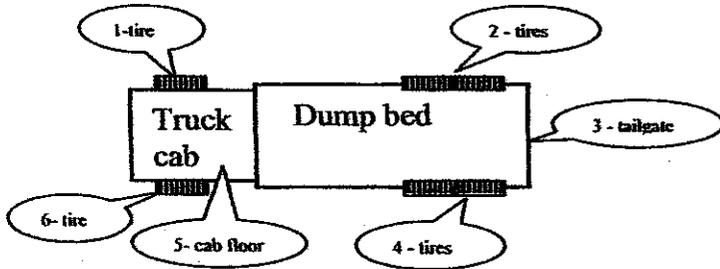
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



23

# NON-HAZARDOUS WASTE MANIFEST

0592183

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 Phone ( ) 303-273-3003			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 Phone ( ) 303-273-3003		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 10001 1/2 Ave 50 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Heavy Soil		17. Allied Waste Approval # and Exp. Date 00107-00008-0011915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Erickson		Signature <i>[Signature]</i>		Month 8	Day Year 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan		Signature <i>[Signature]</i>		Month 8	Day Year 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511794

FOOTHILLS LANDFILL  
8900 HIGHWAY 70  
GOLDEN  
CO  
780603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588196	0000
WEIGHMASTER		
AS00056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	10:31 am	
DATE OUT	TIME OUT	
29 August 2007	10:31 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592188		

Gross Weight 88,340.00 lb  
Tare Weight 35,100.00 lb  
Net Weight 48,240.00 lb 24.12 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.12	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE



23

# NON-HAZARDOUS WASTE MANIFEST

## 0592183

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1807 Illinois St Oxford, OH 45041 4. Phone ( ) 513-775-3899			5. Generating Location (if different) Ohio State University Research Institute North West of 17th and Ohio St Oxford, OH 45041 6. Phone ( ) 513-279-3693		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		20187-3090-7511815		Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>			Signature <i>[Signature]</i>		Month Day Year 8 29 14
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Mark Phelan</i>			Signature <i>[Signature]</i>		Month Day Year 8 29 14
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

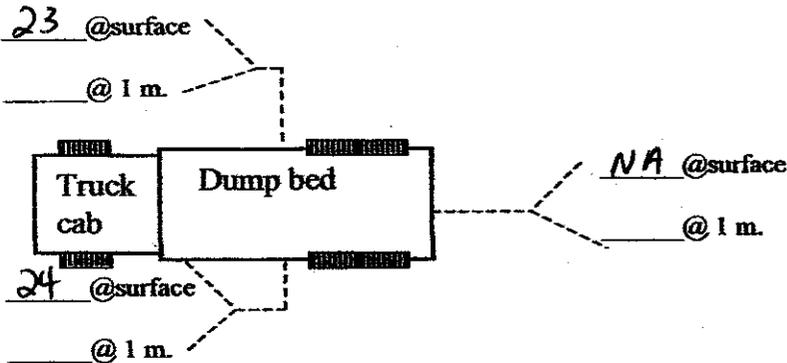
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1020 Surveyed by: CHicks, J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

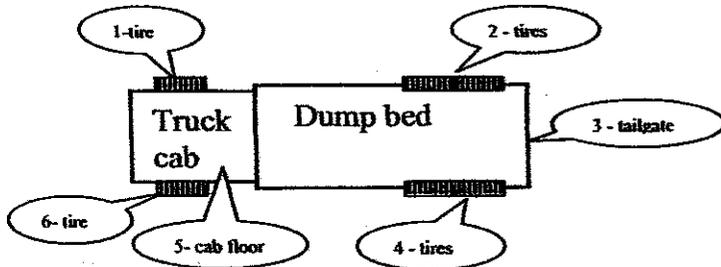
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0592184

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Blake St Golden, CO 80401 303-273-0500				5. Generating Location (if different) School of Mines Research Institute North West of 12th and Dahl St Golden, CO 80401 303-273-0500	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name Jenice Trucking H/D.		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address RSCD Hwy 90 Golden, CO 80401 (Attached to WEST MINE # 820000 Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. North Star		30 100 Gallon 55 Gallon		15	Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brannon		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name J. T. ...		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR'S COPY

COM000033

12

511799

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 980603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

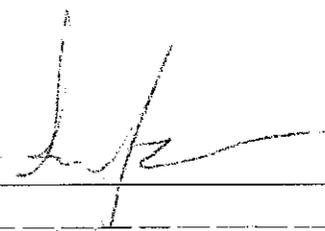
SITE	TICKET	GRID
01	585203	0000
WEIGHMASTER		
5800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	10:35 am	
DATE OUT	TIME OUT	
29 August 2007	10:35 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
593184		

Contract: Y511915

Gross Weight 51,820.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 44,120.00 lb 22.06 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE 

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

12  
0592184

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-2819			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Garinc Trucking #12		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401 Colorado School of Mines		14. US EPA ID Number		16. Waste Shipping Name and Description	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		001870709187511915		19. Total Quantity 6 Cans	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean T. O'Neil		Signature 		Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

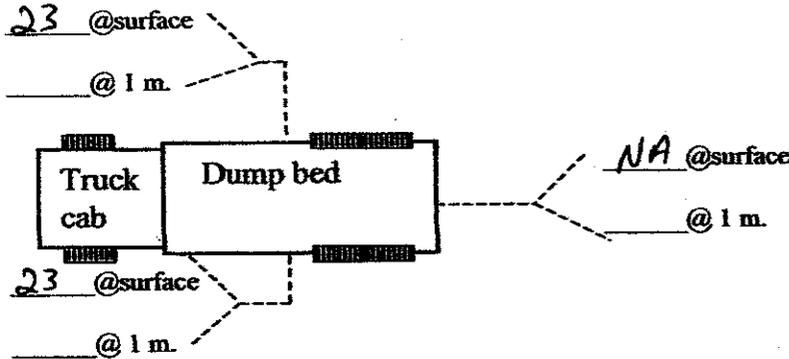
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1027 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grievle Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

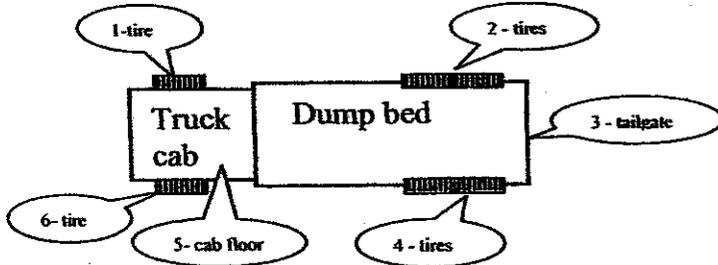
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



NON-HAZARDOUS WASTE MANIFEST

0592185

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1370 25th St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Grand Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. North Side		00167 070903 Y511015		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blahman			Signature		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rafael Collazo Lopez			Signature		Month Day Year 08/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511809

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588308	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	10:44 am	
DATE OUT	TIME OUT	
29 August 2007	10:44 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592165		

Gross Weight 81,080.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 45,380.00 lb 22.69 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.69	TN	SW-COFT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0592185

13

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1900 Birch St Golden, CO 80401 303-273-3096			5. Generating Location (if different) Colorado School of Mines Research Institute North West at 12th and Birch St Golden, CO 80401 303-273-3096		
4. Phone ( ) 303-273-3096		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		2016-07-26/2017-07-26		Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Burkman</i>			Signature <i>[Signature]</i>		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>David Collazo Lopez</i>			Signature <i>[Signature]</i>		Month Day Year 08/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

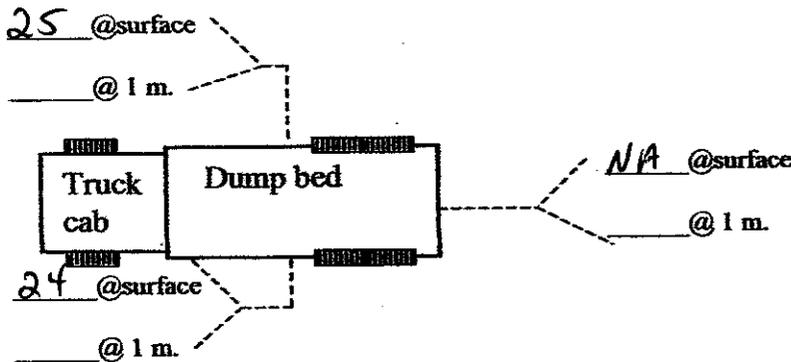
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1035 Surveyed by: Chicks, J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 961

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

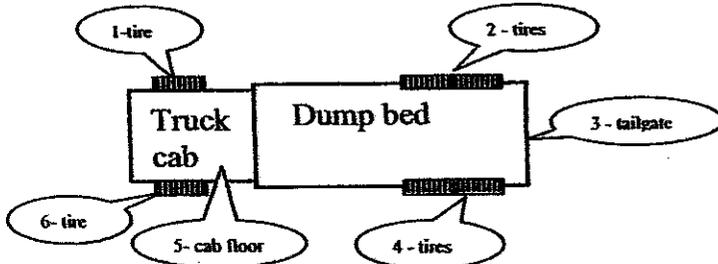
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0592186

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address: 1500 Illinois St Golden, CO 80401 303-279-3891			5. Generating Location (if different): School of Mines Research Institute North West of 12th and Ditch St Golden, CO 80401 303-279-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address: 2001 Perry St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description: a. Worm Soil		17. Allied Waste Approval # and Exp. Date: 0010710050101010		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Burkner		Signature: [Signature]		Month: 8 Day: 29 Year: 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]		Signature: [Signature]		Month: 4 Day: 27 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

511007

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	568212	0000
WEIGHMASTER		
B300056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	10:55 am	
DATE OUT	TIME OUT	
29 August 2007	10:55 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
572186		

Gross Weight 80,160.00 lb  
Tare Weight 34,400.00 lb Inbound --  
Net Weight 45,760.00 lb 22.68 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.68	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE AA



NON-HAZARDOUS WASTE MANIFEST

0592188

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1501 Birch St Golden, CO 80401 303-273-3666			5. Generating Location (if different) School of Mines Research Institute North West at 13th and Court St Golden, CO 80401 303-273-3666		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1501 Birch St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.		0116110000101015		Yards	Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Wingo		Signature		Month Day Year 8/29/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

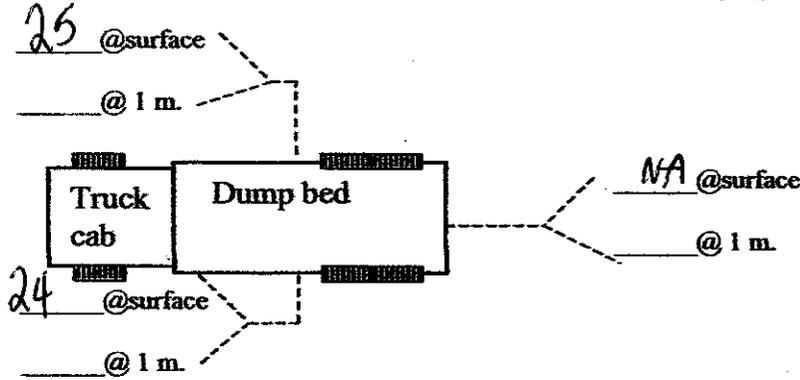
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 1043 Surveyed by: CHicks, J Mattson

Trucking Company: Gneve Truck license plate no. /state: JD01

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

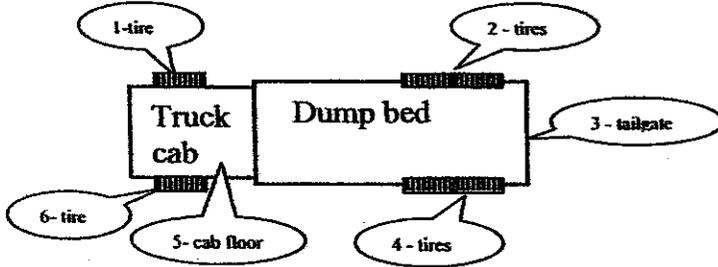
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 2.0 cpm	β 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

JDCI  
0592167

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Myrtle St Golden, CO 80401 303-278-5898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-278-3898				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1500 Myrtle St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a.		303-278-5898		18	Y	1-tons	1-ton
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman				Signature		Month Day Year 7 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Jose W Ruiz				Signature		Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR'S COPY

COM000033

511809

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	558214	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:00 am	
DATE OUT	TIME OUT	
29 August 2007	11:00 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592167		

Gross Weight 90,120.00 lb  
 Tare Weight 35,580.00 lb Inbound -  
 Net Weight 44,540.00 lb 22.27 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.27	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHE



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

JDC  
0592167

Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-1800			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-1800				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401 (Include ZIP, County, State, and Federal Government Structure if Applicable)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity Cylinders	20. Unit Wt/Vol Cylinders
				No.	Type		
a. Waste Soil		167-07000-1511015		18	Y	0	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman				Signature 		Month Day Year 7 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Jose W Ruiz				Signature 		Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

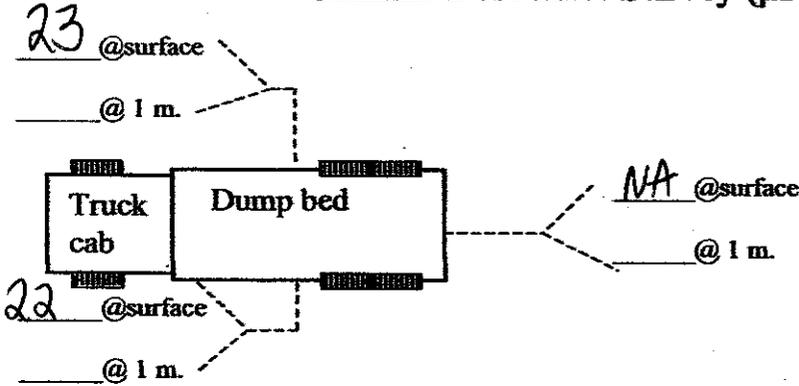
TRANSPORTER #1

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 1047 Surveyed by: C Hicks, J Mattson

Trucking Company: Griev Truck license plate no. /state: 95

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

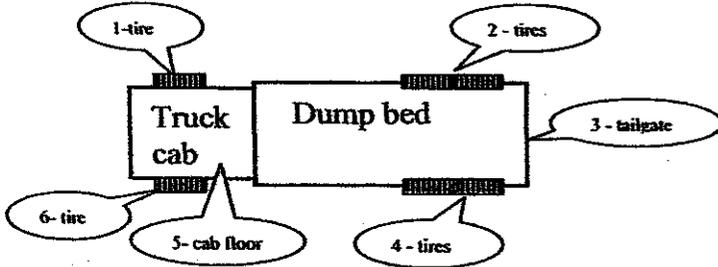
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

95  
0592168

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Garden, CO 80401 Phone: 303-273-3698			5. Generating Location (if different) University School of Law & Business Institute 1/4th West of 12th and Birch St Garden, CO 80401 Phone: 303-273-3698		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3900 Hwy 20 Garden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. <i>Asphalt</i>		01187070901011616			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>		Signature <i>[Signature]</i>		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR'S COPY

COM000033

511811

FOOTHILLS LANDFILL  
2900 HIGHWAY 95  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	598216	0000
WEIGHMASTER		
580005a Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:06 am	
DATE OUT	TIME OUT	
29 August 2007	11:06 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
598216		

Gross Weight 79,020.00 lb  
Tare Weight 36,980.00 lb  
Net Weight 42,040.00 lb 21.02 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.02	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



95

# NON-HAZARDOUS WASTE MANIFEST

## 0592168

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West at 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-1000			6. Phone ( ) 303-273-9998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Schools Landfill 1990 Hwy 93 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 187 87902 YS11915		19. Total Quantity 0.00000 Y-Yards	
b.				20. Unit Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature <i>[Signature]</i>		Month Day Year 8 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name David King			Signature <i>[Signature]</i>		Month Day Year 8 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

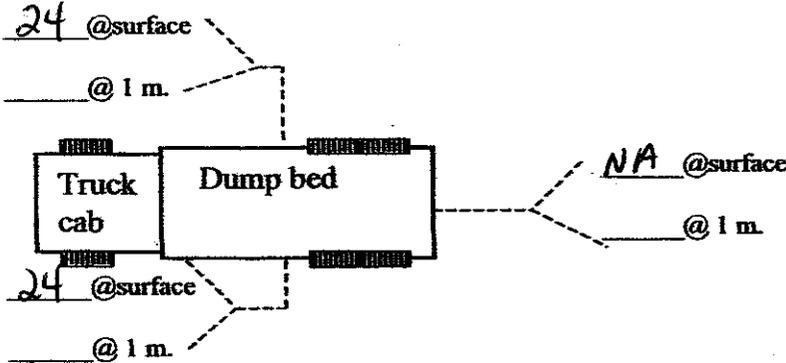
T/S/D FACILITY

TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1052 Surveyed by: CHicks, J Mattson  
 Trucking Company: Gniere Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

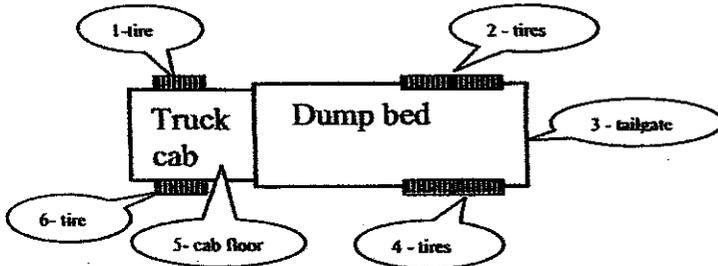
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



NON-HAZARDOUS WASTE MANIFEST

0592169

96

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1800 North St Golden, CO 80401 303-273-3008			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Barn St Golden, CO 80401 303-273-3008		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1800 North St Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 0316737902 1911915		18. Containers	
				19. Total Quantity	
				20. Unit	
a.				Y-Yards	
b.				Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

511814

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806003  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 598219	GRID 0000
WEIGHMASTER		
E500056 Barbara Jo S		
DATE IN 29 August 2007		TIME IN 11:11 am
DATE OUT 29 August 2007		TIME OUT 11:11 am
VEHICLE Y511915		ROLL OFF
REFERENCE 592169	ORIGIN	

Gross Weight 78,960.00 lb  
Tare Weight 36,580.00 lb  
Net Weight 42,380.00 lb 21.17 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.17	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0592169

96

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 West St Golden, CO 80401 303-273-2494			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Berk St Golden, CO 80401 303-273-3908		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address T. Schalls Laminat 6000 Hwy 50 Golden, CO 80401		17. Allied Waste Approval # and Exp. Date A01497070802 5/15/15		20. Unit Wt/Vol Tons	
16. Waste Shipping Name and Description a. Burn Sol b. c. d.		18. Containers No. Type		19. Total Quantity (1) Drums	
				20. Unit Wt/Vol (1) Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature 		Month Day Year 6/29/15
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name James O. Hume			Signature 		Month Day Year 6/29/15
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

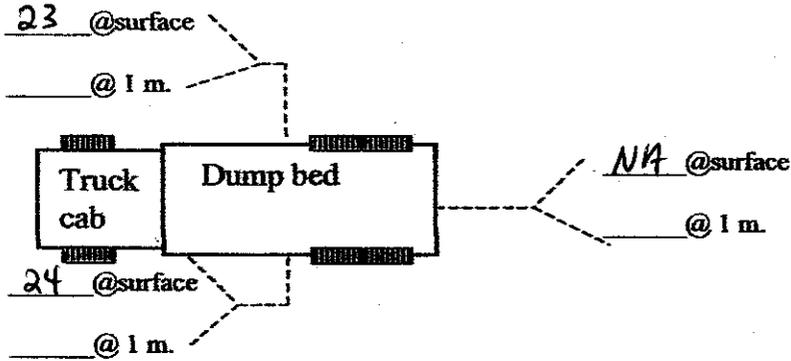
TRANSPORTER #1

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8-29-07 1059 Surveyed by: CHicks, J Mattson

Trucking Company: Gneve Truck license plate no. /state: 04

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

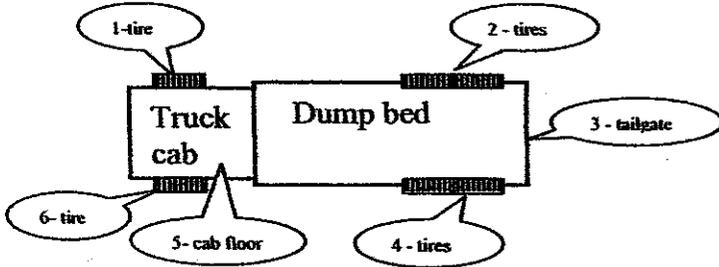
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 µrem/hr	α 2.0 cpm	β 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



NON-HAZARDOUS WASTE MANIFEST

JULY 0592170

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Sisson St Golden, CO 80401 303-273-4996				5. Generating Location (if different) Sius School of Mines Research Institute North West of 12th and Bach St Golden, CO 80401 303-273-4996	
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Sius School of Mines 2370 Hwy 92 Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.		b.		c.	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8/29/02
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Lester K... ..			Signature <i>[Signature]</i>		Month Day Year 09/29/02
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511824

FOOTHILLS LANDFILL  
8700 HIGHWAY 73  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585229	0000
WEIGHMASTER		
8300054 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:21 am	
DATE OUT	TIME OUT	
29 August 2007	11:21 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592170		

00 Gross Weight 75,480.00 lb  
 Tare Weight 35,640.00 lb      Inbound --  
 Net Weight 39,840.00 lb 19.72 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.72	TN	SW-COBT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

JULY  
0592170

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Bluffs St Golden, CO 80401 303-273-3900			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Black St Golden, CO 80401 303-273-3900		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 10001 W. 80th Golden, CO 80401 #169913 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a.					
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name John K... ..			Signature <i>[Signature]</i>		Month Day Year 08/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

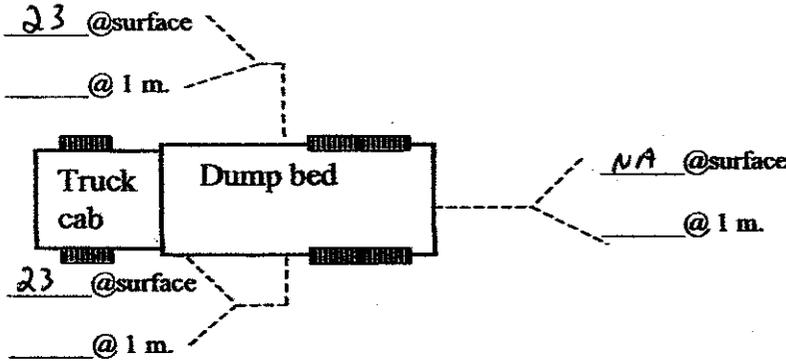
T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1107 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

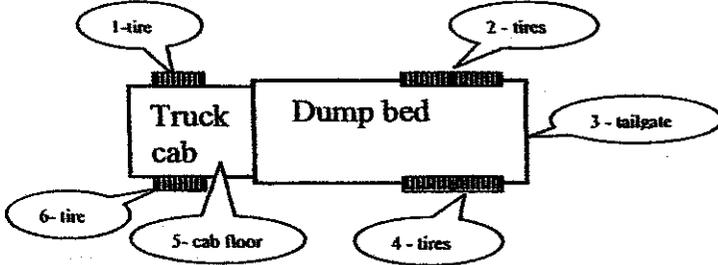
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



NON-HAZARDOUS WASTE MANIFEST

0582171

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-270-4908			5. Generating Location (if different) School of Mass Research Institute North West of 12th and Dixon St Golden, CO 80401 303-270-4908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Public Center 3000 Lowell St Golden, CO 80401 # 303-270-4908 (School of Mass)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 02157071808 7/31/97		18. Containers	
				No.	Type
a. Iron Soil				15	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Smith			Signature		Month Day Year 08 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature		Month Day Year 09 19 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY



# NON-HAZARDOUS WASTE MANIFEST

# 0592171

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Diron St Golden, CO 80401 303-273-3996				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 6000 Hwy 93 Golden, CO ACCOUNT # 30045 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity 0.000000 0.000000	20. Unit Wt/Vol Gallons
				No.	Type		
a. Norm Sod		CO 167 07308 Y511915		18	Y	Y-Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman				Signature		Month Day Year 8/29/07	
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month Day Year 08/29/07	
Printed/Typed Name Chuck Foy				Signature			
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month Day Year	
Printed/Typed Name				Signature			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

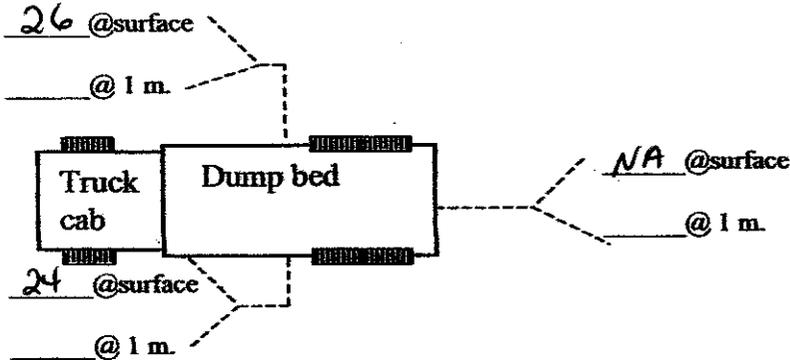
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1117 Surveyed by: CHicks, J Mattson

Trucking Company: Grieve Truck license plate no. /state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

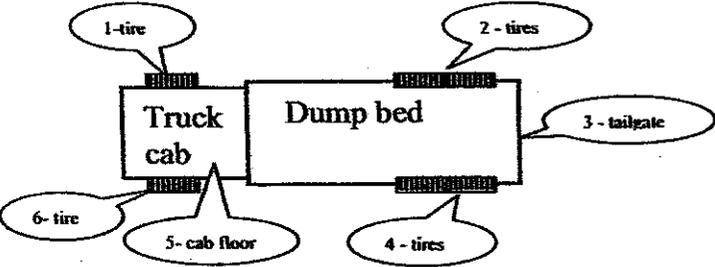
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



461

# NON-HAZARDOUS WASTE MANIFEST

0592172

Please print or type.

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden CO 80401 303-270-3590		5. Generating Location (if different) School of Mines Research Institute North West of 12th and Bristol Golden CO 80401 303-270-3590	
4. Phone ( )		6. Phone ( )	
7. Transporter #1 Company Name		8. US EPA ID Number	9. Transporter #1's Phone
10. Transporter #2 Company Name		11. US EPA ID Number	12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address Golden, CO		14. US EPA ID Number	15. Facility's Phone
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date	
a. Iron Sulf		18. Containers	
		No.	Type
b.		19. Total Quantity 13 Yards	20. Unit Tons
c.			
d.			
21. Additional Descriptions for Materials Listed Above			
22. Special Handling Instructions and Additional Information			
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.			
Printed/Typed Name Steve Brown		Signature <i>[Signature]</i>	Month Day Year 5 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials			
Printed/Typed Name Mike Murray		Signature <i>[Signature]</i>	Month Day Year 5 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials			
Printed/Typed Name		Signature	Month Day Year
26. Discrepancy Indication Space			
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)			
Printed/Typed Name		Signature	Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511827

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 980603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	888888	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:24 am	
DATE OUT	TIME OUT	
29 August 2007	11:24 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592171		

00 Gross Weight 34,160.00 lb  
 Tare Weight 36,540.00 lb Inbound -  
 Net Weight 47,420.00 lb 23.81 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.81	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



461

# NON-HAZARDOUS WASTE MANIFEST

# 0592172

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1701 Illinois St Golden, CO 80401 303-773-0996			5. Generating Location (if different) School of Films Research Institute North West of 12th and Birch St. Golden, CO 80401 303-773-0996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a.		205030000-010005		17 4	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve ...				8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mike Murray				8 27 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

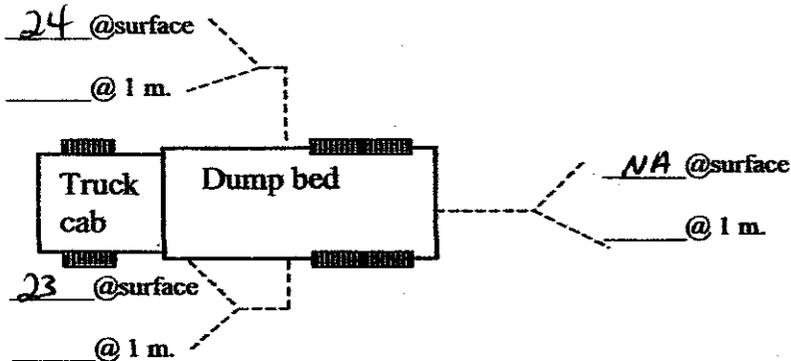
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1123 Surveyed by: CHicks, J Matson

Trucking Company: Grieve Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

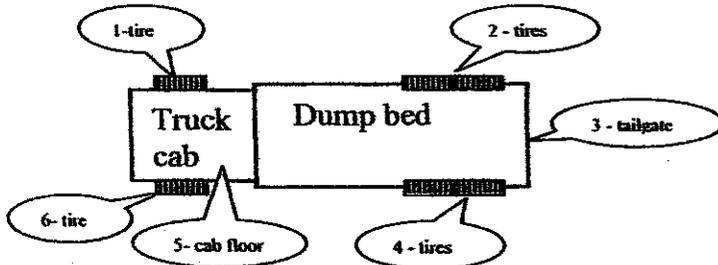
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



NON-HAZARDOUS WASTE MANIFEST

0592173

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 100 Illinois St. Golden, CO 80401 303-777-3000			5. Generating Location (if different) School of Mines Research Institute North West of 13th and Wash St Golden, CO 80401 303-273-3696		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name Joe Grieve Trucking		10. Transporter #2 Company Name		11. US EPA ID Number	
13. Designated T/S/D Facility Name and Site Address Rocky Mountain 10001 Hwy 28 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description Harm Soil		17. Allied Waste Approval # and Exp. Date CO LPT 170000 10/1/96		18. Containers No. Type 18 Y	
				19. Total Quantity 0.0 Yards	
				20. Unit Wt/Vol Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve S. Grieve			Signature <i>[Signature]</i>		Month Day Year 08/29/00
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Skonick			Signature <i>[Signature]</i>		Month Day Year 08/29/00
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

511835

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	538240	0000
WEIGHMASTER		
ISO0056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:38 am	
DATE OUT	TIME OUT	
29 August 2007	11:38 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592172		

CG Gross Weight 80,900.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 46,640.00 lb 23.32 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.32	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0592173

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3896			5. Generating Location (if different) Colorado School of Mines Research Institute North West on 12th and Park St Golden, CO 80401 303-273-3896		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				No. Type	
a. Man Soil		AW 07-070906 1811915		18 Y Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Joe Grieve</i>			Signature <i>[Signature]</i>		Month Day Year 6/19/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Spangler</i>			Signature <i>[Signature]</i>		Month Day Year 6/29/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

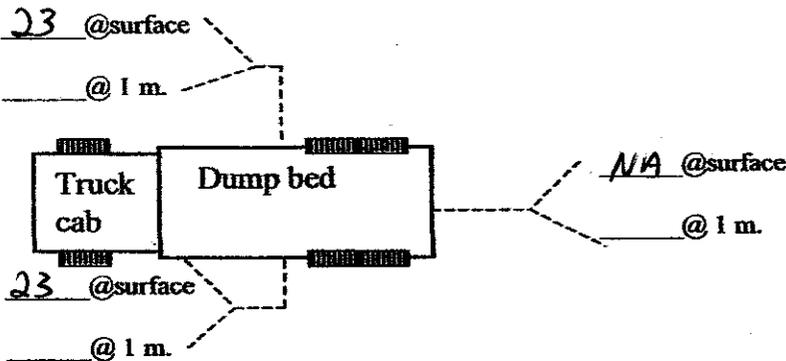
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1130 Surveyed by: Chicks, J Mattson

Trucking Company: Gnere Truck license plate no./state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

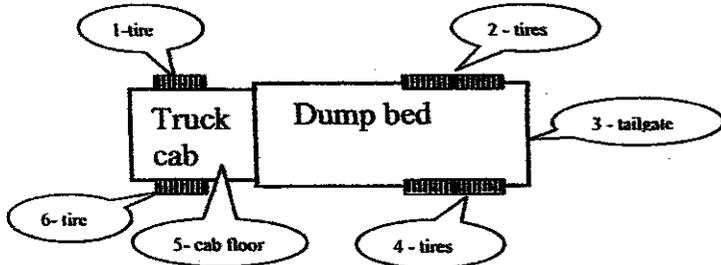
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



23

# NON-HAZARDOUS WASTE MANIFEST

0592176

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Grand St Golden, CO 80401 303-273-3000		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Allied Waste BC 1500 Illinois St Golden, CO 80401		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description				19. Total Quantity	
				20. Unit Wt/Vol	
a. Waste		05/17/2007		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]			Signature [Signature]		Month Day Year 8 29 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN			Signature [Signature]		Month Day Year 8 29 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

24 511838

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 750608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	523243	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:41 am	
DATE OUT	TIME OUT	
29 August 2007	11:41 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592173		

00 Gross Weight 80,720.00 lb  
 Tare Weight 37,200.00 lb Inbound --  
 Net Weight 43,520.00 lb 21.76 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.76	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *K. E. B.*



# NON-HAZARDOUS WASTE MANIFEST

23  
0592176

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-275-3666			5. Generating Location (if different) North West 12th and Park St Golden, CO 80401 303-275-3666		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8076 Hwy 90 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Heavy Soil		17. Allied Waste Approval # and Exp. Date 0017197687551915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month Day Year 8 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN		Signature 		Month Day Year 8 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

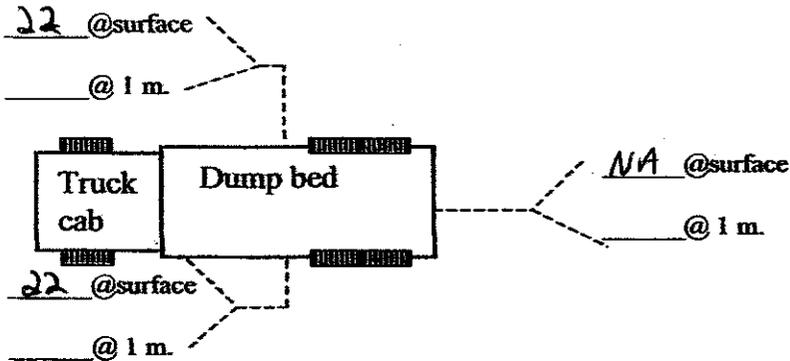
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1138 Surveyed by: CHicks, J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

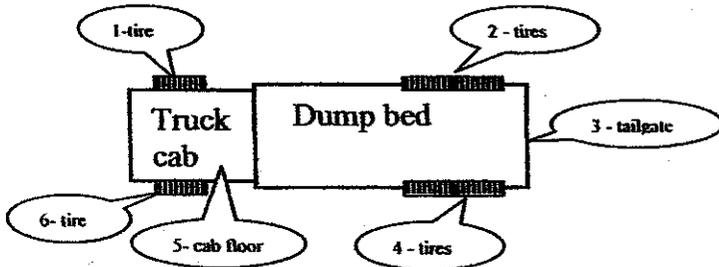
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

0592175

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3990			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dick St Golden, CO 80401 303-273-3990		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Genie Trucking H/R.		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontier Support 10001 Hwy 10 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. More Soil		0015700090075-1015		15	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Zimmerman				Signature <i>[Signature]</i>	
				Month	Day
				8	29
				Year	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Dan Hillman				Signature <i>[Signature]</i>	
				Month	Day
				8	29
				Year	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

511915

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	538248	0000
WEIGHMASTER		
#00005: Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:45 am	
DATE OUT	TIME OUT	
29 August 2007	11:45 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592176		

00 Gross Weight 91,580.00 lb  
 Tare Weight 35,100.00 lb Inbound --  
 Net Weight 46,480.00 lb 23.24 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0592175

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998				
7. Transporter #1 Company Name Cerritos Trucking #12.			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Prothelia Landfill 8900 Hwy 93 Golden, CO 80401 (Colorado Revised Statutes)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
a. Norm Soil			CO 187 070906 Y5 11915		18		5 Yards	10 Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brannon				Signature 		Month Day Year 8 29 07		
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Dan Yellon				Signature 		Month Day Year 8 29 07		
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

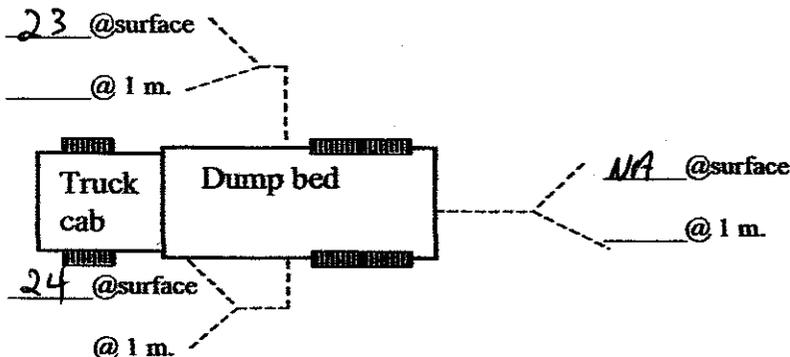
GM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1149 Surveyed by: CHicks, J Mattson

Trucking Company: Gnere Truck license plate no./state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

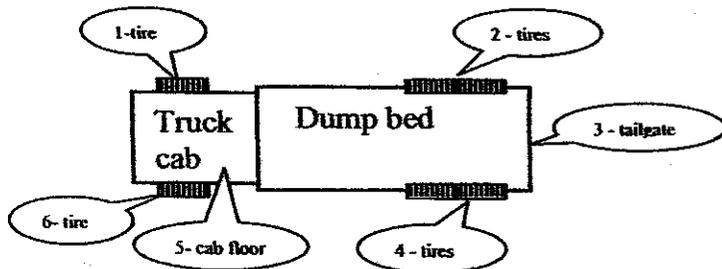
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	54.4 dpm	556.1 dpm



# NON-HAZARDOUS WASTE MANIFEST

13  
0592174

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3500			5. Generating Location (if different) School of Mines Research Institute North West of 19th and Birch St Golden, CO 80401 303-273-3500		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1870 Hwy 93 Golden, CO 80401 # 1870311 School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date 00197070001 10/15/15		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]		Signature [Signature]		Month Day Year 08 29 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Roberto Collozo Lopez		Signature [Signature]		Month Day Year 08 29 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR'S COPY

COM000033

521852 *De*

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
720608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	588257	0000
WEIGHMASTER		
BS00006 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	11:54 am	
DATE OUT	TIME OUT	
29 August 2007	11:54 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592175		

Contract: Y511915

00 Gross Weight 50,460.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 45,760.00 lb 22.88 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.88	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0592174

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 15th St Golden, CO 80401 303-275-3861			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-275-3866		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	19. Total Quantity
				No.	Type
a. Sand Soil		00-197-000000-11876		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve [Signature]		[Signature]		5 19 22	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Raed [Signature]		[Signature]		08 29 08	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

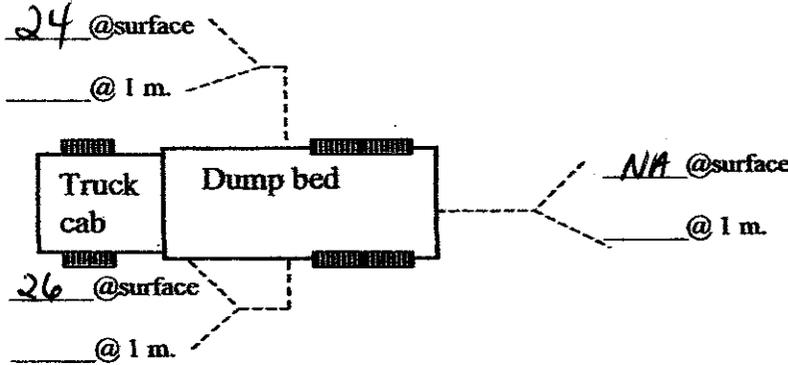
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8-29-07 1201 Surveyed by: CHicks, J Mattson

Trucking Company: Gniere Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

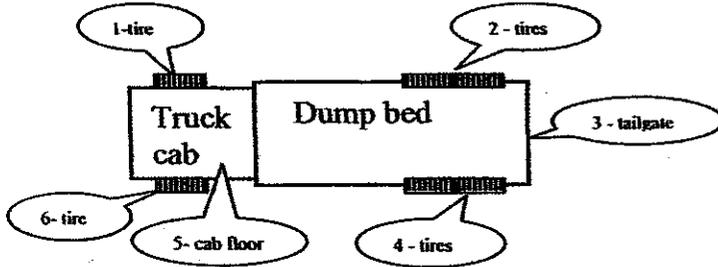
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	8 $\mu\text{rem/hr}$	$\alpha$ 2.0 cpm	$\beta$ 255 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	54.4 dpm	556.1 dpm	



# NON-HAZARDOUS WASTE MANIFEST

961  
0592157

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 1900 ... ... 4. Phone ( )			5. Generating Location (if different) ... School of Minus Research Institute /North West of 12th and Birch St ... 6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address ... ... ... 14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity Cu Yards	20. Unit Wt/Vol Tons
				No.	Type		
a.							
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name				Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR'S COPY

COM000033

511384

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 80401  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588267	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	12:10 pm	
DATE OUT	TIME OUT	
29 August 2007	12:10 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592174		

Gross Weight 80,740.00 lb  
 Tare Weight 38,700.00 lb Inbound --  
 Net Weight 45,040.00 lb 22.52 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.52	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

961  
0592157

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1700 University Ave Denver, CO 80202 Phone (303) 733-3660				5. Generating Location (if different) Colorado School of Mines Research Institute 1400 West 12th Ave Golden, CO 80401 Phone (303) 733-3660	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a.		101070000 Y511015		7 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Dick Beaman				Signature <i>[Signature]</i>	
				Month Day Year 8 29 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name [Name]				Signature <i>[Signature]</i>	
				Month Day Year 9 29 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

COM000033

511869

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588274	0000
WEIGHMASTER		
1300056 Barbara Jo S		
DATE IN	TIME IN	
29 August 2007	12:32 pm	
DATE OUT	TIME OUT	
29 August 2007	12:32 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592157		

Gross Weight 81,140.00 lb  
 Tare Weight 34,400.00 lb      Inbound --  
 Net Weight 46,740.00 lb 23.37 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.37	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

8/23/07 cont.

## Truck Departure Record Form

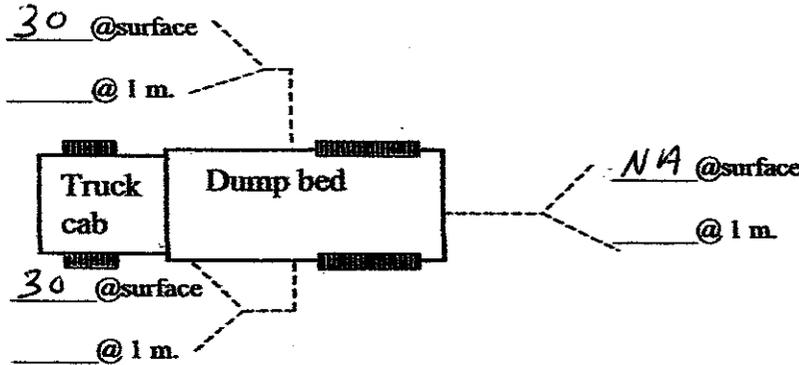
Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Murray 461	8/23/07	1215	1225	18	86500
JD 04		1220	1232		80200
Collazo 13		1225	1238		88400
Marquez 961		1240	1252		85,200
Grieve 8		1245	1300		88,600
Ruiz 95		1250	1307		80,800
Grieve 12		1255	1315		89,900
Grieve 24		1300	1322		82700
Grieve 23		1305	1330		85300
JD 01		1320	1336		80,600
Marquez 96		1325	1343		79,500
Murray 461		1340	1350		83,400
JD 04		1350	1359		80,200
Collazo 13		1400	1406		83,600
Marquez 961		1405	1417		81,700
Grieve 8		1405	1425		84,500
Ruiz 95		1410	1430		77,900
Grieve 12		1425	1440		82700
Grieve 24		1430	1445		80,300
JD 01		1440	1454		75,200



**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/23/07 1225 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grievre Truck license plate no. /state: 461

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

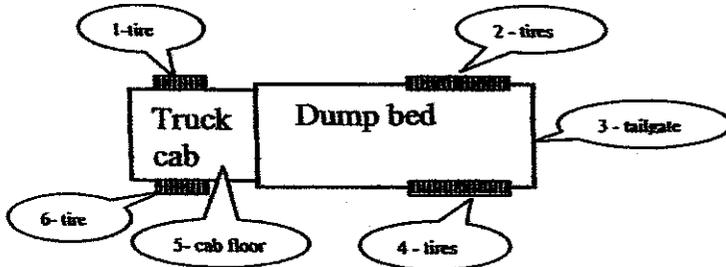
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6





461

# NON-HAZARDOUS WASTE MANIFEST

## 0592498

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address FootHills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 961903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	23/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Mike Murray				8	23/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

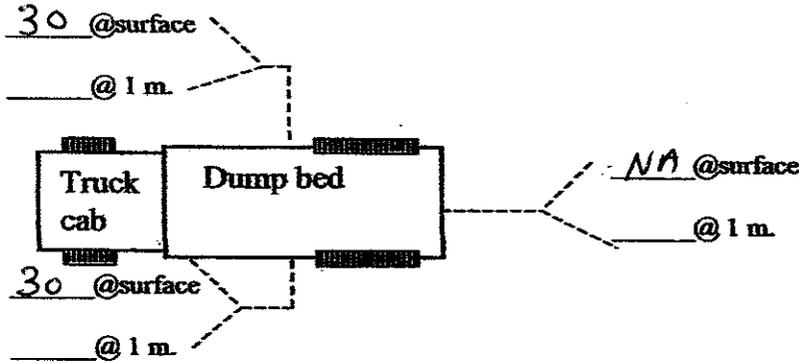
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1232 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no./state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

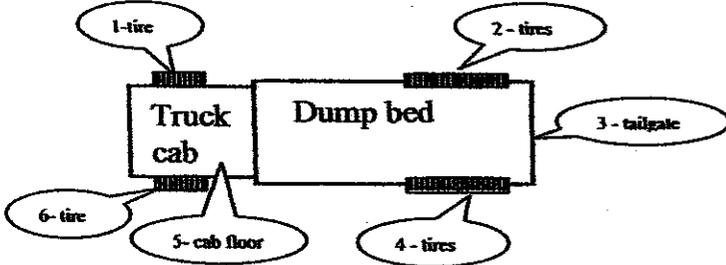
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507151 04

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	584567	0000
WEIGHMASTER		
2500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	12:50 pm	
DATE OUT	TIME OUT	
23 August 2007	12:50 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592479		

Gross Weight 80,240.00 lb  
 Tare Weight 35,640.00 lb      Inbound --  
 Net Weight 44,600.00 lb 22.30 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.30	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE [Signature] 8-23-07



NON-HAZARDOUS WASTE MANIFEST

0592499

04

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 3800 Hwy 90 Golden, CO ACCOUNT # 980813 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		6	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Sieve Beckman			Signature		Month Day Year 8 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name SAH, 990 Vax 901			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

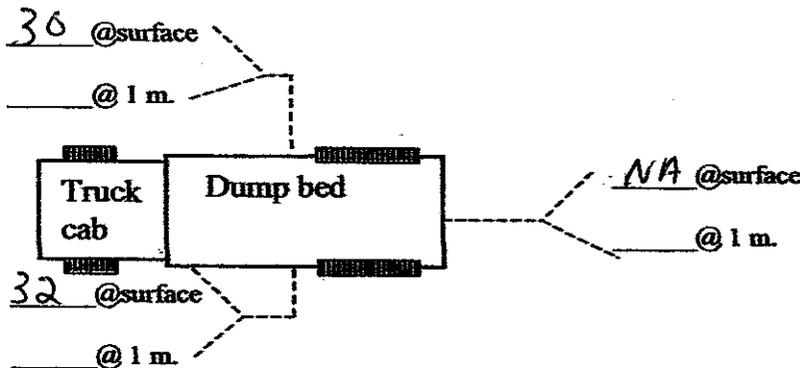
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1238 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

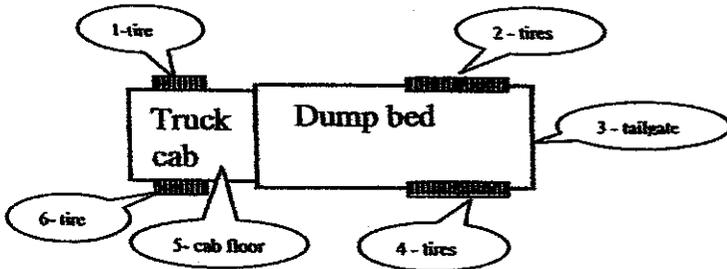
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5	569.6	

507158 B

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contracts: Y511915

SITE	TICKET	GRID
01	566572	0000
WEIGHMASTER		
BSC0056 Barbera, Jo S		
DATE IN	TIME IN	
23 August 2007	12:55 pm	
DATE OUT	TIME OUT	
23 August 2007	12:58 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592500		

00 Gross Weight 88,440.00 lb  
 Tare Weight 35,700.00 lb Inbound ---  
 Net Weight 52,740.00 lb 26.37 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.37	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



13

# NON-HAZARDOUS WASTE MANIFEST

## 0592500

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontline Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 509603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham			Signature		Month Day Year 8/29/07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Rafael Colon Lopez			Signature		Month Day Year 08/23/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

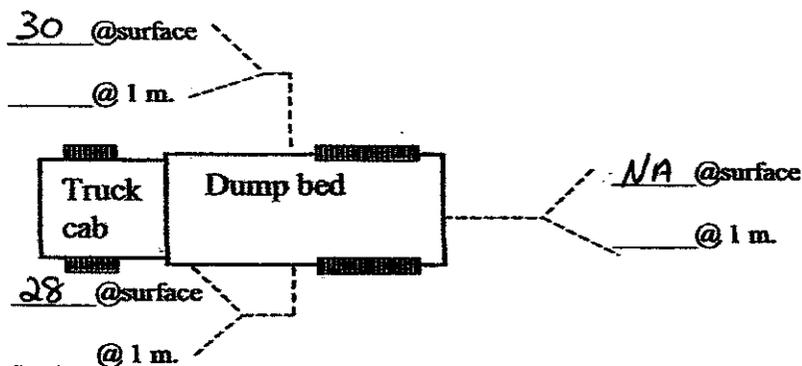
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1252 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

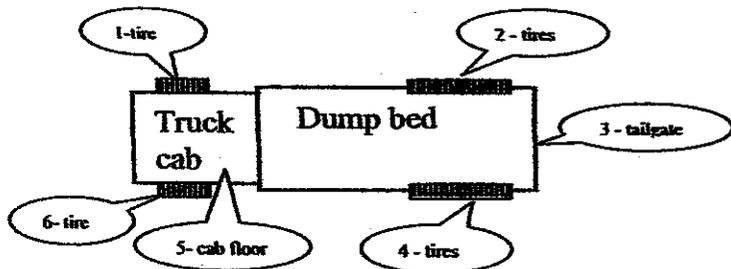
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6





# NON-HAZARDOUS WASTE MANIFEST

0645002

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		6	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benham</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>	
				Month Day Year 4 27 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

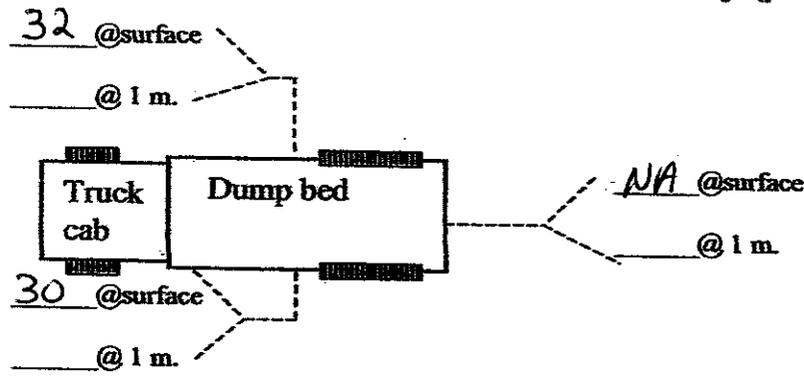
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1300 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

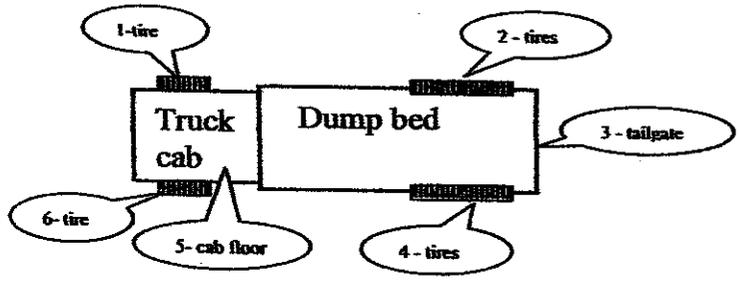
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	

507174 8

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	584591	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	1:22 pm	
DATE OUT	TIME OUT	
23 August 2007	1:22 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645003		

Gross Weight 88,600.00 lb  
 Tare Weight 36,540.00 lb      Inbound -  
 Net Weight 52,060.00 lb 26.03 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.03	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



8

# NON-HAZARDOUS WASTE MANIFEST

## 0645003

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of .	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 93 Golden CO ACCOUNT # 960813 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Chuck Foy				08	03 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

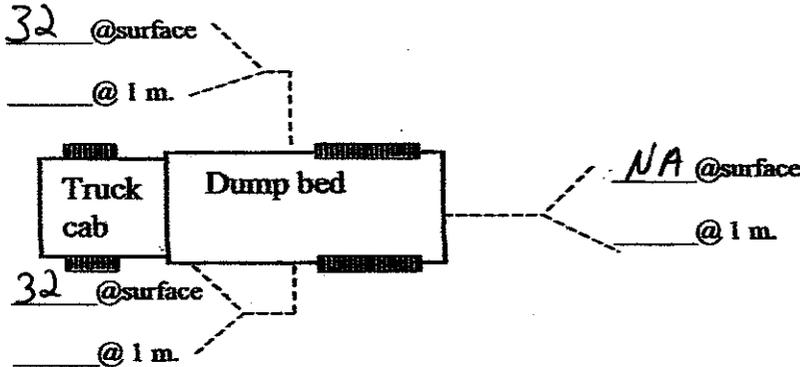
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1307 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

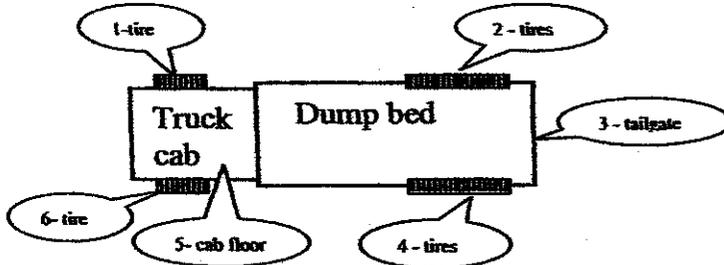
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

507178 95

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960609  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	886598	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	1:28 pm	
DATE OUT	TIME OUT	
23 August 2007	1:28 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645004		

Gross Weight 80,800.00 lb  
 Tare Weight 36,980.00 lb Inbound --  
 Net Weight 43,820.00 lb 21.91 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.91	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



95

# NON-HAZARDOUS WASTE MANIFEST

## 0645004

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2900 Hwy 93 Golden CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Meredith King				8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

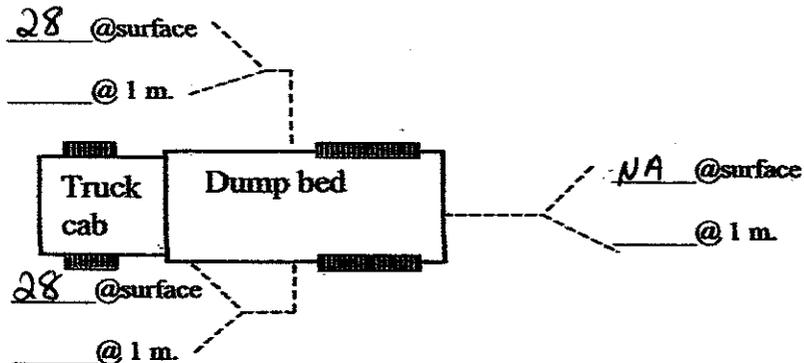
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1315 Surveyed by: J Mattson / C Hicks

Trucking Company: Griev Truck license plate no./state: 12 24 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

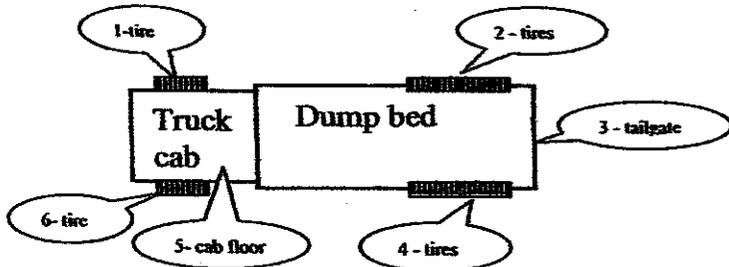
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507182 13

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 980603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	536599	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	1:31 pm	
DATE OUT	TIME OUT	
23 August 2007	1:31 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645005		

Gross Weight 89,860.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 52,160.00 lb 26.08 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.08	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0645005

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name Green Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8800 Hwy 93 Golden, CO ACCOUNT # 860803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day Year 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Olson		Signature 		Month 8	Day Year 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name D.H. [unclear]		Signature 		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

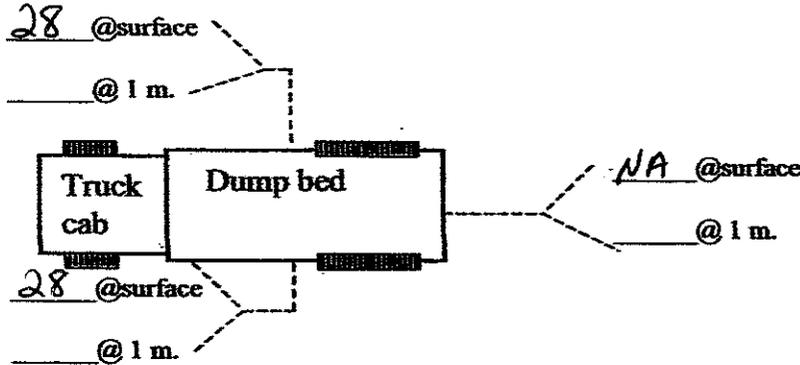
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1322 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grievé Truck license plate no./state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

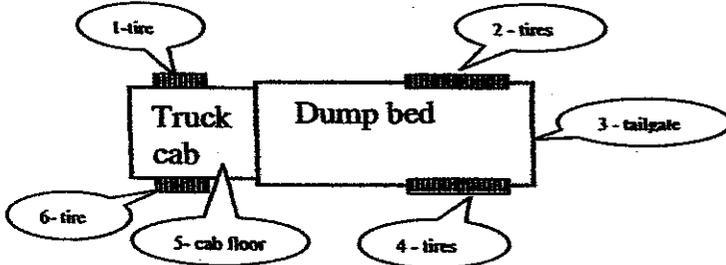
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

24 507188

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586606	GRID 0000
WEIGHMASTER 6600056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 1:41 pm	
DATE OUT 23 August 2007	TIME OUT 1:41 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592405	ORIGIN	

Gross Weight 82,700.00 lb  
 Tare Weight 37,200.00 lb Inbound --  
 Net Weight 45,500.00 lb 22.75 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.75	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KERS



# NON-HAZARDOUS WASTE MANIFEST

## 0592485

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3996			6. Phone ( ) 303-273-3996		
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Boothills Landfill 8200 Hwy 93 Golden, CO ACCOUNT # 057903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CO 157 070806 1511915		No. Type	
				D. Drums	
				Tons	
b.				Y-Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <b>Steve Brinkman</b>			Signature <i>[Signature]</i>		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <b>Ken Shannick</b>			Signature <i>[Signature]</i>		Month Day Year 08 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

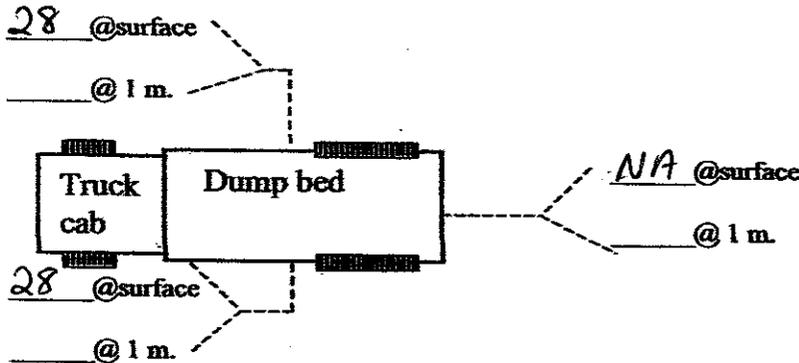
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1330 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

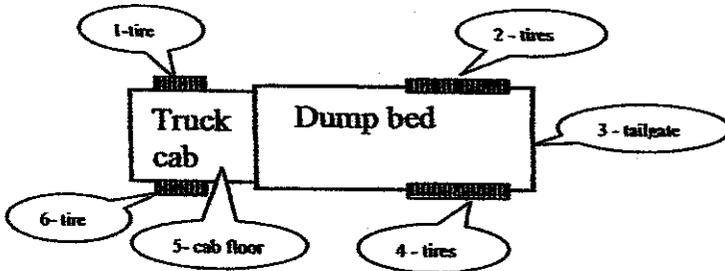
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507192 23

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960803  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586610	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	1:47 pm	
DATE OUT	TIME OUT	
23 August 2007	1:47 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592486		

Gross Weight 85,300.00 lb  
Tare Weight 35,100.00 lb      Inbound --  
Net Weight 50,200.00 lb 25.10 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX
25.10	TN	SW-CONT SOIL			
1.00	LD	ENVIRONMENTAL FEE			
1.00	LD	FUEL RECOVERY FEE			

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

0592486

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone			
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone			
13. Designated T/S/D Facility Name and Site Address Facilities Landfill 8500 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						0 Drums	0 Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month Day Year			
Steve Brinkman				8   23   07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
MARK PHELAN				8   23   07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

T/S/D FACILITY

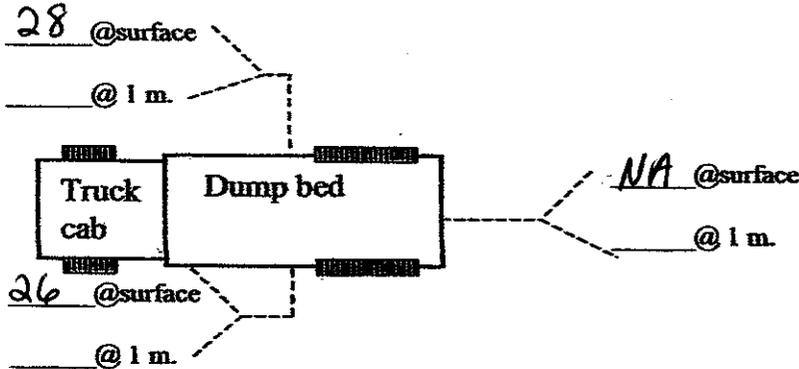
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/23/07 1336 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no./state: JD 01

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

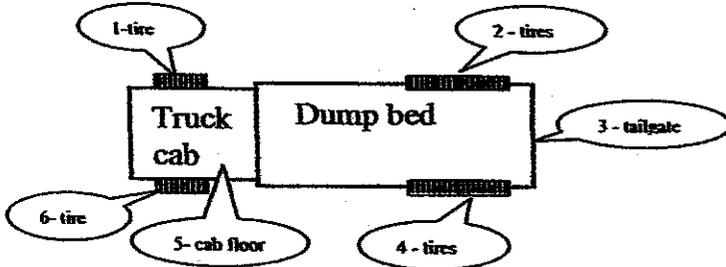
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6





NON-HAZARDOUS WASTE MANIFEST

0592487

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footfalls Landfill 8500 Hwy 93 Golden, CO ACCOUNT # 96005 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name JOSE W Ruiz			Signature		Month Day Year 6 2 7
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

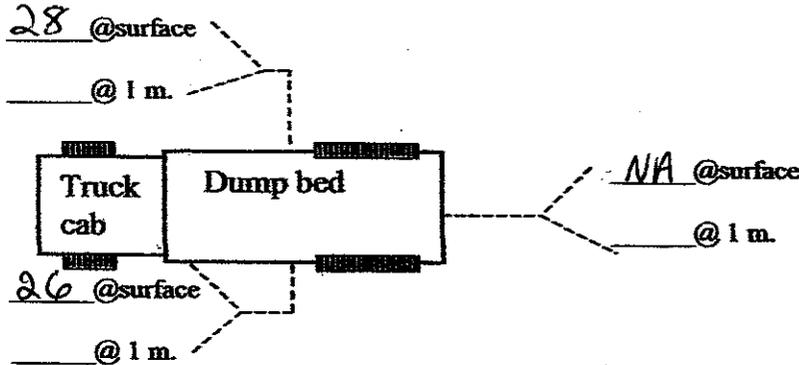
T/S/D FACILITY

TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1343 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

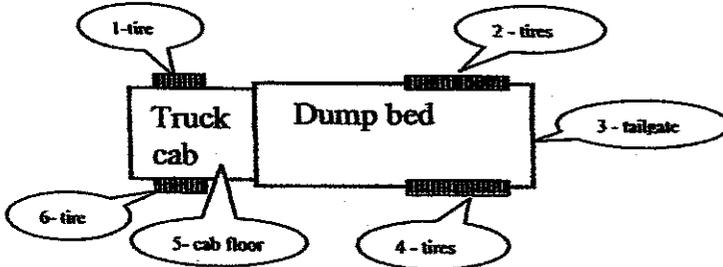
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507198 96

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588616	0000
WEIGHMASTER		
5900056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:06 pm	
DATE OUT	TIME OUT	
23 August 2007	2:06 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592488		

OO Gross Weight 79,500.00 lb  
 Tare Weight 36,580.00 lb Inbound -  
 Net Weight 42,920.00 lb 21.46 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.46	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

*John Doe*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



96

# NON-HAZARDOUS WASTE MANIFEST

## 0592488

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 921603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
				D. Drums	
				G. Gallons	
a. Norm Soil		CO LB7 070908 Y511915		Y-Yards	
b.				T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Beckman		<i>[Signature]</i>		8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Vera		<i>[Signature]</i>		8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

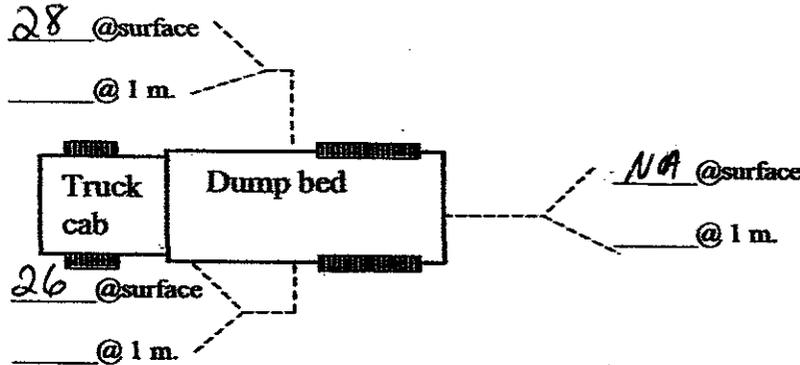
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1350 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 461

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

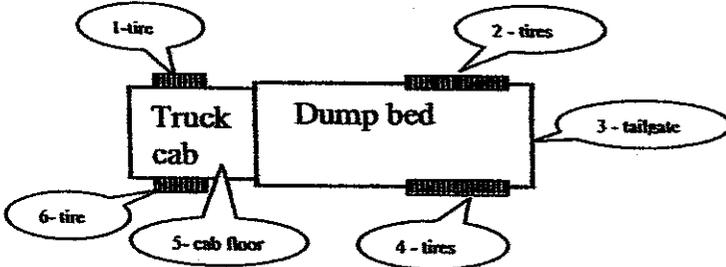
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507200 461

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	506618	0000
WEIGHMASTER		
R600056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:09 pm	
DATE OUT	TIME OUT	
23 August 2007	2:09 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592489		

00 Gross Weight 83,400.00 lb  
 Tare Weight 34,260.00 lb Inbound --  
 Net weight 49,140.00 lb 24.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.57	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0592489

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( 303-273-3898 )			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3898 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 83 Golden, CO ACCOUNT # 860603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers	
				No.	Type
b.				18 Y 4 Y-Yards -Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bankman		Signature <i>[Signature]</i>		Month Day Year 8   23   07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray		Signature <i>[Signature]</i>		Month Day Year 8   23   07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name B...		Signature <i>[Signature]</i>		Month Day Year	

GENERATOR

TRANSPORTER

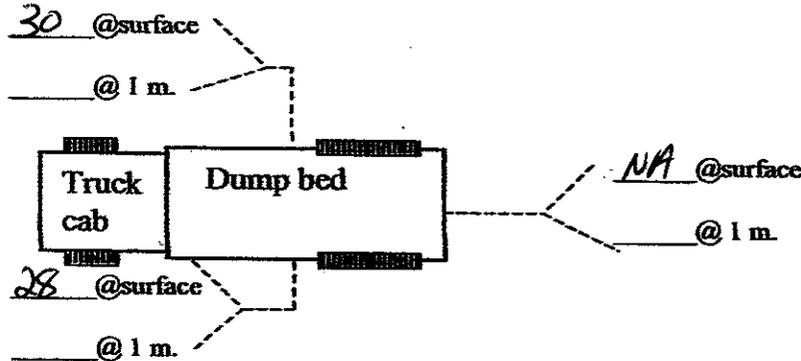
T/S/D FACILITY

TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1359 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: J D04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

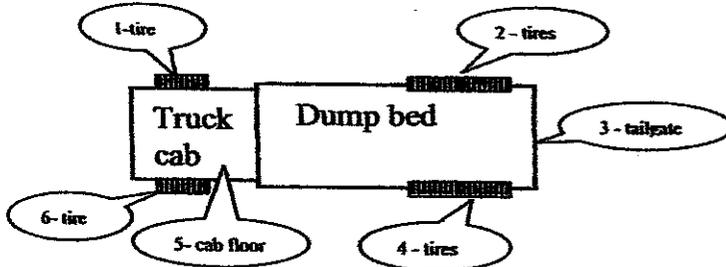
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507206

04

FOOTHILLE LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
980603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586624	0000
WEIGHMASTER		
3500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:18 pm	
DATE OUT	TIME OUT	
23 August 2007	2:18 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592494		

GC Gross Weight 80,290.00 lb  
Tare Weight 35,640.00 lb Inbound --  
Net Weight 44,640.00 lb 22.32 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.32	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE  8-23-07



04

# NON-HAZARDOUS WASTE MANIFEST

0592494

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address P. Smiths Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			Y-Yards Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bankman		Signature		Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas		Signature		Month Day Year 8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

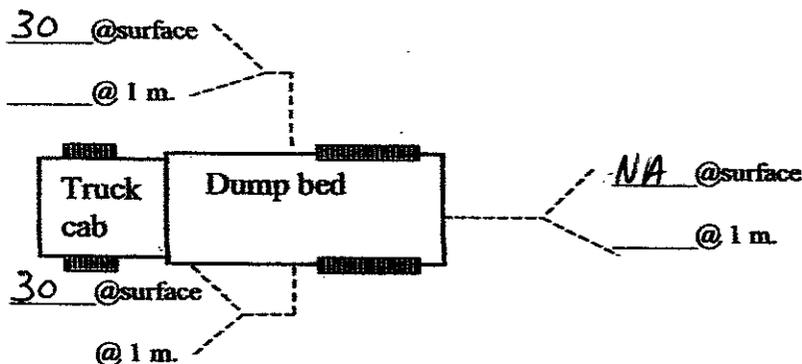
GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1406 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

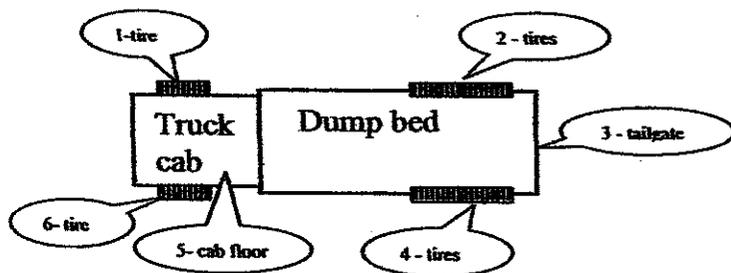
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507212 13

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586630	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:24 pm	
DATE OUT	TIME OUT	
23 August 2007	2:24 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592475		

.00 Gross Weight 83,560.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 47,860.00 lb 23.93 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.93	TN	SW-CDNT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL REDCOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0592475

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footfalls Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman			Signature <i>[Signature]</i>		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Michael Collier Lopez			Signature <i>[Signature]</i>		Month Day Year 09 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name [Signature]			Signature <i>[Signature]</i>		Month Day Year 09 23 07

GENERATOR

TRANSPORTER

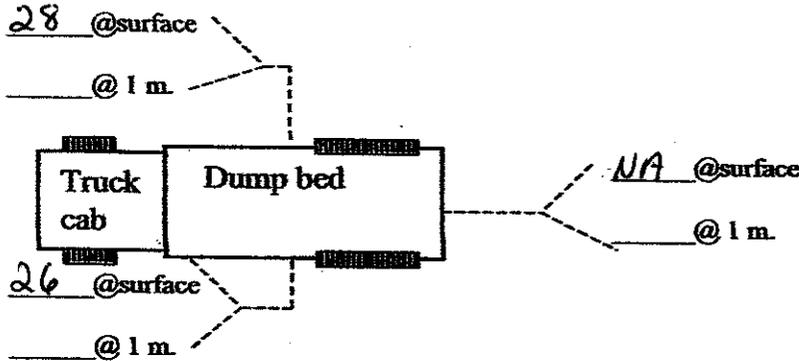
T/S/D FACILITY

TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1417 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

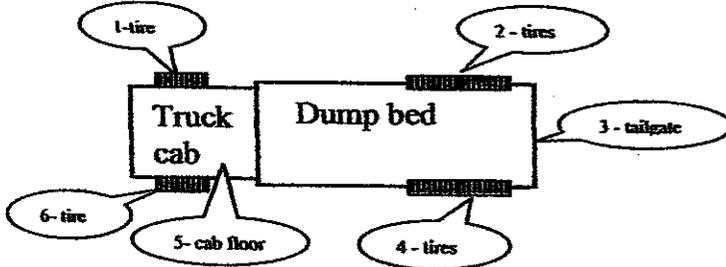
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507218 96

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 940603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	556636	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:36 pm	
DATE OUT	TIME OUT	
23 August 2007	2:36 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592476R		

00 Gross Weight 81,740.00 lb  
 Tare Weight 34,400.00 lb Inbound -  
 Net Weight 47,340.00 lb 23.67 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.67	TN	SW-CDNT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE A.J.



361

# NON-HAZARDOUS WASTE MANIFEST

# 0592476

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996				
4. Phone ( )		6. Phone ( )		7. Transporter #1 Company Name		8. US EPA ID Number		
9. Transporter #1's Phone		10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone		
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 93 Golden, CO ACCOUNT # 80003 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone		
16. Waste Shipping Name and Description				17. Allied Waste Approval # and Exp. Date		18. Containers		
						No.	Type	19. Total Quantity
a. Norm Soil				CO L67 070908 Y511915			Y-Yards	
b.							Tons	
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Benken				Signature 		Month 8	Day 23	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Alvin M... ..				Signature 		Month 8	Day 23	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name Benjamin Taylor				Signature 		Month 8	Day 23	Year 07

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

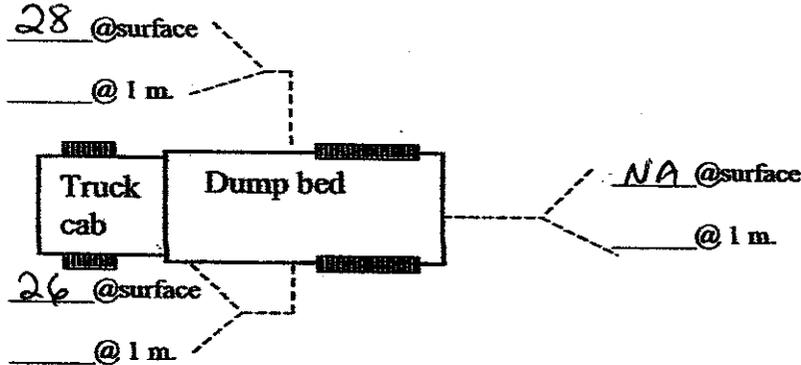
TRANSPORTER #2

COMB00033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/23/07 1425 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

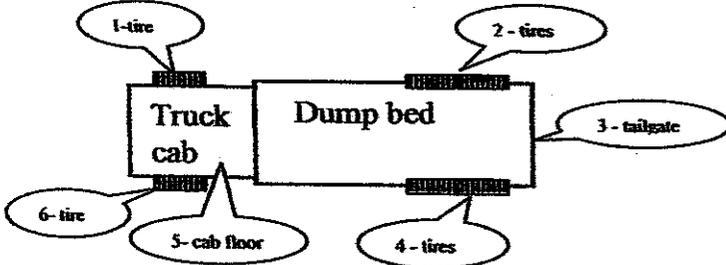
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

537223 8

FOOTHILLS LANDFILL  
 8900 HIGHWAY 73  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	566638	0000
WEIGHMASTER		
ES0005a Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:43 pm	
DATE OUT	TIME OUT	
23 August 2007	2:43 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592477		

00 Gross Weight 84,540.00 lb  
 Tare Weight 36,540.00 lb Inbound --  
 Net Weight 48,000.00 lb 24.00 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.00	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



8

# NON-HAZARDOUS WASTE MANIFEST

# 0592477

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3900			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3900		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Crotchell Landfill 6500 Hwy 93 Golden, CO ACCOUNT # 150002 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Nam Soil		CO 187 070908 1511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Berman</i>			Signature <i>[Signature]</i>		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Chuck Foy</i>			Signature <i>[Signature]</i>		Month Day Year 08 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

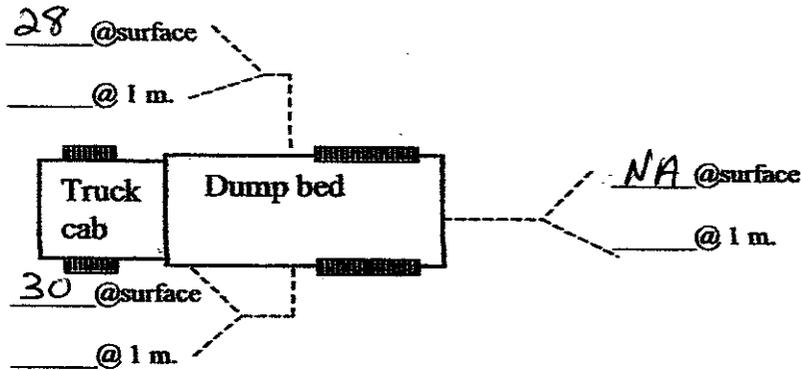
TRANSPORTER #1

CCM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1430 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

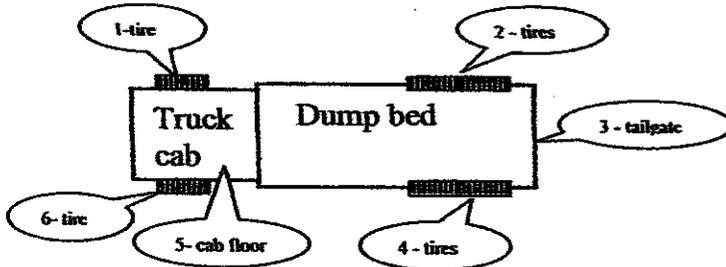
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507223 95

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586641	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:50 pm	
DATE OUT	TIME OUT	
23 August 2007	2:50 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592478		

00 Gross Weight 77,940.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 40,960.00 lb 20.48 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.48	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_



95

# NON-HAZARDOUS WASTE MANIFEST

## 0592478

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Facilities Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CO L67 070908 Y511915		D-Drums	
				Y-Yards	
				T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Michael King				8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

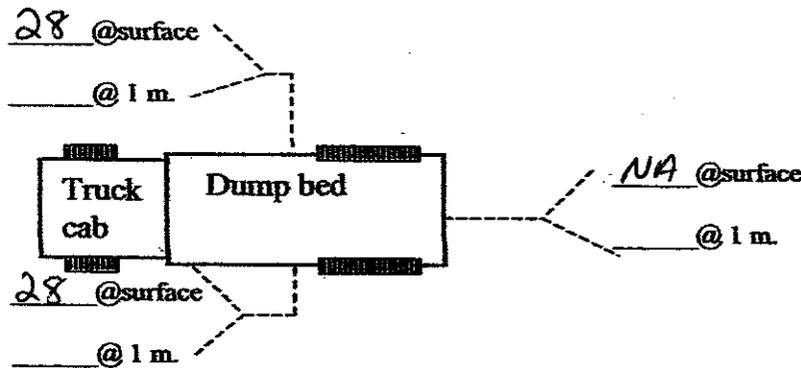
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1440 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

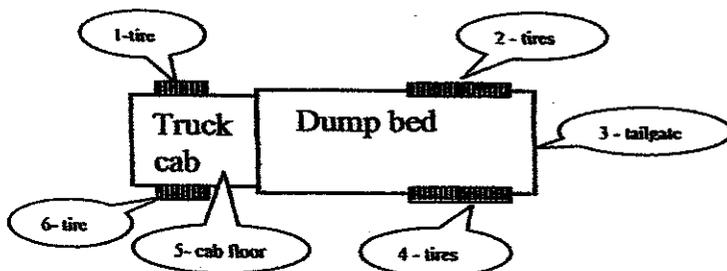
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

507227 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	586645	0000
WEIGHMASTER		
8300036 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	2:55 pm	
DATE OUT	TIME OUT	
23 August 2007	2:55 pm	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
592479		

00 Gross Weight 82,680.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 44,980.00 lb 22.49 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.49	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



12

# NON-HAZARDOUS WASTE MANIFEST

## 0592479

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Griek Trucking 12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L07 070908 Y511915		19. Total Quantity D-Drums 20. Unit G-Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Binkman		Signature		Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean J Owen		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

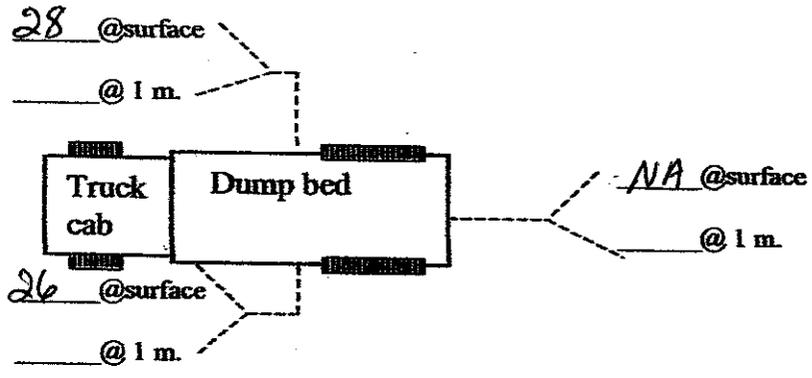
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1445 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 24

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

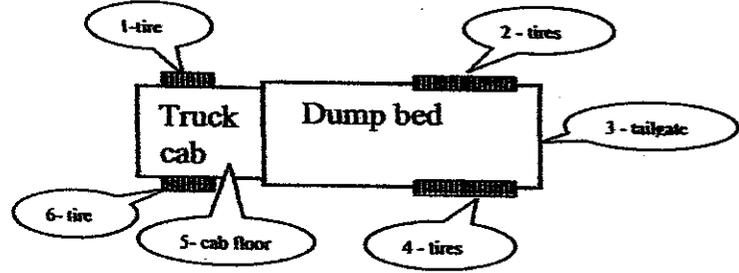
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	





# NON-HAZARDOUS WASTE MANIFEST

0592480

24

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address 1500 Illinois St Golden, CO ACCOUNT # 144403 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity (Drums)	20. Unit Wt/Vol (Gallons)
a. Norm Soil		CC 197 070908 1511915		18	Y	7-Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Brackman</i>				Signature <i>[Signature]</i>		Month Day Year 2 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Ken Shannon</i>				Signature <i>[Signature]</i>		Month Day Year 08 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

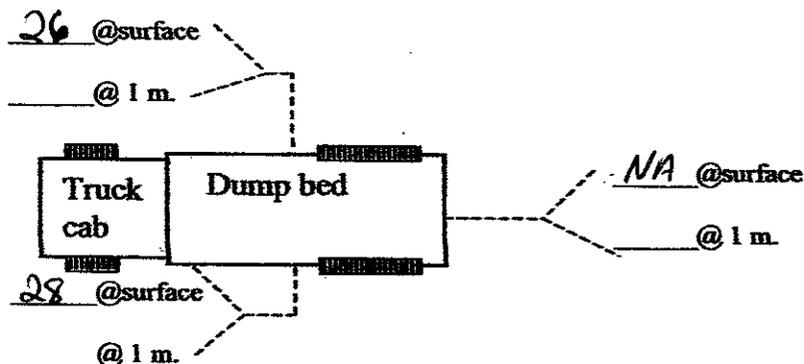
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1454 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 01

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

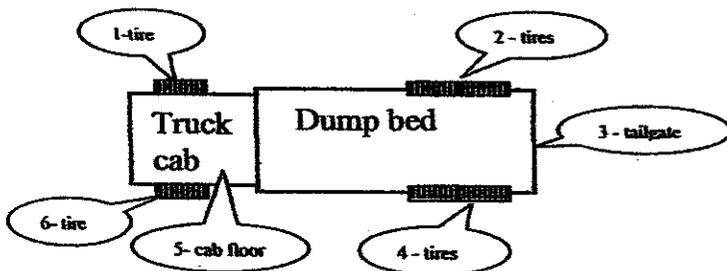
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

507238 01

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contracts: Y511915

SITE	TICKET	GRID
01	556656	0000
WEIGHMASTER		
B500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	3:10 pm	
DATE OUT	TIME OUT	
23 August 2007	3:10 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592481		

Gross Weight 75,180.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 39,600.00 lb 19.80 TN  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.80	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

01  
0592481

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960813 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CO L67 070908 Y511915		6 Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 23 07
24. TRANSPORTER #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Jose W Roik			Signature		Month Day Year
25. TRANSPORTER #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

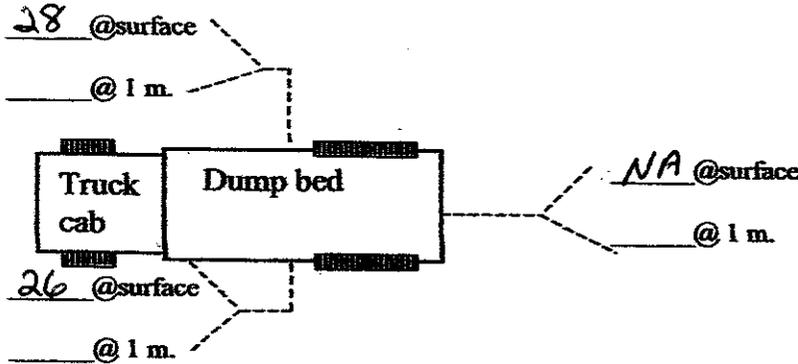
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1505 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

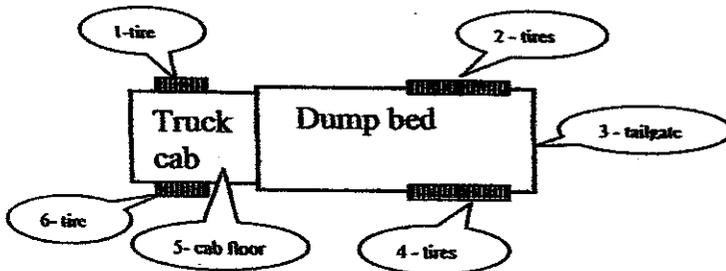
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

507246 96

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585664	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	3:21 pm	
DATE OUT	TIME OUT	
23 August 2007	3:21 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592462		

00 Gross Weight 75,100.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 38,520.00 lb 19.26 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.26	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

96  
0592482

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 93 Golden, CO ACCOUNT # 863003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CC L67 070908 7511515		6	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
Fernando Torres				8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	

GENERATOR

TRANSPORTER

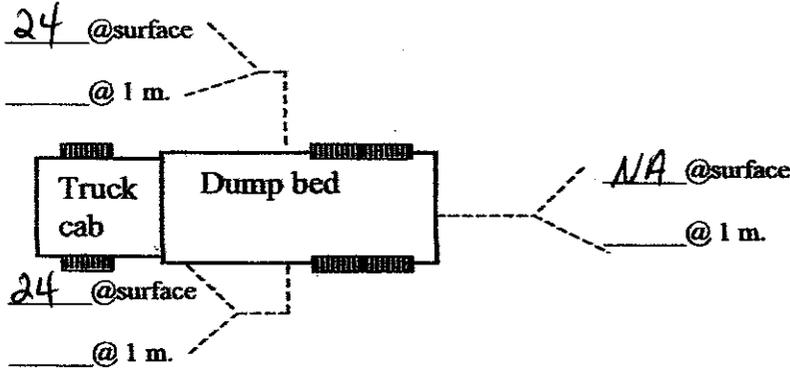
T/S/D FACILITY

TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1512 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

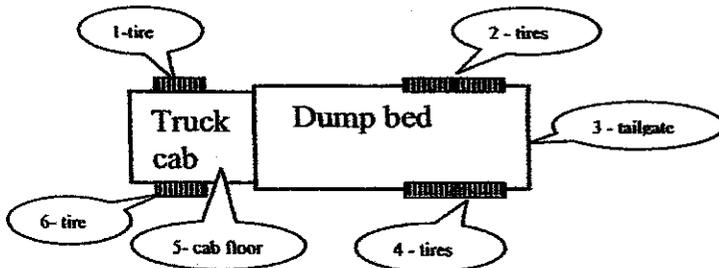
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5	569.6	





# NON-HAZARDOUS WASTE MANIFEST

0592484

701

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Port Hills Landfill 4900 Hwy 93 Golden, CO ACCOUNT # 001003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Benham				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Mike Murray				8	23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
				8	23 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

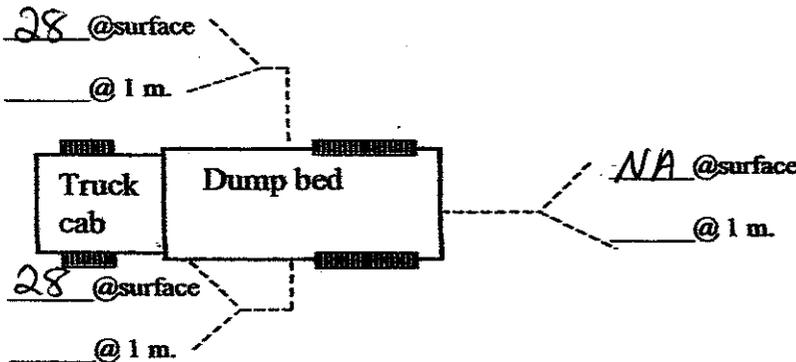
TRANSPORTER #2

COM0000

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1520 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

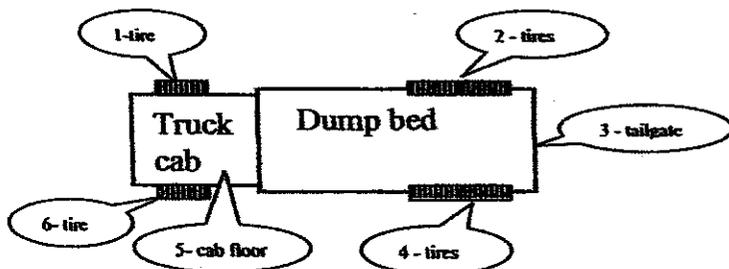
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	

587259 04

FOOTHILLS LANDFILL  
 8900 HIGHWAY 73  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586676	GRID 0000
WEIGHMASTER		
R500056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 3:37 pm	
DATE OUT 23 August 2007	TIME OUT 3:37 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592483	ORIGIN	

Gross Weight 75,380.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 39,740.00 lb 19.87 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.87	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]* 8-23-07



JD 04

# NON-HAZARDOUS WASTE MANIFEST

## 0592483

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 6900 Hwy 90 Golden, CO ACCOUNT # 800913 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brakman			Signature		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiago Vargas			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

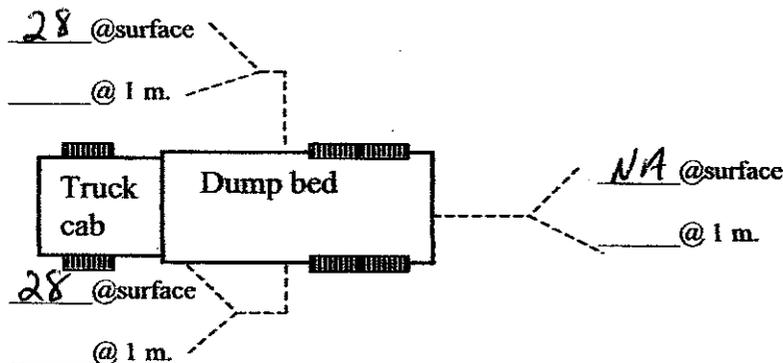
TRANSPORTER #2

COM00033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/23/07 1530 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grievre Truck license plate no. /state: 13

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



Notes:  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

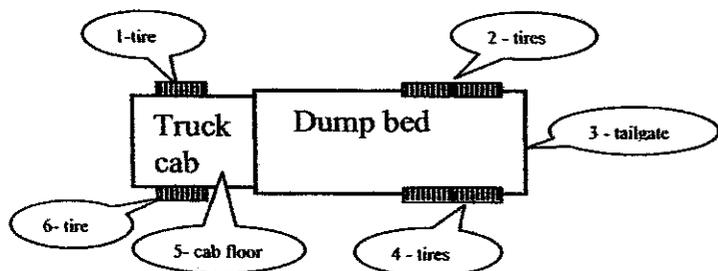
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

507266 13

FOOTHILLE LANDFILL  
 8900 HIGHWAY 98  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

1530

Contract: Y511915

SITE	TICKET	GRID
01	586683	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	3:47 pm	
DATE OUT	TIME OUT	
23 August 2007	3:47 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
593465		

Gross Weight 79,840.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 44,140.00 lb 22.07 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.07	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0592465

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( 303-273-3098 )				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098 6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado Landfill 5900 Hwy 93 Golden, CO ACCOUNT # 980645 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Tons	Ct/Drums
a. Harm Soil			00107070001411615		18		Yards	Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name: Steve Brinkman			Signature:			Month: 8	Day: 23	Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name: Rafael Ochoa Lopez			Signature:			Month: 08	Day: 23	Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name:			Signature:			Month:	Day:	Year:
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name:			Signature:			Month:	Day:	Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

COM000033

P.le B 8/23/07

## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Grieve 8	8-23-07	0700	0723	18	80,900
Ruiz 95		0700	0729		76,400
Grieve 12		0700	0737		80,700
Grieve 24		0700	0743		81,300
JD 01		0700	0749		78,000
Grieve 23		0700	0756		80,900
Marquez 961		0700	0803		81,600
Marquez 96		0700	0809		76,500
Murray 461		0700	0816		78,900
JD 04		0700	0820		74,900
Collazo 13		0700	0826		79,700
Grieve 8		0820	0839		78,900
Ruiz 95		0825	0844		76,200
Grieve 12		0835	0850		80,400
Grieve 24		0840	0856		58,000
JD 01		0845	0902		78,800
Grieve 23		0855	0905		79,300
Marquez 96		0915	0924		74,700
Murray 461		0920	0934		77,400
JD 04	↓	0925	0940	↓	73,800

8/23/07 cont.

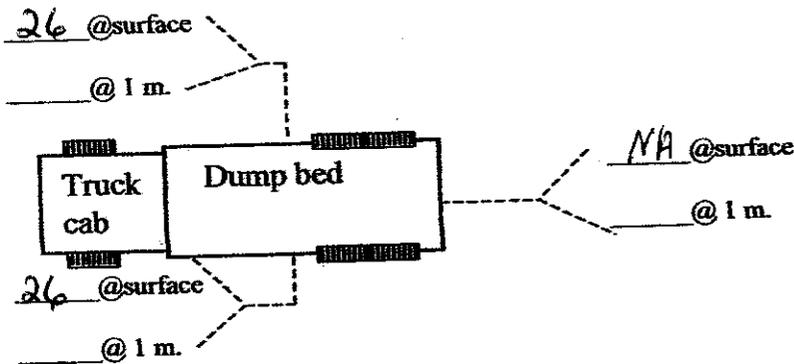
## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Marquez 961	8/23/07	0935	0947	18	76,900
Collazo 13		0945	0953		79,300
Grieve 8		0950	1000		79,400
Ruiz 95		0955	1006		75,700
Grieve 12		1000	1015		82,900
Grieve 24		1010	1021		39,900
JD 01		1015	1026		49,400
Grieve 23		1020	1033		83,500
Marquez 96		1040	1049		80,400
Murray 461		1045	1056		80,400
JD 04		1100	1110		77,300
Collazo 13		1105	1118		84,300
Marquez 961		1118	1126		81,800
Grieve 8		1125	1133		85,600
Ruiz 95		1130	1140		84,700
Grieve 12		1135	1147		87,200
Grieve 24		1145	1155		87,000
JD 01		1150	1202		83,700
Grieve 23		1200	1209		87,700
Marquez 96	↓	1205	1216	↓	84,000

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0723 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

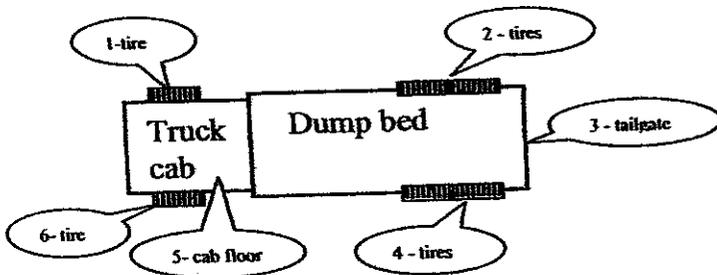
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

ST-RAD-GEN-006

DOTHILL'S LANDFILL  
 1900 HIGHWAY 93  
 GOLDEN  
 CO  
 800605  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	582340	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	7:41 am	
DATE OUT	TIME OUT	
23 August 2007	7:41 am	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
0845051		

Gross Weight 80,900.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 44,360.00 lb 22.18 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.18	TN	SU-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

*[Handwritten signature]*

SIGNATURE





# NON-HAZARDOUS WASTE MANIFEST

# 0645051

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 00003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CC L67 070908 Y511915		10	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature <i>[Signature]</i>		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature <i>[Signature]</i>		Month Day Year 08 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Chuck Messer			Signature <i>[Signature]</i>		Month Day Year 08 23 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

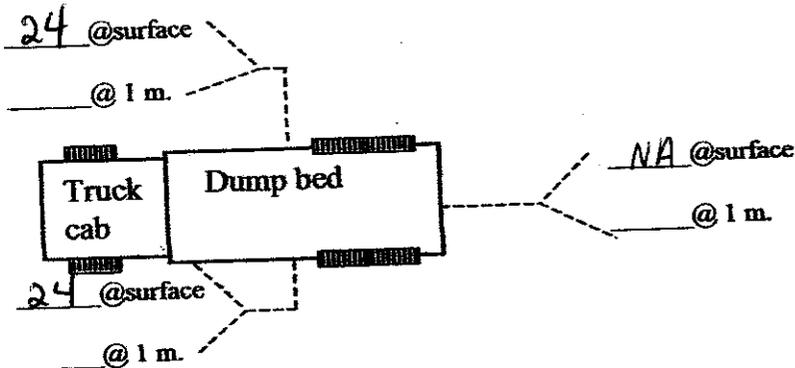
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0729 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 95

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

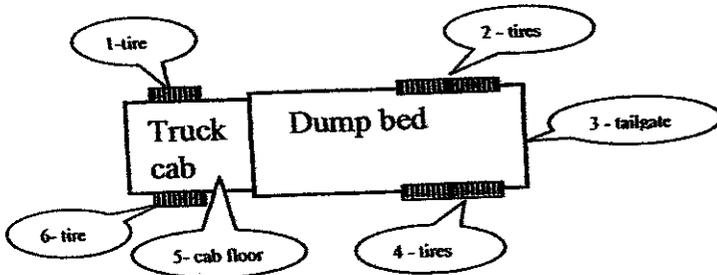
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

ST-RAD-GEN-006

FOOTHILLS LANDFILL  
 3900 MIDWAY RD  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y211915

SITE	TICKET	GRID
11	585343	0000
WEIGHMASTER		
000056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	7:50 am	
DATE OUT	TIME OUT	
23 August 2007	7:50 am	
VEHICLE	ROLL OFF	
Y211915		
REFERENCE	ORIGIN	
0645050		

Gross Weight 76,360.00 lb  
 Tare Weight 36,960.00 lb  
 Net Weight 39,390.00 lb 19.69 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.69	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*  
 SIGNATURE



# NON-HAZARDOUS WASTE MANIFEST

## 0645050

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone			
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						0 Drums	0 Gallons
						1 Yards	1 Tons
a. Norm Soil		CO L67 070908 Y511915					
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month Day Year			
Steve Brinkman				8 23 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
Manuel Ruiz				8 23 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			
Chuck Messer				08 23 07			

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

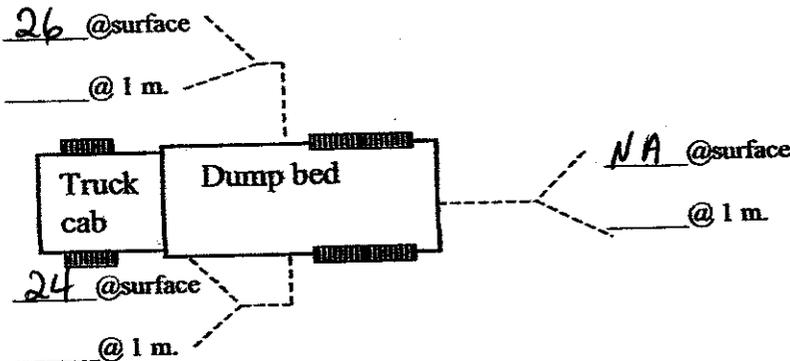
COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0737 Surveyed by: J Mattson / C Hicks

Trucking Company: Griev Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

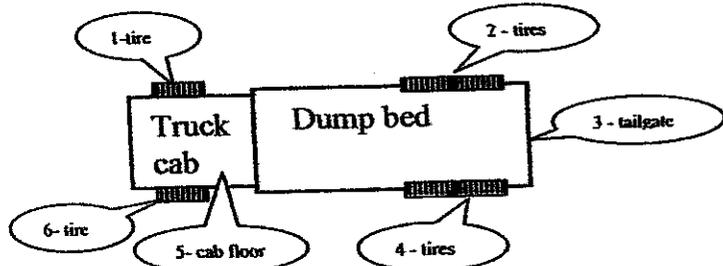
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	565346	0000
WEIGHMASTER		
300056 Barbara Jo B		
DATE IN		TIME IN
23 August 2007		7:55 AM
DATE OUT		TIME OUT
23 August 2007		7:55 AM
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
0545041		

Gross Weight 80,680.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 42,980.00 lb 21.49 TN

Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.49	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645041

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name Gravel Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						8 Drums	8 Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Bankman		Signature		Month Day Year 11 23 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name David Olson		Signature		Month Day Year 11 23 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name Barbara Wright		Signature		Month Day Year 11 23 07			

GENERATOR

TRANSPORTER

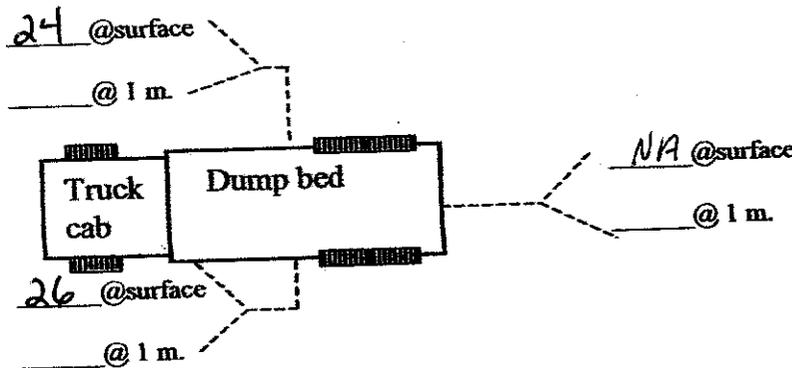
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0743 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

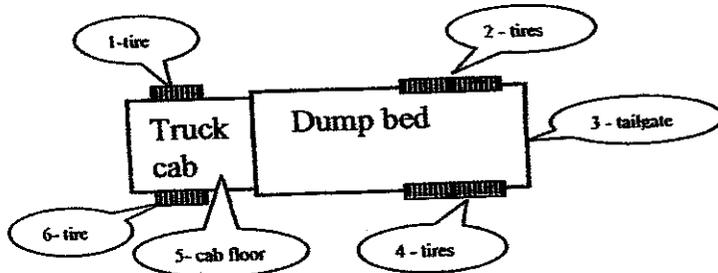
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

ST-RAD-GEN-006

FOOTHILLS LANDFILL  
 3900 HIGHWAY 93  
 GOLDEN  
 CO  
 800-603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 53-352	GRID 0000
WEIGHMASTER		
2500056 Barbara JD S		
DATE IN 23 August 2007	TIME IN 8:02 am	
DATE OUT 23 August 2007	TIME OUT 9:02 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 54E04E	ORIGIN	

Gross Weight 81,320.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 44,120.00 lb 23.06 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KEAS



# NON-HAZARDOUS WASTE MANIFEST

0645042

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3598			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3668		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name S D C Grieve Trucking		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Golden, CO ACCOUNT # 069203 (Contract School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		COLR7 DTUSK8 Y511915		18 Y Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year 08 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

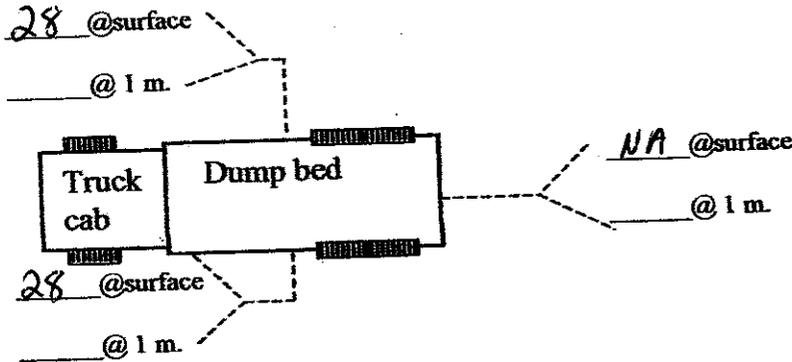
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0749 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: JD01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

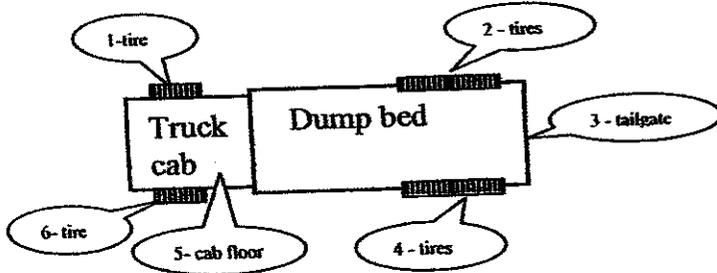
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	586358	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	5:09 AM	
DATE OUT	TIME OUT	
23 August 2007	5:09 AM	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
545043		

Gross Weight 78,020.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 42,440.00 lb 21.22 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.22	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645043

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( ) 303-273-3998				6. Phone ( )	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 95 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <u>Steve Brinkman</u>				Signature <u>[Signature]</u>	
				Month	Day Year
				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <u>JOSE W RUIZ</u>				Signature <u>[Signature]</u>	
				Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

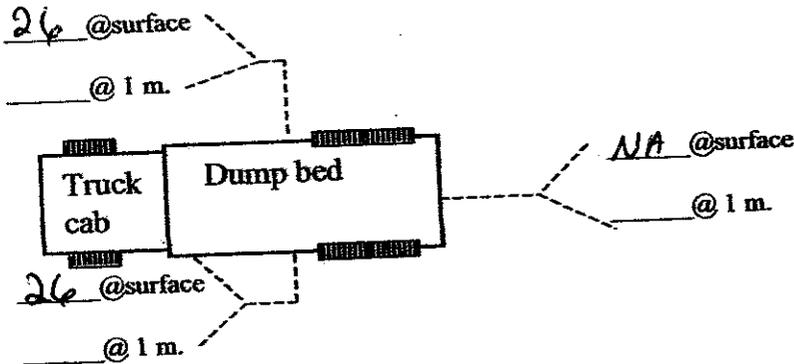
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0756 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no./state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

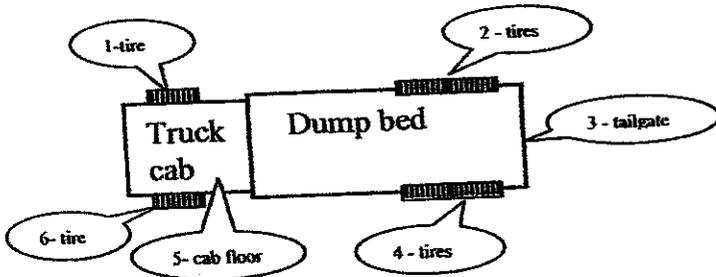
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

ST-RAD-GEN-006

DETHILLS LANDFILL  
 900 HIGHWAY 93  
 OLNEY  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586366	0000
WEIGHMASTER		
S00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	8:15 am	
DATE OUT	TIME OUT	
23 August 2007	8:18 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645044		

Gross Weight 80,860.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 45,760.00 lb 22.88 TN  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.88	TN	SW-CDNT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645044

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3996			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 987603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Non Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
					17	0 Drums	0 Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Benkman			Signature		Month Day Year 8 28 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name MARK PHELAN			Signature		Month Day Year 8 23 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

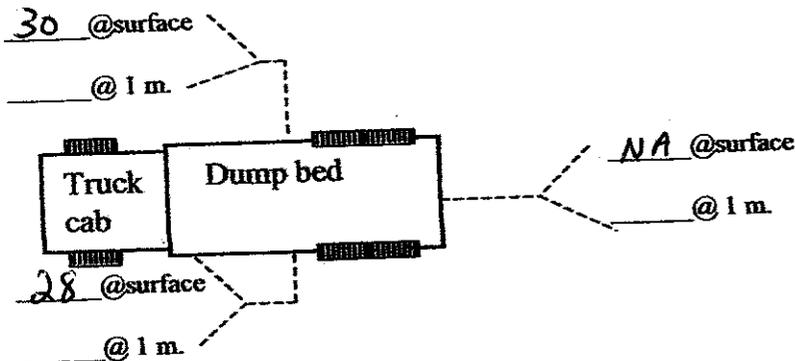
## TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0803 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griener Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

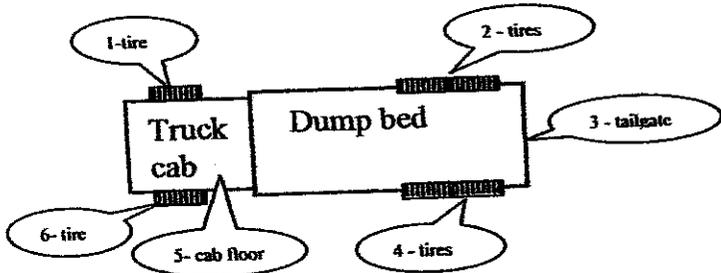
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

DEETHILLS LANDFILL  
 5000 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586375	0000
WEIGHMASTER		
R500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	08:24 am	
DATE OUT	TIME OUT	
23 August 2007	08:34 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645045		

Gross Weight 31,640.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 47,240.00 lb 23.62 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.62	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE A. M.



# NON-HAZARDOUS WASTE MANIFEST

# 0645045

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 860603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 12 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Harmon</i>			Signature <i>[Signature]</i>		Month Day Year 2 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Harmon</i>			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

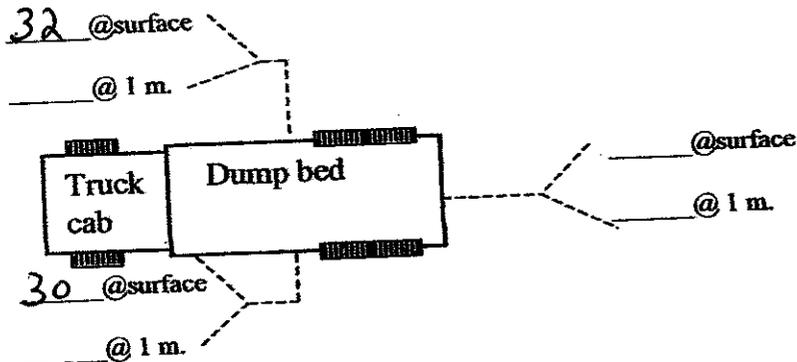
### TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0809 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

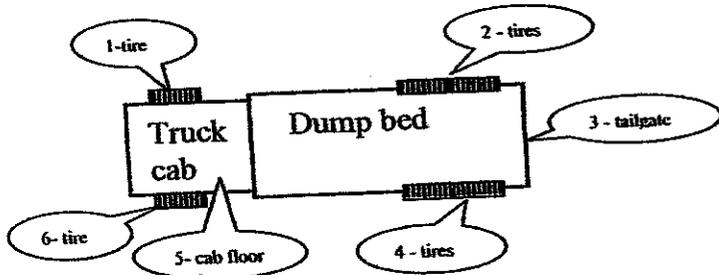
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

ST-RAD-GEN-006

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 SOLIGN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 7511915

SITE	TICKET	GRID
01	884379	0000
WEIGHMASTER		
800086 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	8:30 am	
DATE OUT	TIME OUT	
23 August 2007	8:30 am	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
645035		

Gross Weight 76,540.00 lb  
 Tare Weight 36,500.00 lb  
 Net Weight 39,960.00 lb 19.98 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.98	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645035

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8500 Hwy 93 Golden, CO ACCOUNT # 580613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070902 Y511915		6	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Brinkman				8	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Fernando Barra				8	23
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

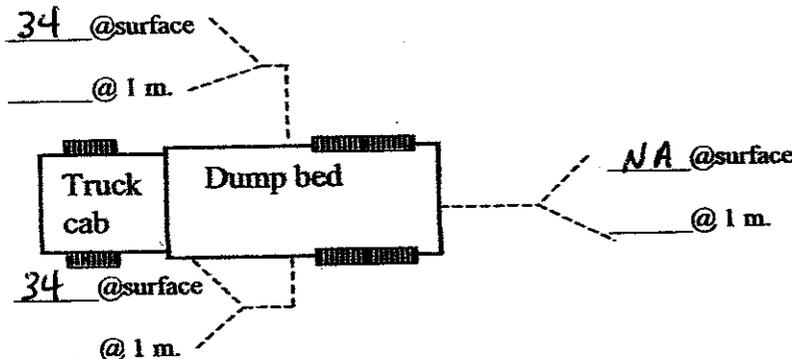
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0816 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no./state: 461

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

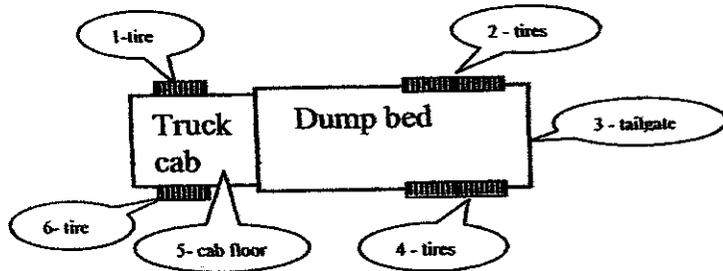
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	584384	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	8:37 am	
DATE OUT	TIME OUT	
23 August 2007	8:37 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
545034		

Gross Weight 78,900.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 44,640.00 lb 22.32 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.32	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LE	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *MJM*

NON-HAZARDOUS WASTE MANIFEST

0645034

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address F. J. Mills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 981603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Mike Murray				8	23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

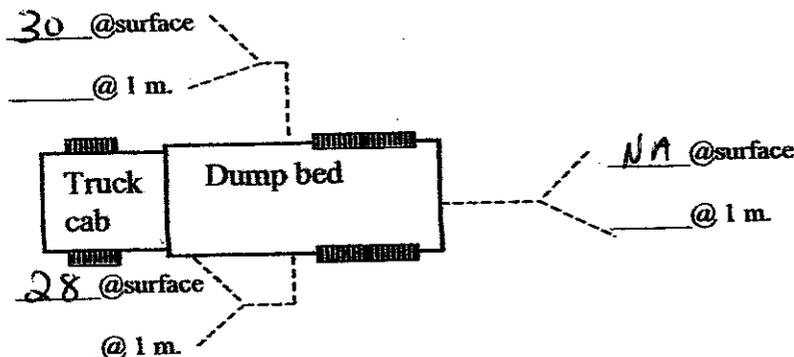
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0820 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: JD04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

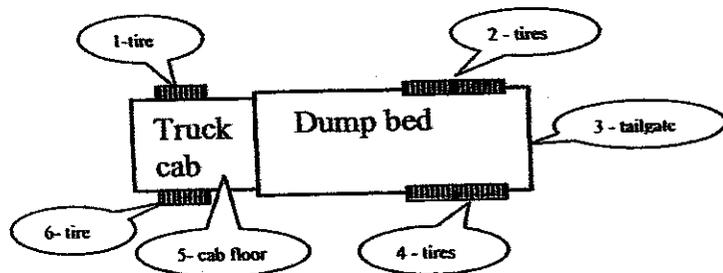
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLE LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE 01	TICKET 582387	GRID 0000
WEIGHMASTER		
200058 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 8:41 am	
DATE OUT 23 August 2007	TIME OUT 8:41 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645033	ORIGIN	

Contract: Y511915

Gross Weight 74,920.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 39,280.00 lb 19.64 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.64	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-23-07

NON-HAZARDOUS WASTE MANIFEST

0645033

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960806 (Colorado School of Mines)		14. US EPA ID Number			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511016		0 Drums	0 Gallons
b.				Y Yards	T Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Sant. 090 Vargos					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

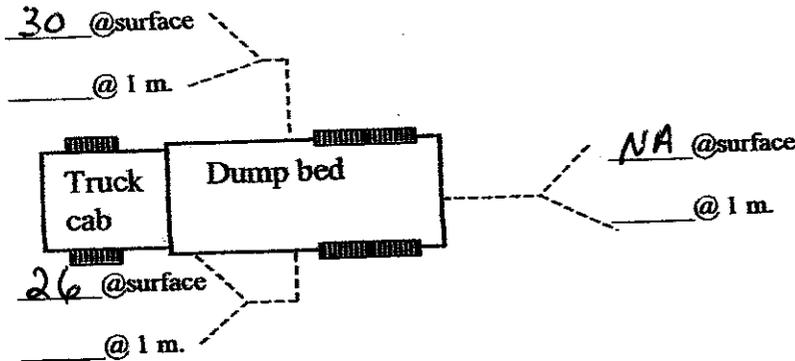
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0826 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 13

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

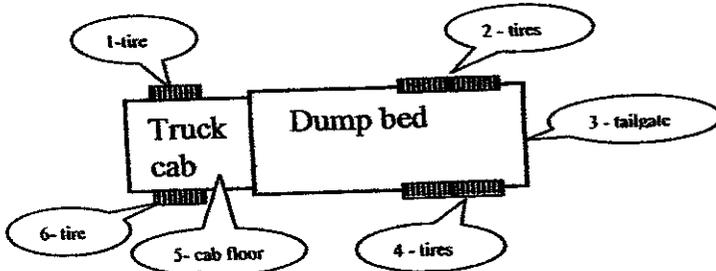
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

OOTHILLE LANDFILL  
 900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	526394	0000
WEIGHMASTER		
#300056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	8:47 am	
DATE OUT	TIME OUT	
23 August 2007	8:47 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
545032		

Gross Weight 77,700.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 44,000.00 lb 22.00 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.00	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL REDCOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645032

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 4900 Hwy 93 Golden, CO ACCOUNT # 96063 (Colorado School of Mines)		14. US EPA ID Number		18. Containers	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		19. Total Quantity	
a. Norm Soil		CO 187 070908 7511915		D-Drums G-Gallons	
b.				Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8/23/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Rafael Colero Lopez				6/28/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

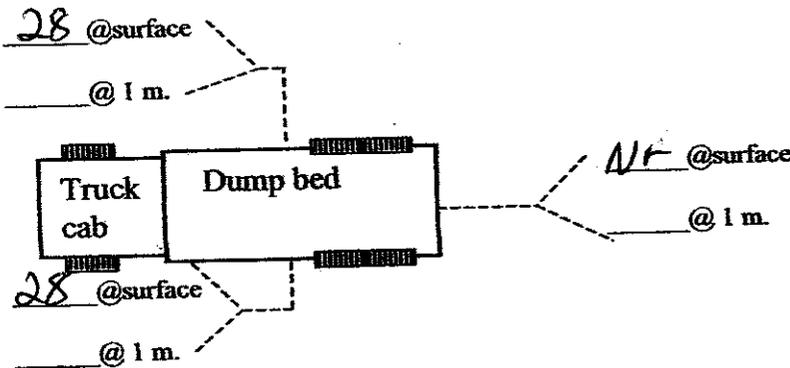
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0839 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

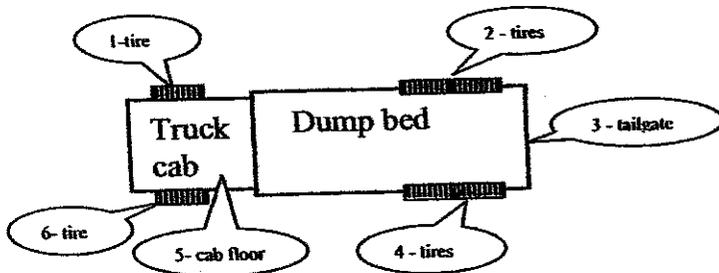
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 806508  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	#88401	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	8:56 am	
DATE OUT	TIME OUT	
23 August 2007	8:56 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
845001		

Gross Weight 78,850.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 42,340.00 lb 21.17 TN

Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.17	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

0645031

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( ) 303-273-3996		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L67 070908 Y511915		19. Total Quantity D. Drums Y. Yards G. Gallons	
b.				18. Containers No. Type	
c.				18. Containers No. Type	
d.				18. Containers No. Type	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Fay				08 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

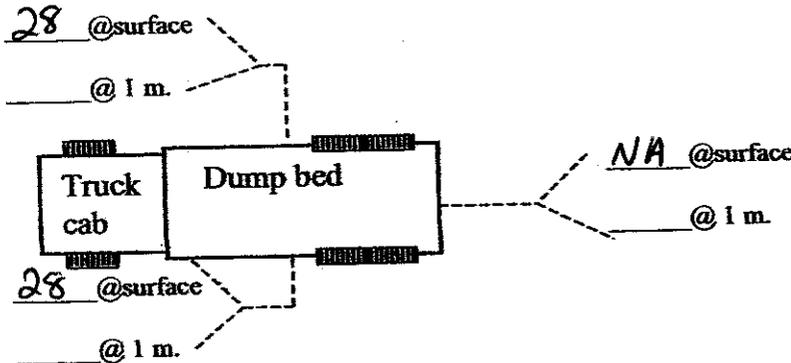
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0844 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

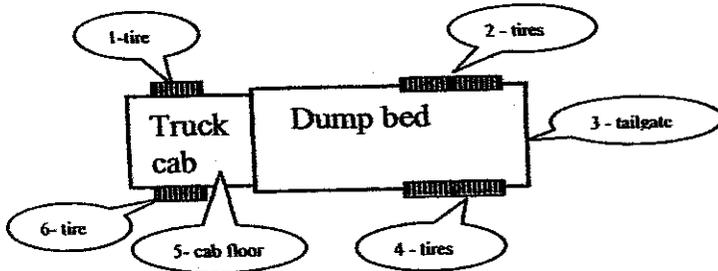
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 386405	GRID 0000
WEIGHMASTER 8300056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 9:05 am	
DATE OUT 23 August 2007	TIME OUT 9:05 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 643030	ORIGIN	

Gross Weight 76,200.00 lb  
 Tare Weight 36,980.00 lb  
 net Weight 39,220.00 lb 17.61 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.61	TN	SW-CONT SCIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*  
 SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645030

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address FootHills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 993803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L67 070906 Y511915		19. Total Quantity 0-Drums 0-Gallons	
b.				Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8/23/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Michael Rice				8/23/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

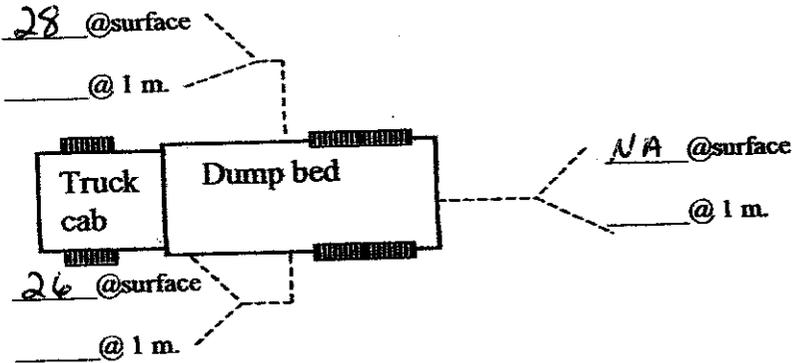
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0850 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

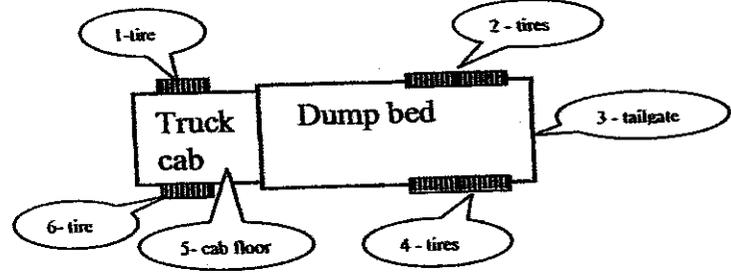
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10 mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 53  
 GOLDEN  
 CO  
 806608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586408	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 7:11 am	
DATE OUT 23 August 2007	TIME OUT 7:11 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645029	ORIGIN	

Gross Weight 80,440.00 lb  
 Tare Weight 37,700.00 lb      Inbound --  
 Net Weight 42,740.00 lb 21.37 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.37	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

*[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645029

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996		
4. Phone ( ) 303-273-3996		6. Phone ( )			
7. Transporter #1 Company Name Greene Trucking #10		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CC L67 070908 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Bankman		Signature 		Month Day Year 8/23/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name John Carter		Signature 		Month Day Year 8/22/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

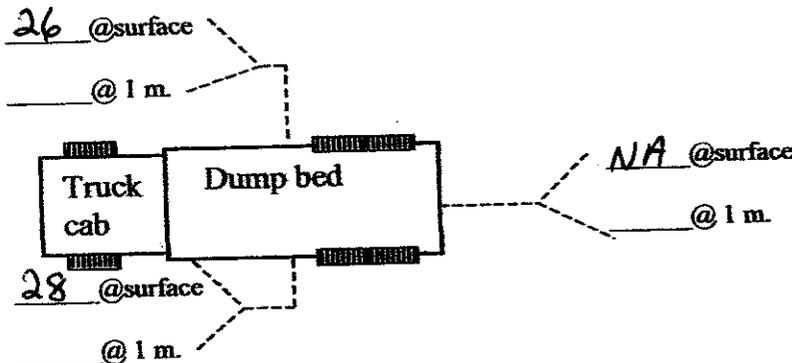
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0856 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griene Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

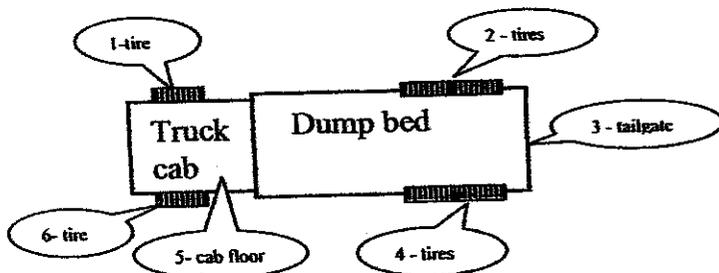
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 3900 HIGHWAY 93  
 GOLDEN  
 CO  
 800603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 886412	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 9:16 am	
DATE OUT 23 August 2007	TIME OUT 9:16 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0645028	ORIGIN	

Gross Weight 58,060.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 20,860.00 lb 10.43 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
10.43	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KENS

NON-HAZARDOUS WASTE MANIFEST

0645028

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Joe Grievette Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Perkins Laboratory 6970 Hwy 90 Golden, CO ACCOUNT # 160873 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Worm Soil		CO 187 070001 Y511015		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature <i>[Signature]</i>		Month 8	Day Year 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name KEITH SHANNON		Signature <i>[Signature]</i>		Month 08	Day Year 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

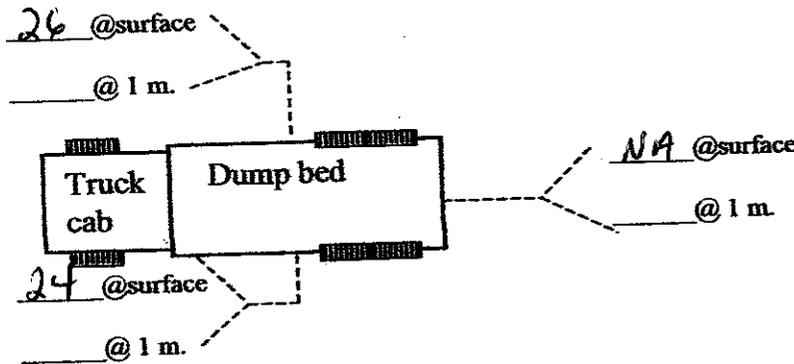
GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

TRANSPORTER #1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0902 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griene Truck license plate no./state: JD01

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

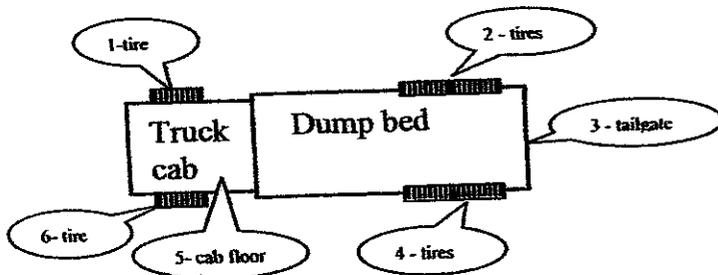
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

ST-RAD-GEN-006

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401  
 Contract: YS11915

SITE	TICKET	GRID
01	5844-17	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	9:25 AM	
DATE OUT	TIME OUT	
23 August 2007	9:25 AM	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
0645027		

Gross Weight 78,800.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 43,220.00 lb 21.61 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.61	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645027

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 33 Golden, CO ACCOUNT # 960503 (Colorado School of Mines)		14. US EPA ID Number		16. Waste Shipping Name and Description	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CC L67 070908 Y511915		19. Total Quantity D. Drums Y. Yards	
b.				E. Gallons T. Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Jose W Ruiz					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
Chuck Messer				06 23 07	

GENERATOR

TRANSPORTER

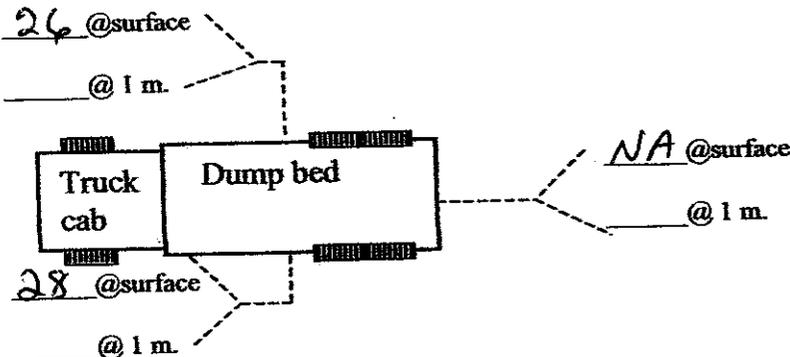
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0905 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

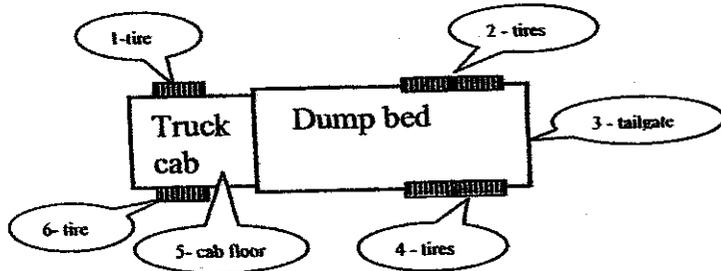
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA 43.5	43.5	569.6

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 930603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586423	0000
WEIGHMASTER		
84500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	9:36 am	
DATE OUT	TIME OUT	
23 August 2007	9:36 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0645026		

Gross Weight 79,280.00 lb  
 Tare Weight 35,100.00 lb Inbound --  
 Net Weight 44,180.00 lb 22.09 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.09	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645026

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Bonnie Landfill 8600 Hwy 23 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CO L67 070908 Y511915		D-Drums G-Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8/23/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mark Phelan				8/23/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

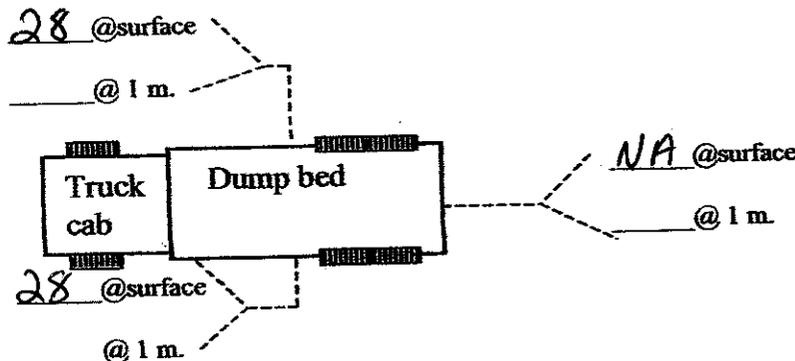
GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0924 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

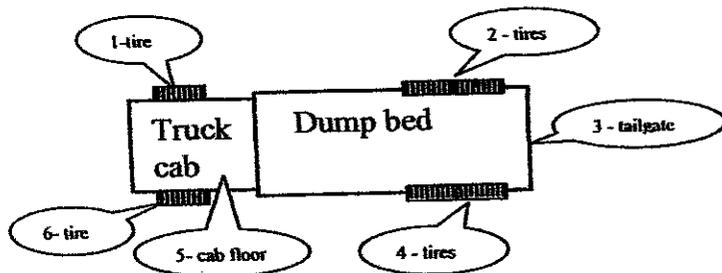
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

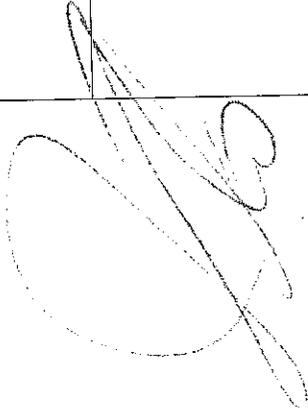
Contract: Y511915

SITE	TICKET	GRID
01	526434	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	9:51 am	
DATE OUT	TIME OUT	
23 August 2007	9:51 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0645025		

00 Gross Weight 74,580.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 38,100.00 lb 19.05 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.05	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_



ALLIED WASTE  
**NON-HAZARDOUS WASTE MANIFEST**

**0645025**

Please print or type

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401		5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998		6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number	9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number	12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)		14. US EPA ID Number	15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	19. Total Quantity	20. Unit
				No.	Type	D-Drums
a. Norm Soil		CO L67 070908 Y511915			Y-Yards	T-Tons
b.						
c.						
d.						
21. Additional Descriptions for Materials Listed Above						
22. Special Handling Instructions and Additional Information						
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Printed/Typed Name		Signature		Month	Day	Year
Steve Benkman				8	23	07
24. Transporter #1: Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
Fernando Luna				8	23	07
25. Transporter #2: Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
26. Discrepancy Indication Space						
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)						
Printed/Typed Name		Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

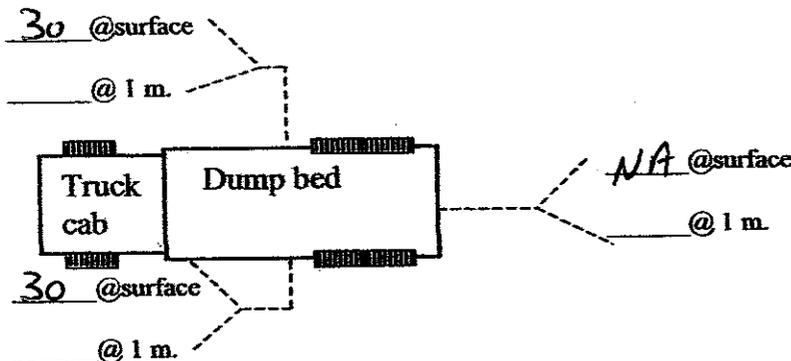
**TRANSPORTER #2**

COM009033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0934 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no./state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

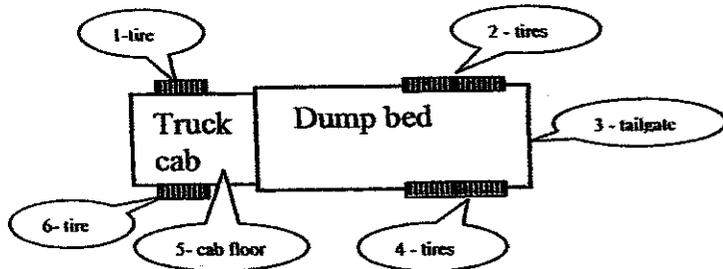
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586438	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN		TIME IN
23 August 2007		10:00 am
DATE OUT		TIME OUT
23 August 2007		10:00 am
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
0645024		

Gross Weight 77,360.00 lb  
 Tare Weight 34,620.00 lb  
 Net Weight 42,740.00 lb 21.37 TN  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.37	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Mh M*

NON-HAZARDOUS WASTE MANIFEST

0645024

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3698			5. Generating Location (if different from above) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Poudre Mills Landfill 8900 Hwy 99 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L87 070908 Y511915		19. Total Quantity D-Drums 0 G-Gallons 0 Y-Yards 18 T-Tons 4	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mike Murray				8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
Chuck Meyer				08 23 07	

GENERATOR

TRANSPORTER

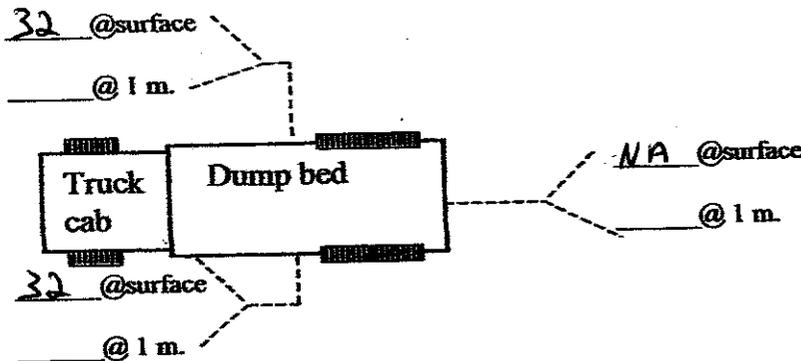
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0940 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no./state: 04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

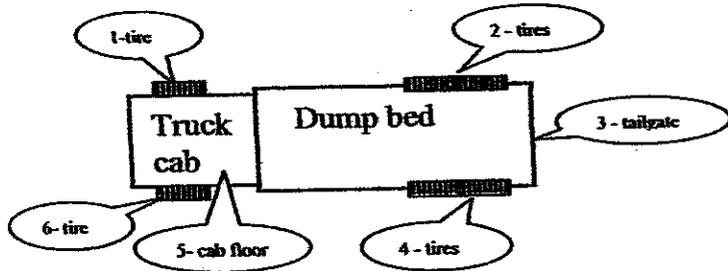
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	

FOOTHILLS LANDFILL  
 3900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586443	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	10:10 am	
DATE OUT	TIME OUT	
23 August 2007	10:10 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645023		

Gross Weight 79,760.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 38,120.00 lb 19.06 TN

Inbound ---

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-23-07

NON-HAZARDOUS WASTE MANIFEST

0645023

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 90 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	20. Unit
a. Norm Soil		CO L67 070908 Y511915		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8/23/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Sanford Vaygas					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
				8/23/07	

GENERATOR

TRANSPORTER

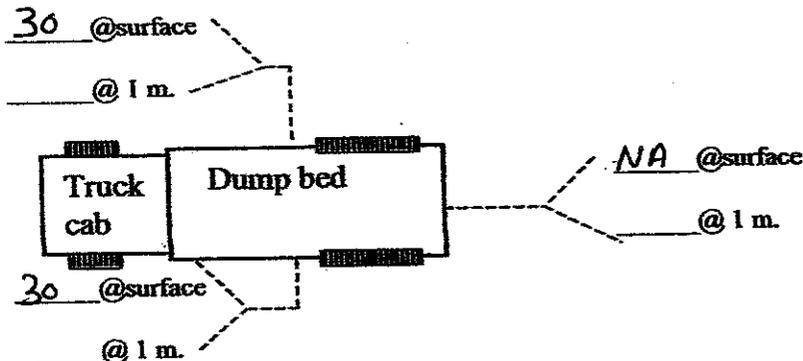
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0947 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Gnere Truck license plate no. /state: 961

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

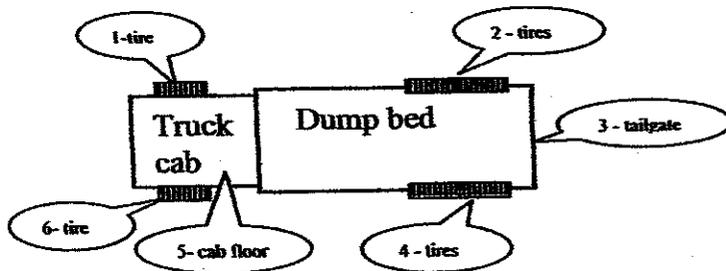
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6



NON-HAZARDOUS WASTE MANIFEST

0645022

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone			
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden CO ACCOUNT # 99000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Sod b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511916		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						D-Drums	G-Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Armando Marquez		Signature 		Month 8	Day 23		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day		

GENERATOR

TRANSPORTER

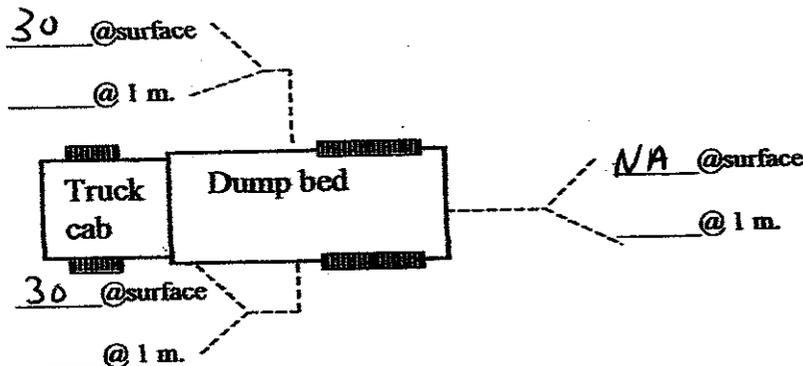
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 0953 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griener Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

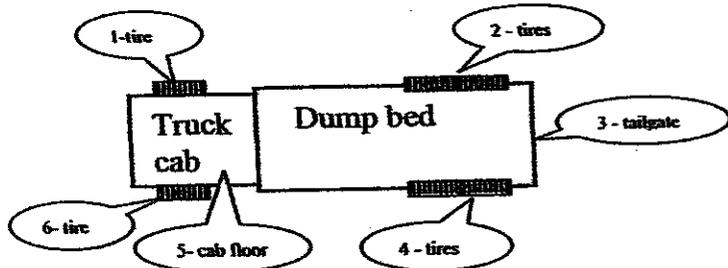
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586455	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	10:21 am	
DATE OUT	TIME OUT	
23 August 2007	10:21 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645021		

Gross Weight 79,280.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 43,580.00 lb 21.79 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.79	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645021

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			Y-Yards
b.					T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	10 07
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name		Signature		Month	Day Year
Rafael Collazo Lopez				08	23 07
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name		Signature			
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
Dennis					

GENERATOR

TRANSPORTER

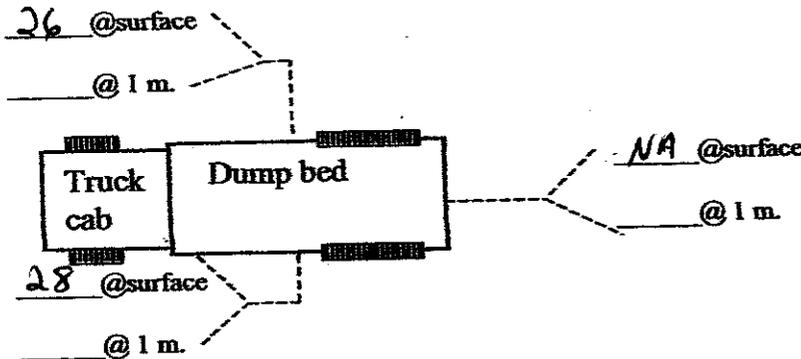
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1000 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grievé Truck license plate no./state: 8

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

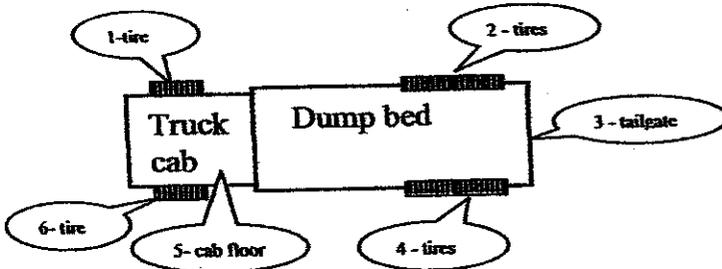
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

COOTHILLS LANDFILL  
 1700 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

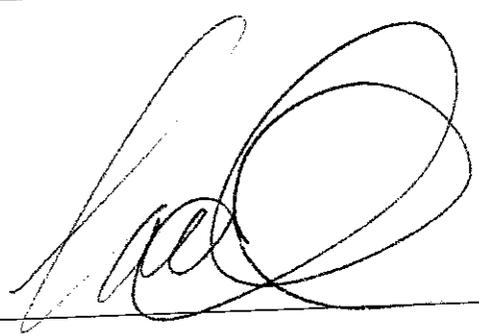
SITE	TICKET	GRID
01	386460	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	DATE OUT	TIME IN
23 August 2007	23 August 2007	10:25 am
DATE OUT	DATE OUT	TIME OUT
23 August 2007	23 August 2007	10:25 am
VEHICLE	REFERENCE	ORIGIN
YS11915	645020	
ROLL OFF		

Gross Weight 79,440.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 42,900.00 lb 21.45 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.45	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE



NON-HAZARDOUS WASTE MANIFEST

0645020

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3650		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 8900 Hwy 91 Golden CO ACCOUNT # 000013 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Soil		CO L67 073008 7511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brando			Signature		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year 08 23 07
Printed/Typed Name Chuck Foy			Signature		
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
Printed/Typed Name			Signature		
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

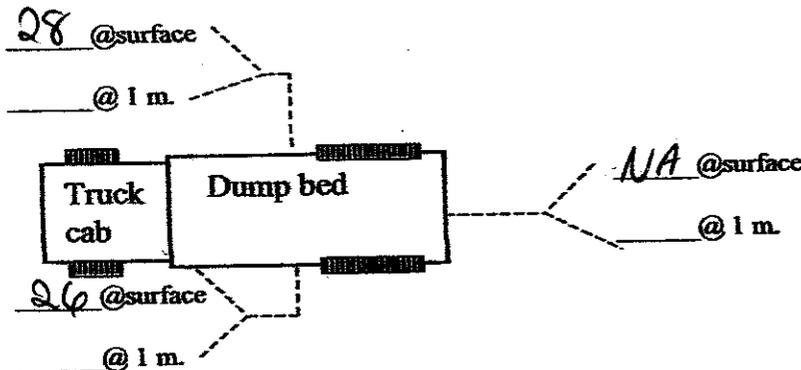
T/S/D FACILITY

TRANSPORTER #1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1006 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griener Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

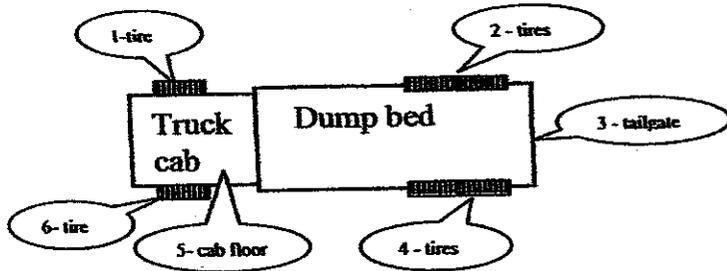
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	586464	0000
WEIGHMASTER		
R600056 Barbara Jo S		
DATE IN	DATE OUT	TIME IN
23 August 2007	23 August 2007	10:28 am
DATE OUT	DATE IN	TIME OUT
23 August 2007	23 August 2007	10:28 am
VEHICLE	REFERENCE	ROLL OFF
Y511915	645019	
REFERENCE	ORIGIN	
645019		

Contract: Y511915

Gross Weight 75,660.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 38,680.00 lb 19.34 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.34	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645019

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 90 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity D-Drums G-Gallons	20. Unit Wt/Vol Y-Yards T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brakman		Signature <i>[Signature]</i>		Month Day Year 8   23   07			
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month Day Year 8   23   07			
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

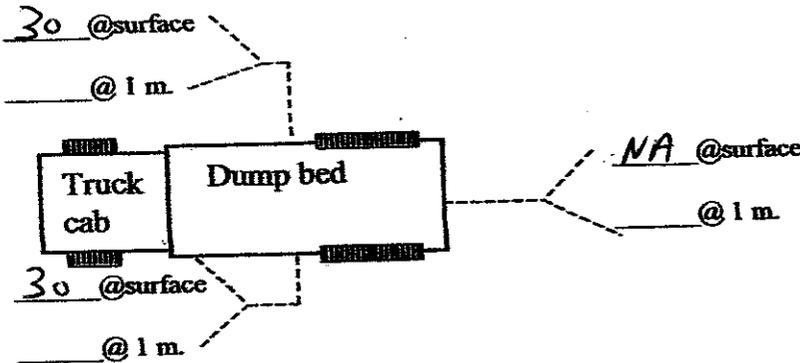
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1015 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griener Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

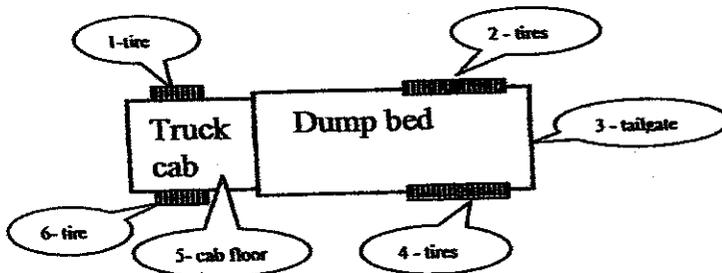
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

ST-RAD-GEN-006

MOUNTAIN HILLS LANDFILL  
 1900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	586467	0000
WEIGHMASTER		
1600056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	10:32 am	
DATE OUT	TIME OUT	
23 August 2007	10:32 am	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	

Gross Weight 82,850.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 45,150.00 lb 22.57 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.57	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0645016

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Gravel Trucking #12		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 3900 Hwy 93 Golden, CO ACCOUNT # 90603 (Colorado School of Mines)		14. US EPA ID Number		18. Containers	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		19. Total Quantity	
a. Norm Soil		CO L67 970908 Y911915		0 - Drums Y - Yards G - Gallons T - Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature [Signature]	
				Month Day Year 8 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Alan Okon				Signature [Signature]	
				Month Day Year 8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Chuck Messer				Signature [Signature]	
				Month Day Year 09 23 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

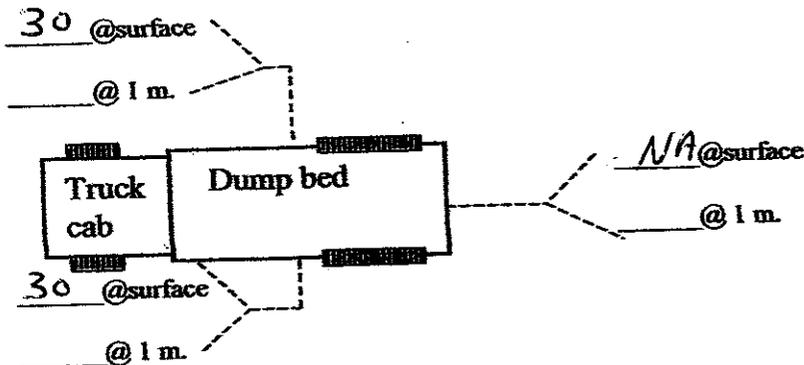
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1021 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

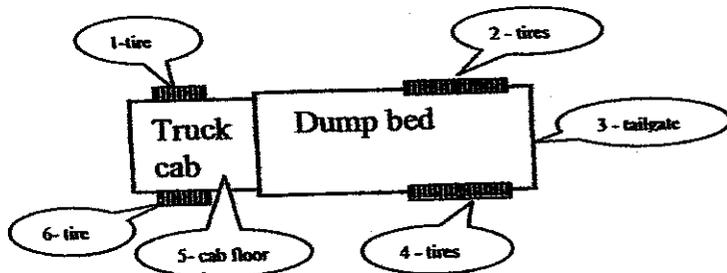
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

ST-RAD-GEN-006

FOOTHILLS LANDFILL  
 3900 HIGHWAY 93  
 GOLDEN  
 CO  
 80606  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 566478	GRID 0000
WEIGHMASTER		
PS00056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 10:47 am	
DATE OUT 23 August 2007	TIME OUT 10:47 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 0645018	ORIGIN	

00 Gross Weight 39,980.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 2,780.00 lb 1.39 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.39	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*Kell*

NON-HAZARDOUS WASTE MANIFEST

0645018

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different from generator) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name Joe Grieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 6900 Hwy 33 Golden, CO ACCOUNT # 98005 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Harm Sol		CO 107 070808 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brannaman		Signature 		Month 8	Day 23
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 05	Day 23
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Chuck Messer		Signature 		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

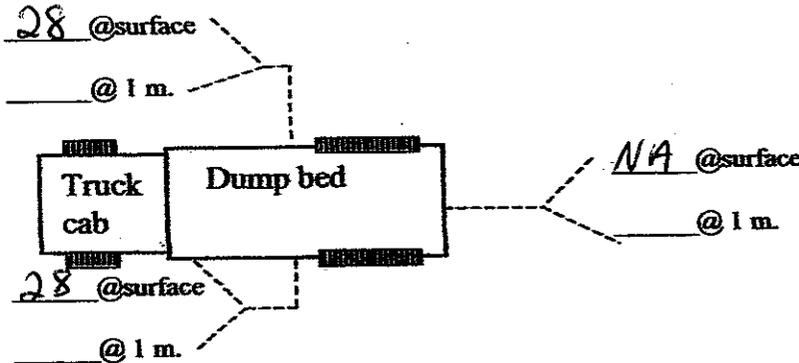
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1026 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

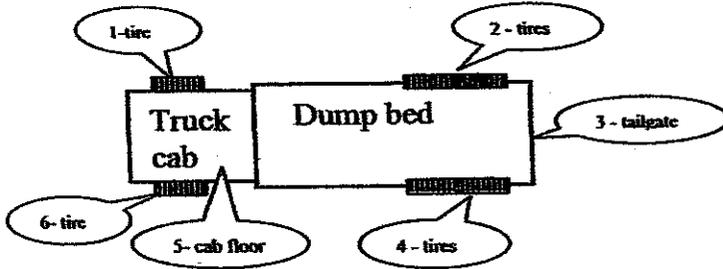
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	CB4481	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	10:50 am	
DATE OUT	TIME OUT	
23 August 2007	10:50 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0645017		

00 Gross Weight 49,420.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 13,840.00 lb 6.92 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
6.92	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]* 8 21 07

NON-HAZARDOUS WASTE MANIFEST

0645017

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 187 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brakman				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Joseph Ruiz					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
Chuck Messer				18	23 07

GENERATOR

TRANSPORTER

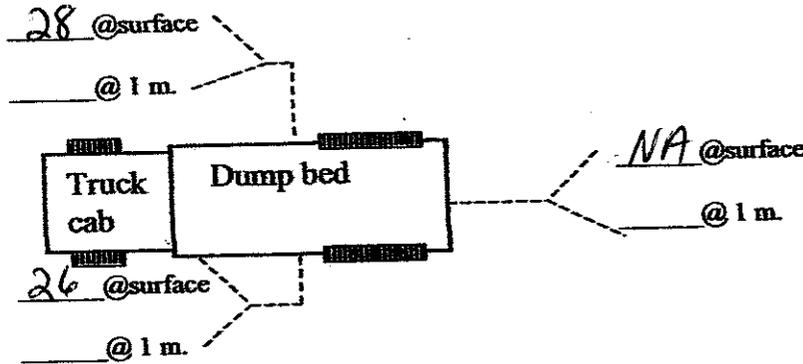
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1033 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 23

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

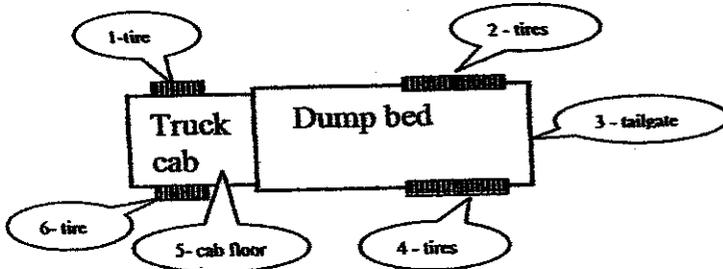
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FORTMILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	386424	0000
WEIGHMASTER		
B300056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	10:54 am	
DATE OUT	TIME OUT	
23 August 2007	10:54 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
0645015		

00 Gross Weight 83,540.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 48,440.00 lb 24.22 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.22	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645015

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 99 Golden, CO ACCOUNT # 960006 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Nonm Soil		CO L67 070908 Y611915		0 Drums	0 Gallons
b.				Y-Yards	T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan			Signature		Month Day Year 8 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Chuck Meser			Signature		Month Day Year 09 23 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

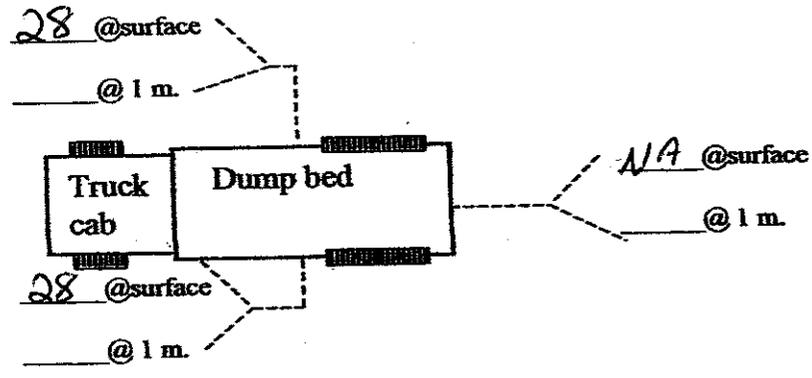
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1049 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

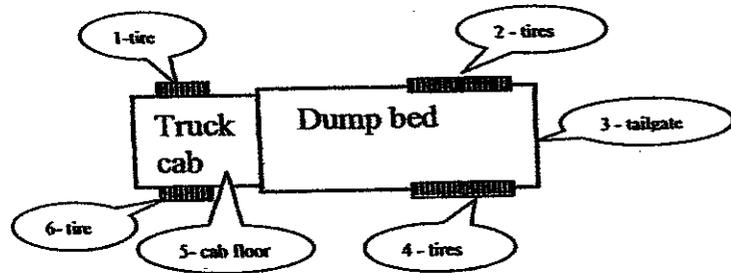
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	

FOOTHILLS LANDFILL  
 1900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	556491	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	11:06 am	
DATE OUT	TIME OUT	
23 August 2007	11:06 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645014		

00 Gross Weight 80,400.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 43,820.00 lb 21.91 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.91	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645014

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different from 3) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Footprints Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit Wt/Vol	
a. Nonm Soil		CO L67 070908 Y511915		D-Drums Y-Yards -Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Bankman				8 23 97	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Fernando Vera				8 23 97	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

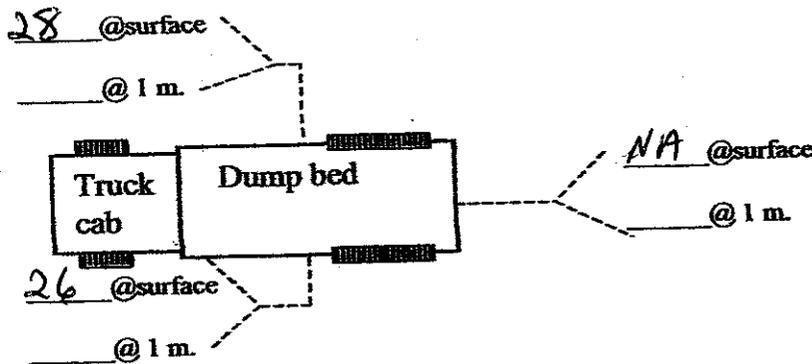
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1056 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

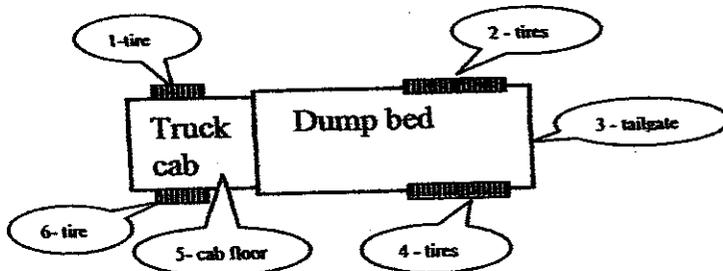
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200	< 2200	

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 804003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	582500	0000
WEIGHMASTER		
MS00056 Barbara Jo S		
DATE IN		TIME IN
23 August 2007		11:19 am
DATE OUT		TIME OUT
23 August 2007		11:19 am
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
645013		

Gross Weight 80,360.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 46,100.00 lb 23.05 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.05	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *MJM*

NON-HAZARDOUS WASTE MANIFEST

0645013

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone				
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone				
13. Designated T/S/D Facility Name and Site Address Footbills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number						
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	D-Drums	G-Gallons	
a. Norm Soil		CO L67 070908 Y511915		18	4	Y-Yards	T-Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brinkman				Signature		Month 8	Day 23	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month 8	Day 23	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

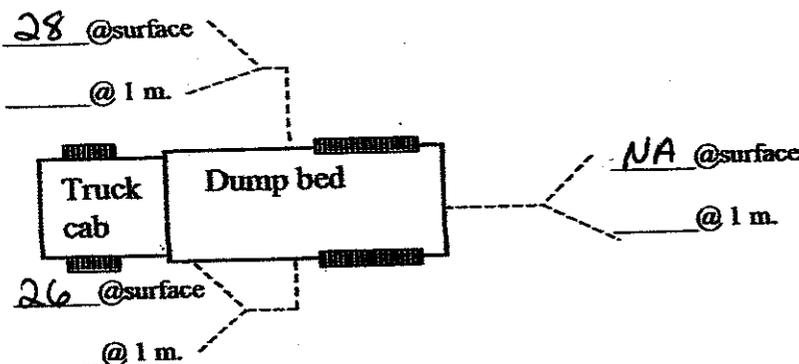
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1110 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no./state: JD 04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

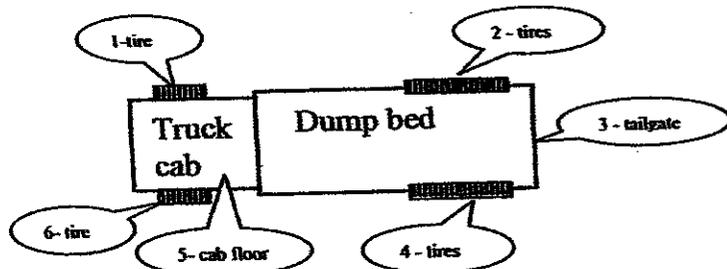
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

00:00

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	584508	0000
WEIGHMASTER		
IS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	11:29 am	
DATE OUT	TIME OUT	
23 August 2007	11:29 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645012		

Contract: Y511915

Gross Weight 77,340.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 41,700.00 lb 20.85 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.85	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE  8-23-07

NON-HAZARDOUS WASTE MANIFEST

0645012

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Columbus Landfill 8000 Hwy 93 Golden, CO ACCOUNT # 96803 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	20. Unit Wt/Vol
a. Norm Soil		CO 1.67 070908 Y611915		D-Drums	G-Gallons
b.				Y-Yards	T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Benham				8	23
Year		27			
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Santoso Vargas					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

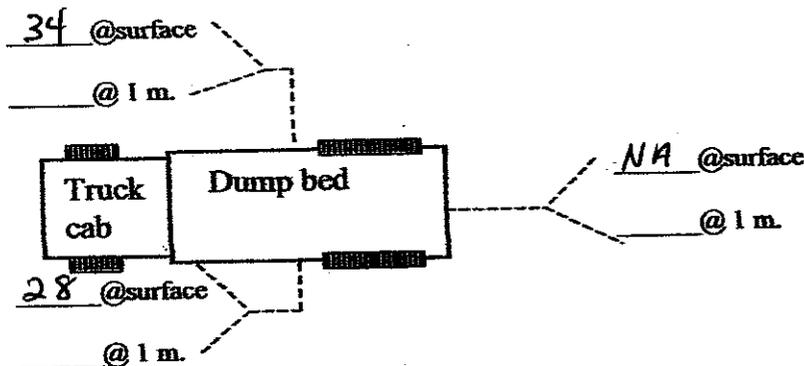
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1118 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

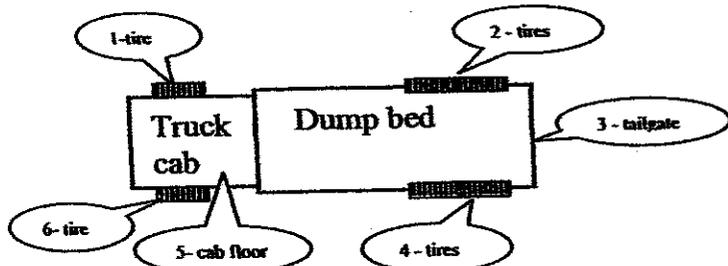
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	584517	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN		TIME IN
23 August 2007		11:40 am
DATE OUT		TIME OUT
23 August 2007		11:40 am
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
645011		

Gross Weight 84,280.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 48,580.00 lb 24.29 TN  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.29	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0645011

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 00000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Marael Collazo Lopez				08	20 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
D. J. ...					

GENERATOR

TRANSPORTER

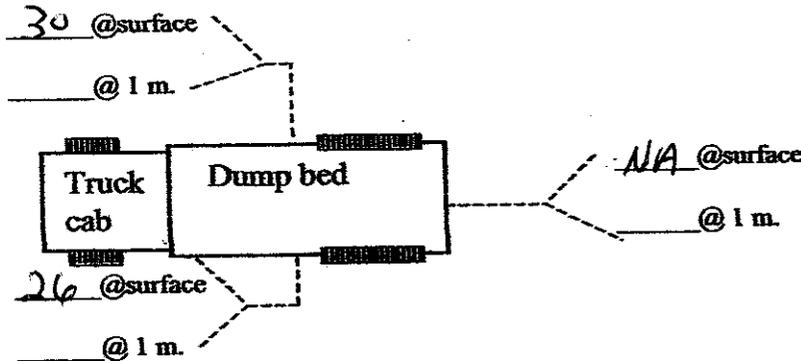
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1126 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

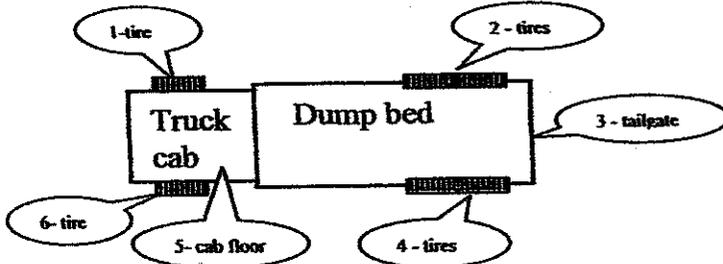
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6



ALLIED WASTE  
**NON-HAZARDOUS WASTE MANIFEST**

**0645010**

Please print or type.

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of						
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998		5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998						
4. Phone ( )		6. Phone ( )						
7. Transporter #1 Company Name		8. US EPA ID Number	9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number	12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number	15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date  CO L67 070008 1511915		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	D-Drums	G-Gallons	
				a.			Y-Yards	T-Tons
				b.				
				c.				
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. <b>GENERATOR'S CERTIFICATION:</b> I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name <i>Steve Brinkman</i>		Signature		Month <i>8</i>	Day <i>07</i>	Year <i>07</i>		
24. <b>Transporter #1:</b> Acknowledgement of Receipt of Materials								
Printed/Typed Name <i>Timothy ...</i>		Signature		Month <i>8</i>	Day <i>07</i>	Year <i>07</i>		
25. <b>Transporter #2:</b> Acknowledgement of Receipt of Materials								
Printed/Typed Name		Signature		Month	Day	Year		
26. Discrepancy Indication Space								
27. <b>Facility Owner or Operator:</b> Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name		Signature		Month	Day	Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

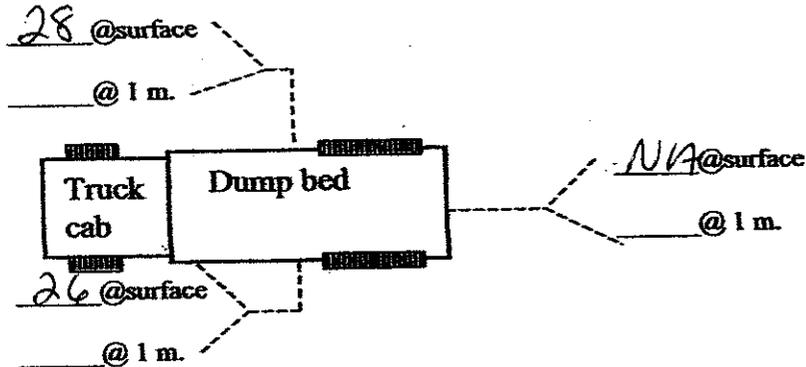
**TRANSPORTER #2**

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1133 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

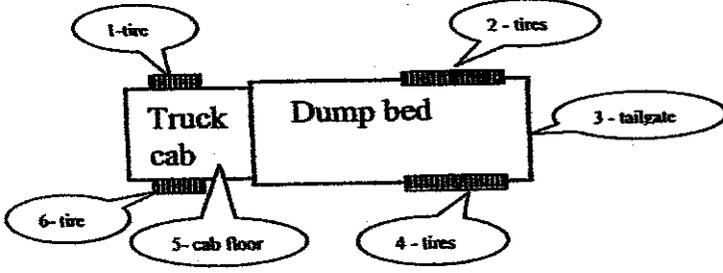
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm	
Efficiency	NA	17.6%	13.9%	
MDA	NA	43.5	569.6	

TOOTHILLS LANDFILL  
 1900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 804527	GRID 0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 11:50 AM	
DATE OUT 23 August 2007	TIME OUT 11:50 AM	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645009	ORIGIN	

Gross Weight 85,580.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 49,040.00 lb 24.52 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.52	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE



NON-HAZARDOUS WASTE MANIFEST

0645009

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone			
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit
a. Norm Soil		CO L67 070908 Y511915		18	Y	Y-Yards	T-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman				Signature		Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month Day Year 08 31 07	
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

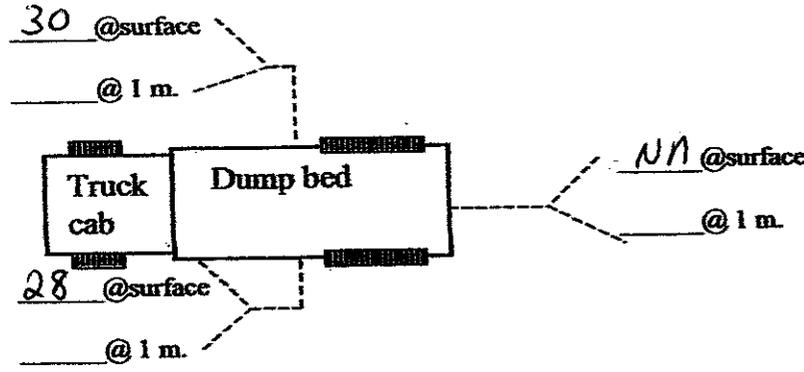
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1140 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 nrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 nrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10 nrem/hr, survey is complete.)

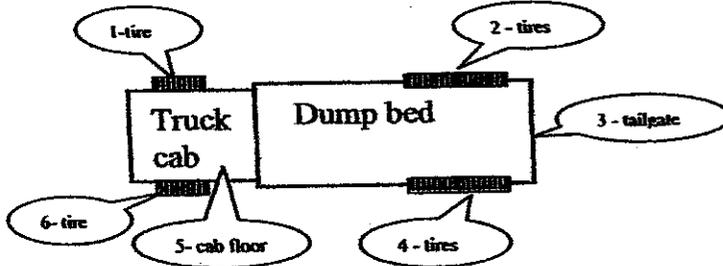
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586532	0000
WEIGHMASTER		
6500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	11:56 am	
DATE OUT	TIME OUT	
23 August 2007	11:56 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645006		

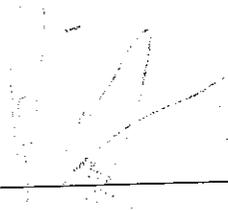
Gross Weight 84,700.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 47,720.00 lb 23.66 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.66	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



  
 SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645006

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Drums	Gallons
a. Norm Soil			CO L87 970908 Y511915				Y-Yards	T-Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brinkman				Signature		Month 8	Day 23	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month 8	Day 13	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

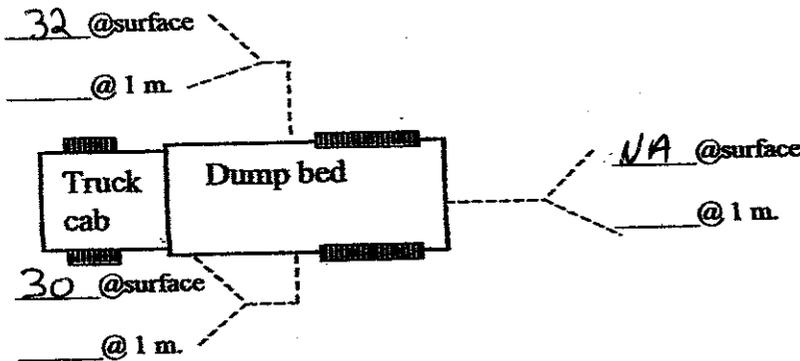
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1147 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 95 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

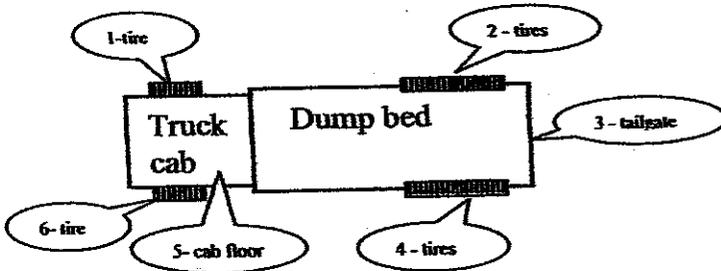
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINDIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	584534	0000
WEIGHMASTER		
PS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	12:06 pm	
DATE OUT	TIME OUT	
23 August 2007	12:06 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645008		

Gross Weight 87,200.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 49,500.00 lb 24.75 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.75	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645008

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Greene Trucking #12		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Fox Hills Landfill 8500 Hwy 90 Golden, CO ACCOUNT # 060003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L67 070908 Y511915		19. Total Quantity D-Drums 0 Gallons	
b.				20. Unit Wt/Vol Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature		Month Day Year 8 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name John Owen		Signature		Month Day Year 8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

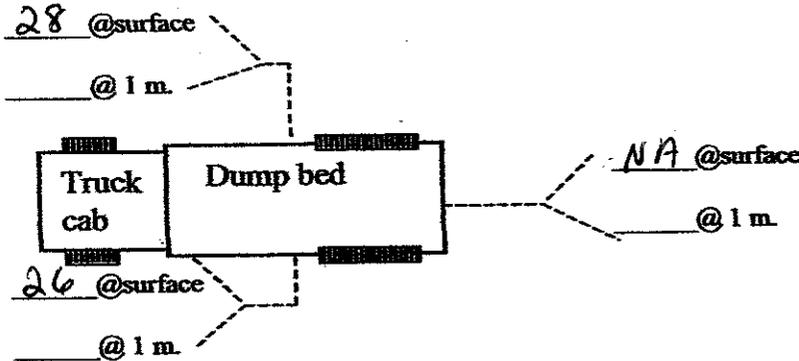
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1155 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Grieve Truck license plate no. /state: 24

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

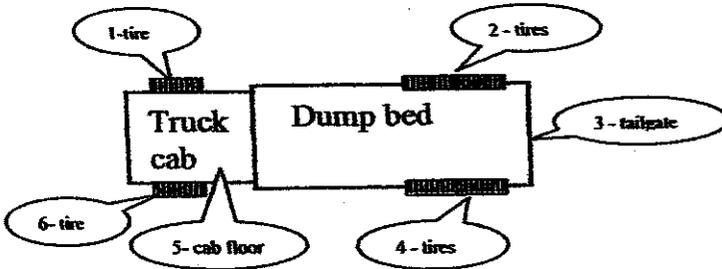
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	α 1 cpm	β 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 980603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	580543	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	12:14 pm	
DATE OUT	TIME OUT	
23 August 2007	12:14 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645007		

Gross Weight 87,000.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 49,800.00 lb 24.90 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.90	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE KENS

NON-HAZARDOUS WASTE MANIFEST

0645007

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3938				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3938			
4. Phone ( )				6. Phone ( )			
7. Transporter #1 Company Name <b>Joe Grieve Trucking</b>		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1600 Illinois St Golden, CO ACCOUNT # 804013 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron, Cast b. c. d.		17. Allied Waste Approval # and Exp. Date 00127 870908 Y511916		18. Containers			
				No.	Type	19. Total Quantity	20. Unit
						Drums	Gal/ons
				18	Y	Yards	Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <b>Steve Benkman</b>		Signature <i>[Signature]</i>		Month Day Year 8 23 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <b>KERSHANNON</b>		Signature <i>[Signature]</i>		Month Day Year 08 23 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year			

GENERATOR

TRANSPORTER

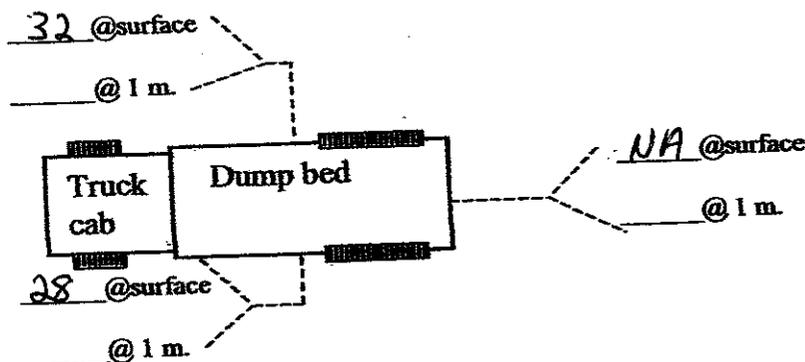
T/S/D FACILITY

TRANSPORTER #1

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1202 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: JD 01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

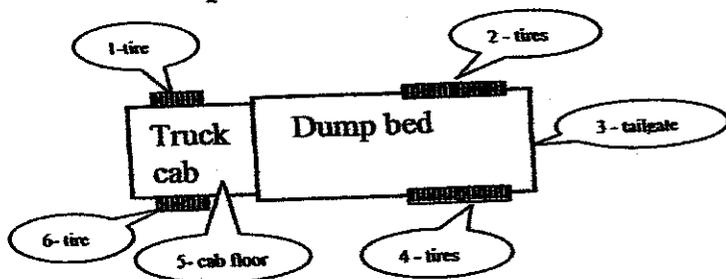
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586545	GRID 0000
WEIGHMASTER 8800056 Barbara Jo S		
DATE IN 23 August 2007	TIME IN 12:22 PM	
DATE OUT 23 August 2007	TIME OUT 12:22 PM	
VEHICLE Y511915	ROLL OFF	
REFERENCE 592495	ORIGIN	

Gross Weight 83,700.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 48,120.00 lb 24.06 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.06	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_

*[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0592495

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 89 Golden, CO ACCOUNT # 060603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste/Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Norm Soil		CO L67 070908 Y611815		18	Y	Y-Yards	T-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Beckman</i>				Signature <i>[Signature]</i>		Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>JOSE W Ruiz</i>				Signature <i>[Signature]</i>		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

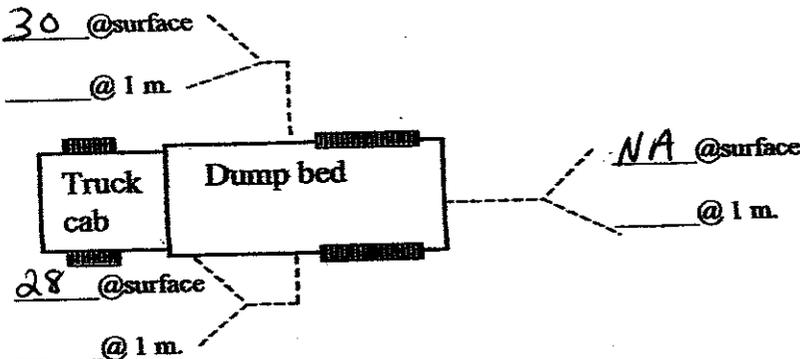
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 1209 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

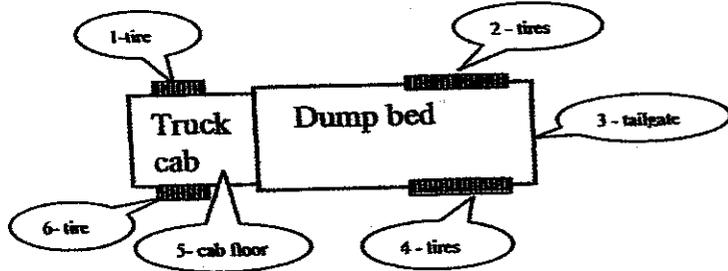
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	554547	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
23 August 2007	12:27 pm	
DATE OUT	TIME OUT	
23 August 2007	12:27 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
592496		

Gross Weight 87,640.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 52,540.00 lb 26.27 TN Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
26.27	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*

NON-HAZARDOUS WASTE MANIFEST

0592496

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Cottman's Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990813 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		19. Total Quantity	
16. Waste Shipping Name and Description		18. Containers		20. Unit Wt/Vol	
a. Norm Soil		CO 167-070908 Y511915		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benjamin			Signature 		Month Day Year 8/23/07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year
Printed/Typed Name MARK FRYLAN					8/23/07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
Printed/Typed Name					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

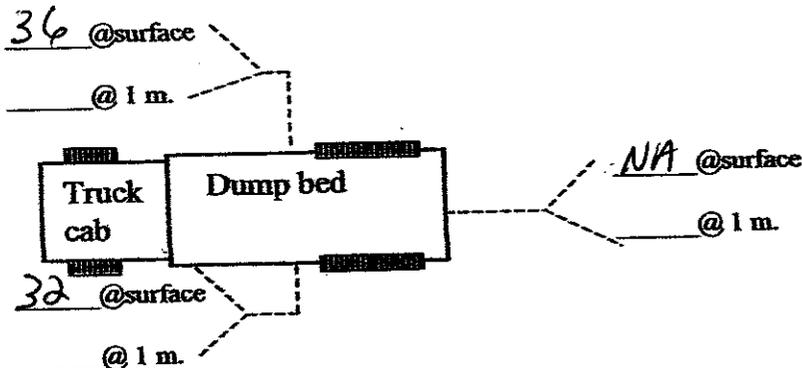
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/23/07 12/6 Surveyed by: J Mattson / C Hicks  
 Trucking Company: Griev Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

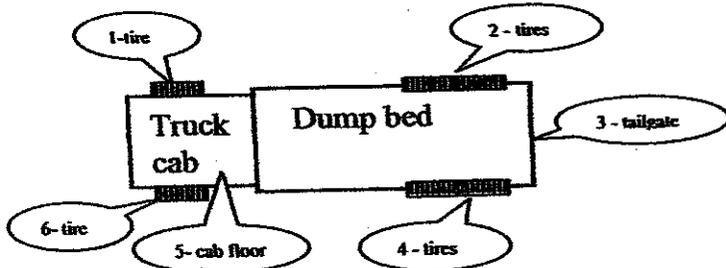
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	$\alpha$ 1 cpm	$\beta$ 268 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	569.6

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 554552	GRID 0000
WEIGHMASTER ES00056 Barbara Jo S		
DATE IN 23 August 2007		TIME IN 12:36 pm
DATE OUT 23 August 2007		TIME OUT 12:36 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 593497	ORIGIN	

Gross Weight 84,060.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 47,480.00 lb 23.74 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.74	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0592497

Please print or type.

1. Generator's US EPA ID Number	Manifest Document Number	2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401		5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( ) 303-273-3998		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 3900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	D-Drums	C-Containers
a. Norm Soil		CO L87 070908 Y511915			16	Y-Yards	T-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Brinkman</i>				Signature <i>[Signature]</i>		Month Day Year 8 23 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Fernando [Signature]</i>				Signature <i>[Signature]</i>		Month Day Year 8 23 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	
Grievé 24	8-22-07	1145	1152	18 yds	83280
Murray 461		1150	1156		82800
JD 04		1155	1202		77100
Marquez 96		1200	1208		77700
Grievé 8		1206	1214		82700
Grievé 23		1212	1219		80700
Collazo 13		1220	1230		81,800
JD 01		1230	1237		79,900
Grievé 12		1240	1251		81,600
Grievé 24		1250	1302		84,200
Murray 461		1300	1307		82,400
Marquez 961		1306	1314		80,200
Ruiz 95		1312	1319		80,100
JD 04		1315	1324		73800
Grievé 8		1320	1330		81,200
Grievé 23		1325	1335		82,100
Marquez 96		1335	1341		77,400
Collazo 13		1340	1347		84,400
Grievé 12		1355	1404		84,560
JD 01	↓	1400	1408	↓	79100

# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Grieve 24	8/22/07	1405	1415	18
Murray 461	8/22/07	1410	1421	
Marquez 961	8/22/07	1422	1433	
Ruiz 95	8/22/07	1429	1440	
JD 04	8/22/07	1435	1445	
Grieve 8	8/22/07	1445	1452	
Grieve 23	8/22/07	1450	1500	
Marquez 96	8/22/07	1500	1505	
Collazo 13	8/22/07	1505	1512	
Grieve 12	8/22/07	1510	1519	
J001	8/22/07	1518	1524	
Grieve 24	8/22/07	1520	1532	
Murray 461	8/22/07	1530	1547	
Grieve 8	8/22/07	1548	1553	
Ruiz 95	8/22/07	1550	1600	
Marquez 961	8/22/07	1555	1608	

84,700  
82,800  
81,300  
82,000  
76,400  
83,300  
82,600  
77,700  
82,800  
81,200  
76,500  
84,300  
80,600  
79,400  
81,100  
81,400

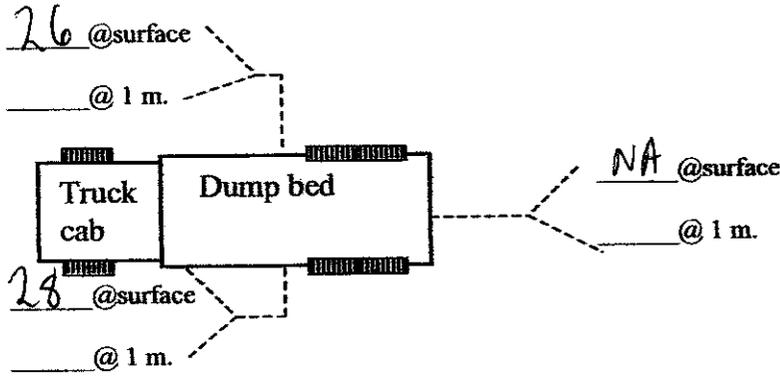
644

76 trucks 8/22/07

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1152 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Onire Truck license plate no. /state: 24

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

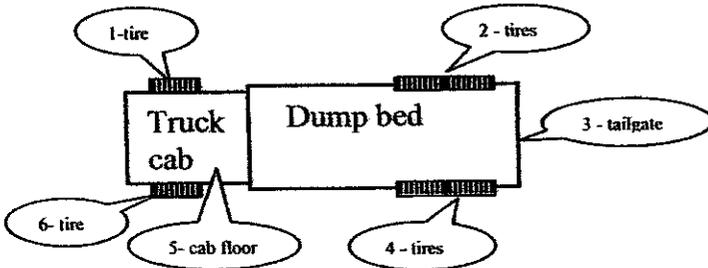
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

24 303722

FOOTHILLE LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YB1191E

SITE	TICKET	GRID
01	586131	0000
WEIGHMASTER		
NS00056 Barbara Jo S		
DATE IN		TIME IN
22 August 2007		12:08 pm
DATE OUT		TIME OUT
22 August 2007		12:08 pm
VEHICLE		ROLL OFF
YB1191E		
REFERENCE	ORIGIN	
445106		

Gross Weight 83,250.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 46,050.00 lb 23.04 TN  
 Incurred -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.04	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE Kew

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0645106

24

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3996				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name Soergrieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Poudre Canyon 3540 Hwy. 93 Golden, CO ACCOUNT # 100000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description: a. Norm. Soil		17. Allied Waste Approval # and Exp. Date CO 187 07000 12-1-1915		18. Containers			
				No.	Type	19. Total Quantity D-Drums 3-Drums	20. Unit WT/Vol G-Gallons T-Tons
				18	Y	Y-Yards	T-Tons
				b.			
				c.			
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Bralman		Signature 		Month	Day Year		
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Ken Shannon		Signature 			
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day Year		

GENERATOR

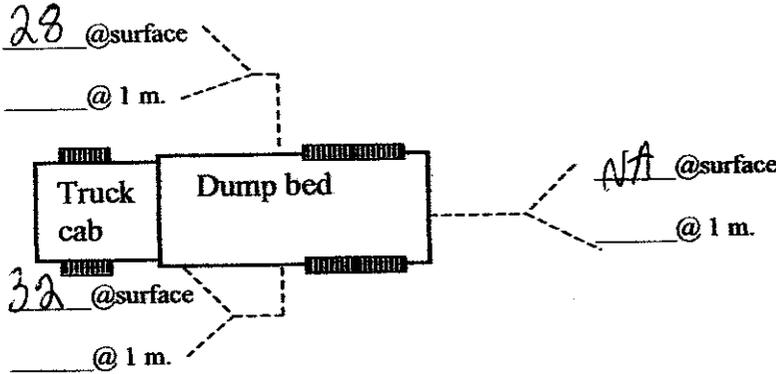
TRANSPORTER

T/S/D FACILITY

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1156 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

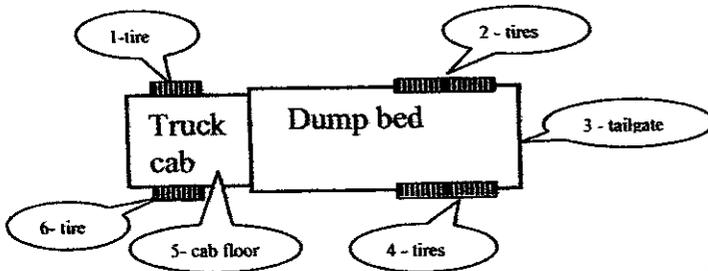
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0





461

# NON-HAZARDOUS WASTE MANIFEST

# 0645107

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( ) 303-273-3998		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 99 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	4
b.					
c.					
d.					
20. Unit WT/Vol D-Drums G-Gallons Y-Yards T-Tons					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman				Signature	
				Month 8	Day 22
				Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray				Signature	
				Month 8	Day 22
				Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
				Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month 6	Day 27
				Year 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

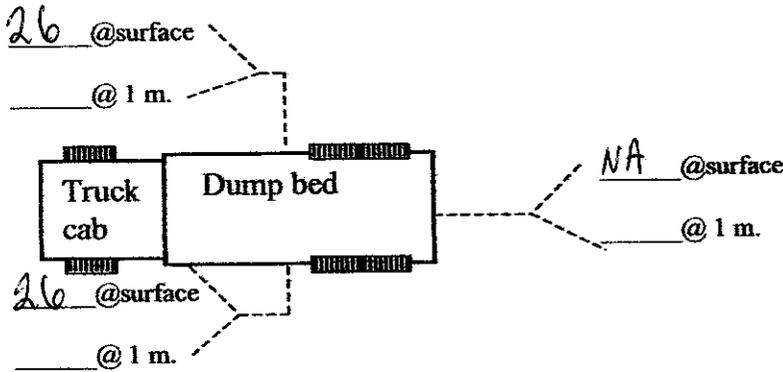
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1202 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: T004

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

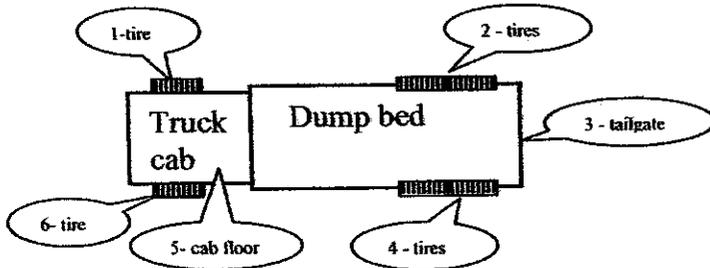
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

303721 37

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
760608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET EB0140	GRID 0000
WEIGHMASTER 8300056 Barbara Jo S		
DATE IN 22 August 2007		TIME IN 12:21 pm
DATE OUT 22 August 2007		TIME OUT 12:21 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 645106	ORIGIN	

Gross Weight 77,100.00 lb  
Tare Weight 35,640.00 lb  
Net Weight 41,460.00 lb 20.73 TN

Inclosed -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.73	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE [Signature] 8-22-07



04

# NON-HAZARDOUS WASTE MANIFEST

## 0645108

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998	
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 107 070902 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benhman		Signature <i>[Signature]</i>		Month 8	Day 2
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature Vargas		Month	Day
Printed/Typed Name Santhosho Vargas		Signature		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
Signature		Signature		Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

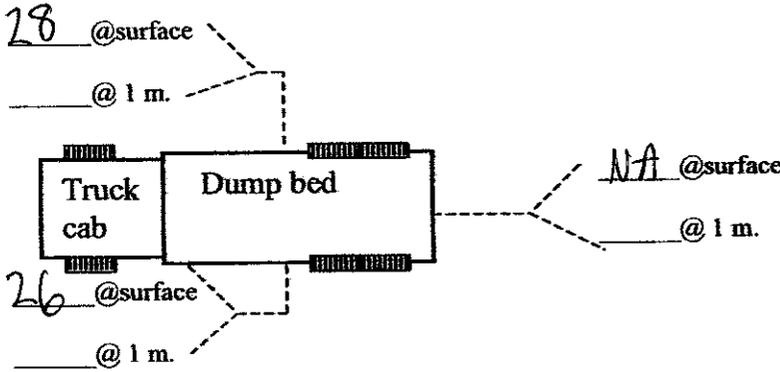
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1208 Surveyed by: C Hicks / J Mattson

Trucking Company: Onive Truck license plate no. /state: 96

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits** (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

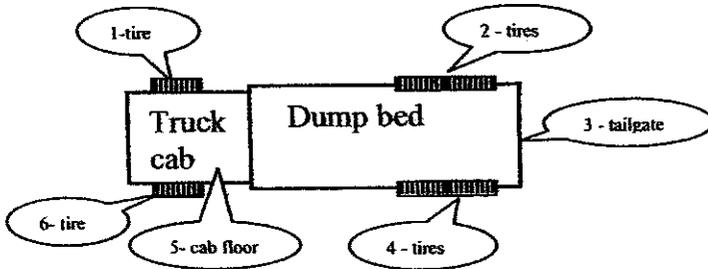
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

583726 9/2

FOOTHILLS LANDFILL  
 2700 HILDAWAY ST  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YB11915

SITE	TICKET	GRID
01	584145	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	2:25 PM	
DATE OUT	TIME OUT	
22 August 2007	12:25 PM	
VEHICLE	ROLL OFF	
YB11915		
REFERENCE	ORIGIN	
545078		

Gross Weight 77,700.00 lb  
 Tare Weight 36,580.00 lb      Inbound --  
 Net Weight 41,120.00 lb 20.56 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.56	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE





# NON-HAZARDOUS WASTE MANIFEST

0645078

96

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Benkman				8	22 04
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Fernando Lima				8	22 04
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

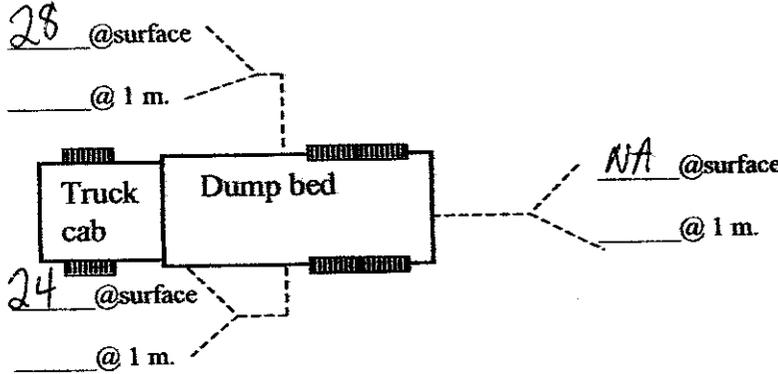
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1214 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 8

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

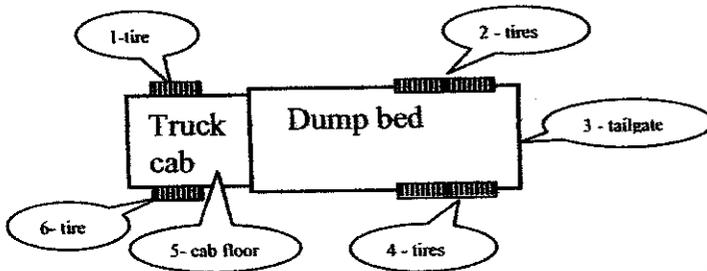
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>

Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

308723 5

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603

COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 586147	GRID 0000
WEIGHMASTER 180005a Barbara Jo S		
DATE IN 22 August 2007	TIME IN 12:30 pm	
DATE OUT 22 August 2007	TIME OUT 12:50 pm	
VEHICLE YE11915	ROLL OFF	
REFERENCE 645077	ORIGIN	

Gross weight 82,660.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 46,120.00 lb 23.06 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.06	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645077

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1501 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3996						
4. Phone ( )		6. Phone ( )							
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Postville Landfill 4507 Hwy 81 Golden, CO ADMIN # 99886 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date 03167-070908 1511915		18. Containers					
				No.	Type	19. Total Quantity Cu Yards	20. Unit Wt/Vol Tons		
				a.		18	Y		
				b.					
				c.					
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Beckman		Signature 		Month	Day Year				
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Chuck Foy		Signature 					
				Month	Day Year				
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature					
				Month	Day Year				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name		Signature		Month	Day Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

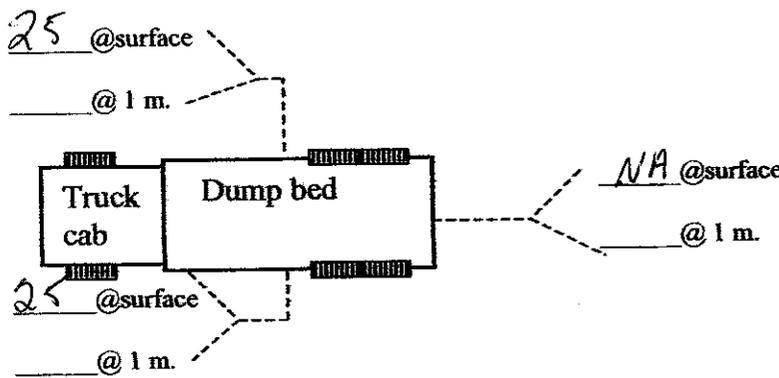
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1219 Surveyed by: C Hicks / J Mattson

Trucking Company: Conieve Truck license plate no./state: 23

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

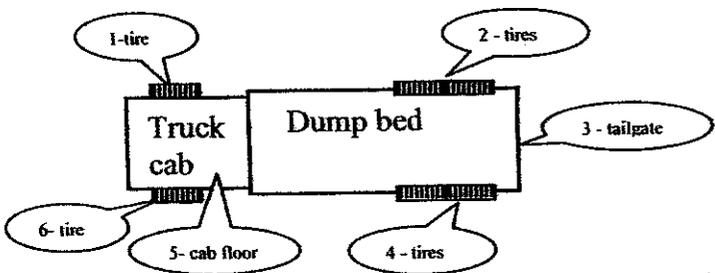
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 µrem/hr	5 cpm α	252 cpm β	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

508733

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
740605  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 558152	GRID 0000
WEIGHMASTER 1500054 Barbara Jo S		
DATE IN 22 August 2007		TIME IN 12:55 pm
DATE OUT 22 August 2007		TIME OUT 12:55 pm
VEHICLE Y511915		ROLL OFF
REFERENCE 645076	ORIGIN	

Contract: Y511915

Gross Weight 80,680.00 lb  
Tare Weight 35,100.00 lb      Inbound -  
Net Weight 45,580.00 lb @ 22.79 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.79	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645076

23

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Footfills Landfill 1900 Hwy 93 Golden, CO ACCOUNT # 960003 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	
a. Norm Soil		CO L67 070908 Y511915		D-Drums 3 Gallons	
b.				Y-Yards 1-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>MARK PHILLAN</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>	
				Month Day Year 8 22 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

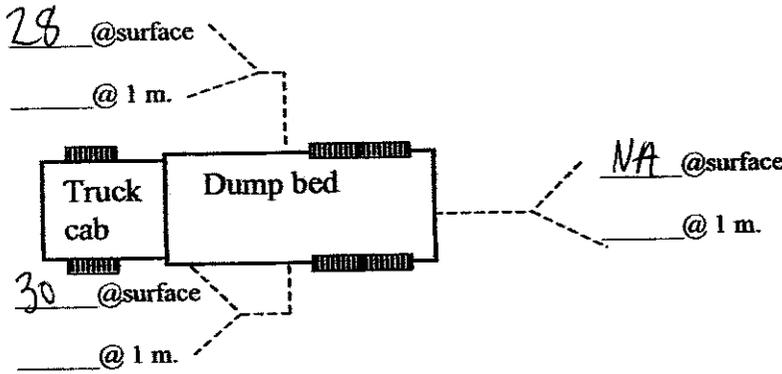
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1230 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

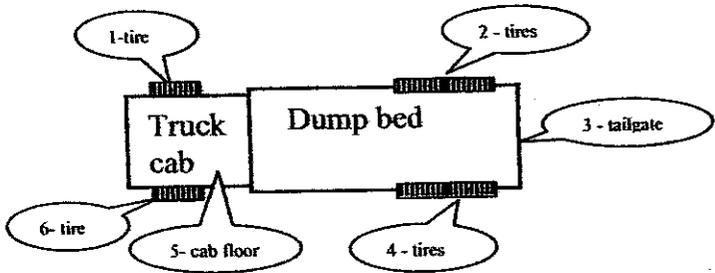
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503736

FOOTHILLS LANDFILL  
9700 HIGHWAY 93  
GOLDEN  
CO  
80660  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 0861EE	GRID 0000
WEIGHMASTER 1500056 Barbara Jo S		
DATE IN 22 August 2007		TIME IN 12:49 PM
DATE OUT 22 August 2007		TIME OUT 12:49 PM
VEHICLE Y511915		ROLL OFF
REFERENCE 845069	ORIGIN	

Contract# Y511915

Gross Weight 81,800.00 lb  
 Tare Weight 35,700.00 lb      Inbound -  
 Net Weight 46,100.00 lb 23.05 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.05	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

10  
0645069

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L97 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Michael Colares Lopez				08	22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
Dennis Light					

GENERATOR

TRANSPORTER

T/S/D FACILITY

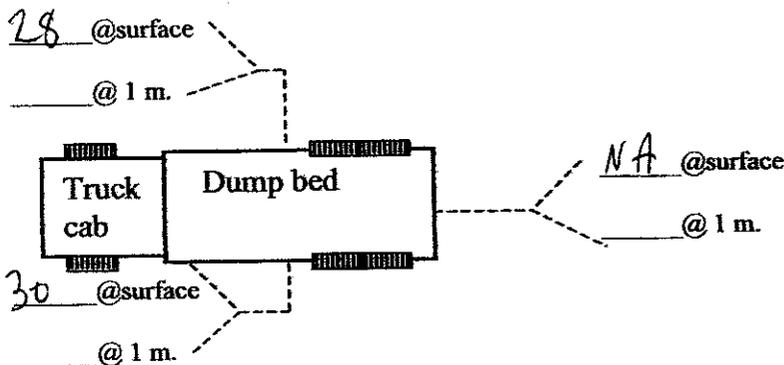
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1231 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

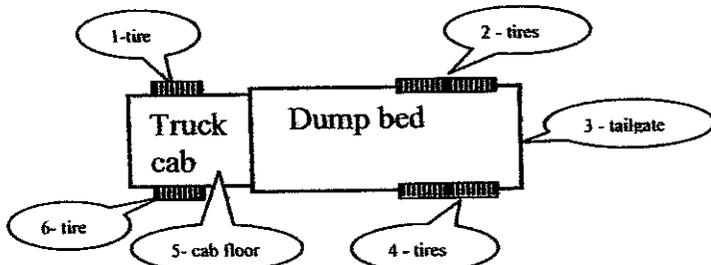
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503 121

FOOTHILLS LANDFILL  
3900 HIGHWAY 93  
GOLDEN  
CO  
804603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	586156	0000
WEIGHMASTER		
5000056 Barbara Jo E		
DATE IN	TIME IN	
22 August 2007	12:54 pm	
DATE OUT	TIME OUT	
22 August 2007	12:54 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645070		

Contract: Y511915

Gross Weight 79,850.00 lb  
 Tare Weight 35,550.00 lb  
 Net Weight 44,300.00 lb 22.15 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.15	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645070

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2900 Hwy 93 Golden, CO ACCOUNT # 980903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 YS11915		1	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <u>Steve Benkman</u>			Signature		Month <u>8</u> Day <u>22</u> Year <u>07</u>
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <u>Jose W Ruiz</u>			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <u>Steve Benkman</u>			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

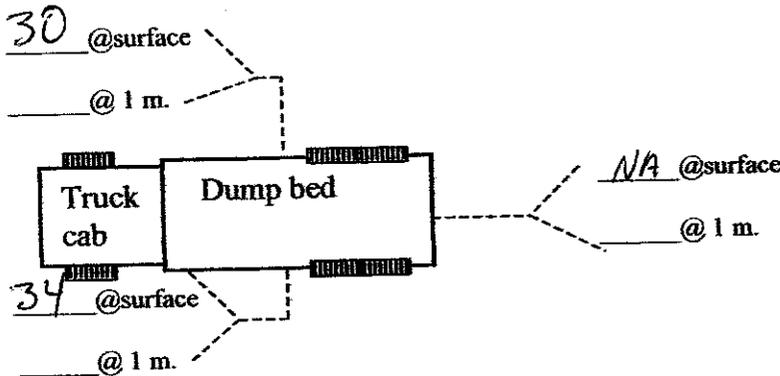
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1251 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Geneve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

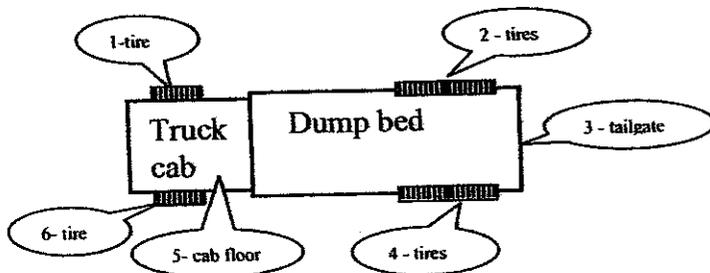
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

883713 12

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE1191E

SITE	TICKET	GRID
01	YE1191E	0000
WEIGHMASTER		
8800056 Barbara Jo S		
DATE IN	TIME IN	
22 AUGUST 2007	1:08 pm	
DATE OUT	TIME OUT	
22 August 2007	1:08 pm	
VEHICLE	ROLL OFF	
YE1191E		
REFERENCE	ORIGIN	
645071		

Gross Weight 81,640.00 lb  
 Tare Weight 39,700.00 lb      Inboured -  
 Net Weight 41,940.00 lb @ 21.77 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.77	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645071

10

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401									
4. Phone ( ) 303-273-3998				6. Phone ( )									
7. Transporter #1 Company Name Grive Trucking H12				8. US EPA ID Number		9. Transporter #1's Phone							
10. Transporter #2 Company Name				11. US EPA ID Number		12. Transporter #2's Phone							
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone							
16. Waste Shipping Name and Description a. Norm Soil b. c. d.				17. Allied Waste Approval # and Exp. Date CO L67 070903 Y311915		18. Containers		19. Total Quantity		20. Unit Wt/Vol			
						No.		Type		Drums		Gallons	
								18		Y-Yards		T-Tons	
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Bankman				Signature				Month 8		Day 27		Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature				Month 8		Day 20		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name				Signature				Month		Day		Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

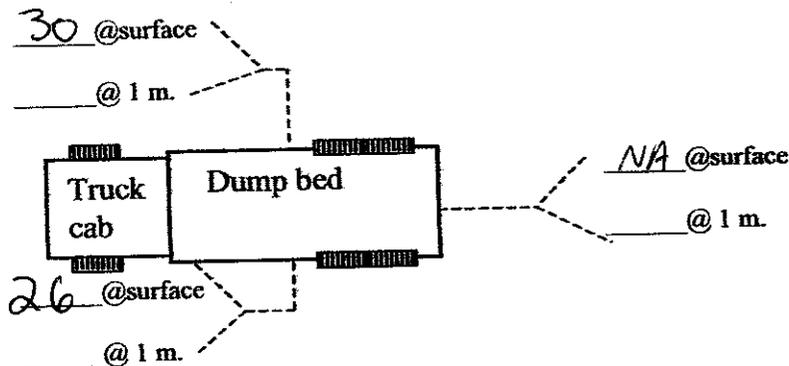
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 <sup>1302</sup> 1415 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Conve Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

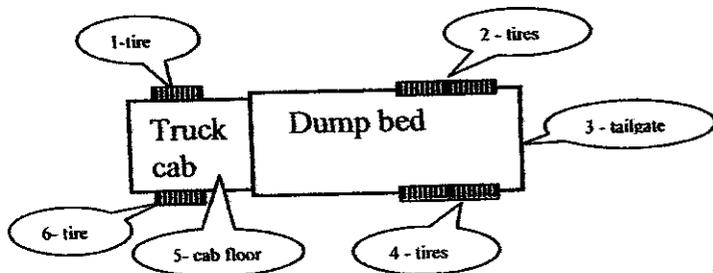
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 804600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YB11915

SITE	TICKET	GRID
01	326169	0000
WEIGHMASTER		
2500036 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:17 pm	
DATE OUT	TIME OUT	
22 August 2007	1:17 pm	
VEHICLE	ROLL OFF	
YB11915		
REFERENCE	ORIGIN	
645072		

Gross Weight 84,190.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 46,990.00 lb 23.47 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.47	TN	SW-COINT SOLL				
1.00	LA	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kens*



# NON-HAZARDOUS WASTE MANIFEST

0645072

27

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3848			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Joe Grieve Trucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 3000 Hwy 90 Golden, CO ACCOUNT # 140653 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Waste Sol.		CO 187 070908 7511915		19. Total Quantity D-Drums G-Gallons	
b.				20. Unit Wt/Vol	
c.				Y-Yards T-Tons	
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature		Month Day Year 8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Shannon		Signature		Month Day Year 08 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

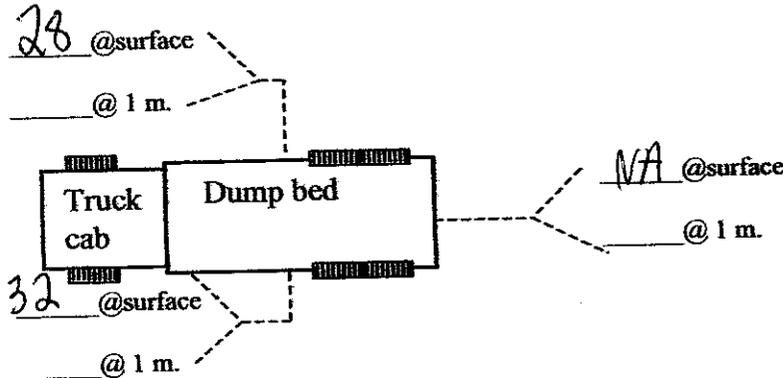
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1307 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Geneve Truck license plate no. /state: 461

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

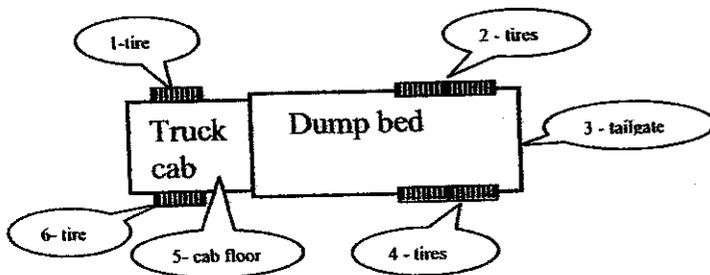
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	5220				52200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503754 401

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	586173	0000
WEIGHMASTER		
#500054 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:26 pm	
DATE OUT	TIME OUT	
22 August 2007	1:26 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645073		

Contract: Y511915

Gross Weight 82,400.00 lb  
 Tare Weight 34,260.00 lb Inbound --  
 Net Weight 48,140.00 lb 24.07 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.07	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *M L N*



# NON-HAZARDOUS WASTE MANIFEST

0645073

701

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature <i>[Signature]</i>		Month Day Year 8 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

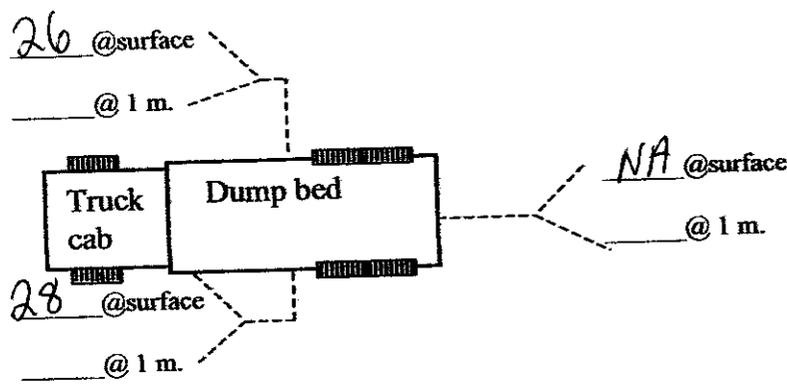
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1314 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

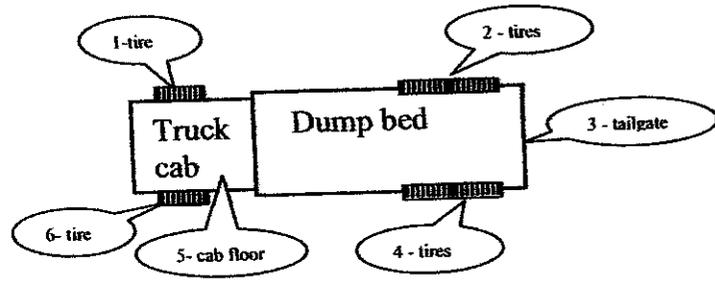
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

503762 961

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586161	0000
WEIGHMASTER		
#300056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:05 pm	
DATE OUT	TIME OUT	
22 August 2007	1:35 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645075		

Gross Weight 80,200.00 lb  
 Tare Weight 34,400.00 lb      Inbound --  
 Net Weight 45,800.00 lb @ 22.90 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.90	TN	SW-COHT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645075

761

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 880003 (Colorado School of Mines)		14. US EPA ID Number			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			10 Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 12 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Alberto Mendez			Signature		Month Day Year 8 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

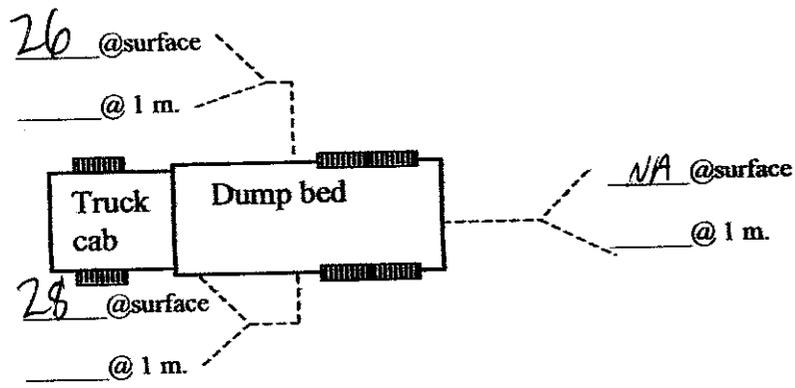
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1319 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Geneve Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

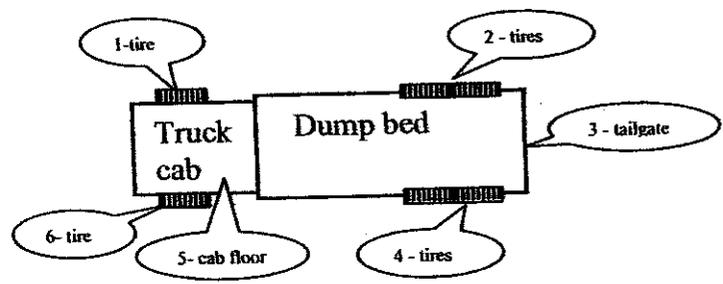
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

503780 95

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	526185	0000
WEIGHMASTER		
8000086 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:38 pm	
DATE OUT	TIME OUT	
22 August 2007	1:38 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645074		

Contract: Y511915

Gross Weight 80,080.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 43,100.00 lb 21.55 TN  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.55	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645074

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998						
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone					
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone					
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers					
				No.	Type	19. Total Quantity	20. Unit Wt/Vol		
						0 Drums	0 Gallons		
				a.		Norm Soil	CO L67 070908 Y511915	Y-Yards	-Tons
				b.					
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name		Signature		Month	Day				
Steve Brinkman				8	22				
Year		Month		Day	Year				
07		8		22	07				
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name		Signature		Month	Day				
Muel Ruiz				8	22				
Year		Month		Day	Year				
07		8		22	07				
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name		Signature		Month	Day				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name		Signature		Month	Day				
Year		Month		Day	Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

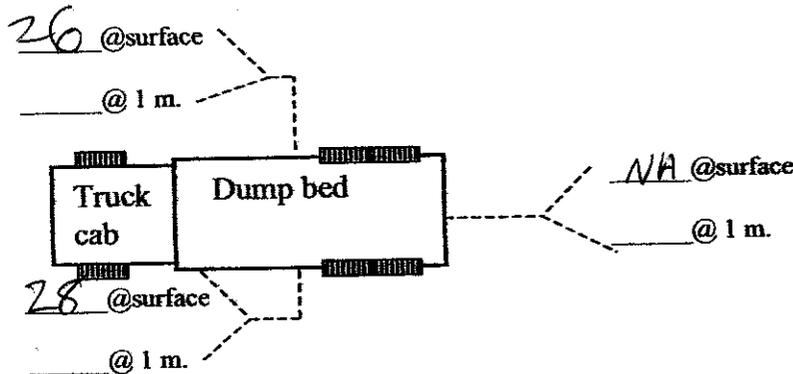
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1324 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Onive Truck license plate no. /state: 04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

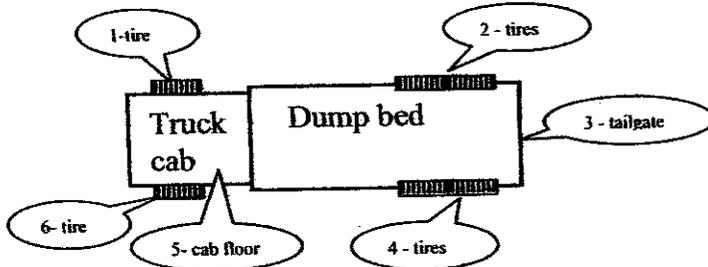
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

303711 09

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586190	0000
WEIGHMASTER		
280005a Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:43 pm	
DATE OUT	TIME OUT	
22 August 2007	1:43 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645063		

Gross Weight 73,840.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 38,200.00 lb 19.10 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.10	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Signature]* 8-22-07  
 SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645068

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers				
				No.	Type	19. Total Quantity	20. Unit Wt/Vol	
				a.			Y-Yards	T-Tons
				b.				
				c.				
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name		Signature		Month Day Year				
Steve Brinkman				8 27 07				
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name		Signature		Month Day Year				
Santiago Vargay								
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name		Signature		Month Day Year				
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name		Signature		Month Day Year				
D. J. ...				8 27 07				

GENERATOR

TRANSPORTER

T/S/D FACILITY

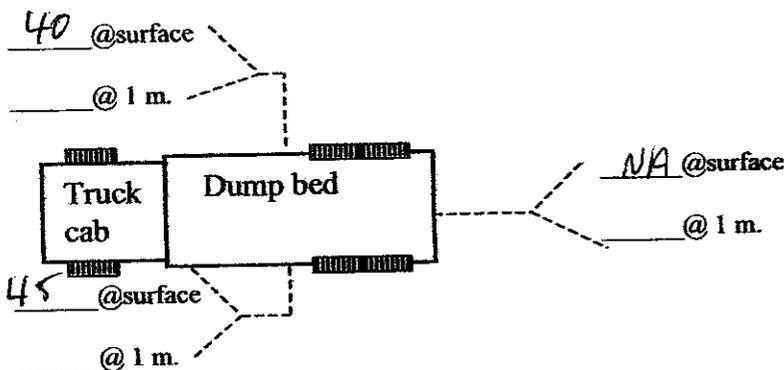
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1330 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

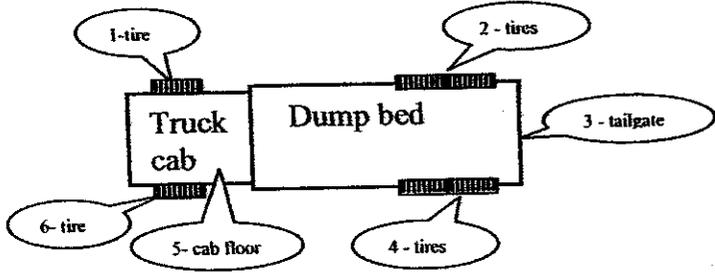
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	566197	0000
WEIGHMASTER		
5600056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:50 pm	
DATE OUT	TIME OUT	
22 August 2007	1:50 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645067		

Gross Weight 81,220.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 44,680.00 lb 22.34 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.34	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0645057

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3908					
4. Phone ( ) 303-273-3908		6. Phone ( )		9. Transporter #1's Phone				
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone				
13. Designated T/S/D Facility Name and Site Address Feather's Landfill 6800 Hwy 95 Golden, CO ACCOUNT # 004813 (Drummed - School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type	Drums	Gallons	
a. Norm Soil		00107 070801 Y511915		18	Y	Yards	Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Benkman				Signature		Month 8	Day 22	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month 08	Day 22	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

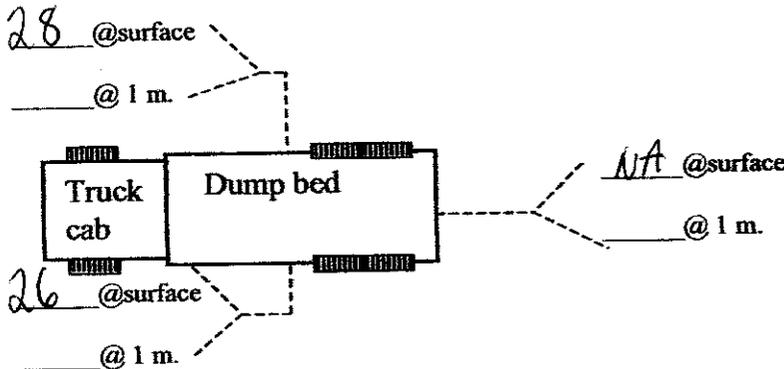
TRANSPORTER #1

COM000035

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1335 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

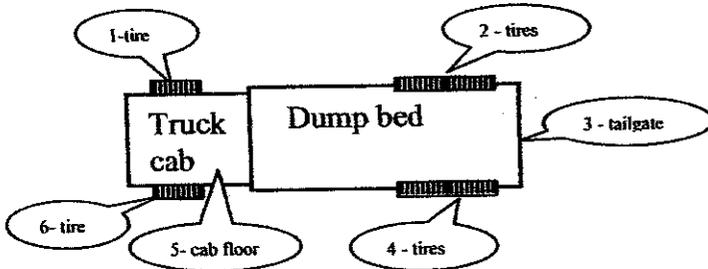
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	5220				52200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503732 24

FOOTHILLS LANDFILL  
 8900 HIGHWAY 98  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 7511915

SITE	TICKET	GRID
01	586201	0000
WEIGHMASTER		
5800056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	1:54 pm	
DATE OUT	TIME OUT	
22 August 2007	1:54 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
045066		

Gross Weight 82,060.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 46,960.00 lb 23.48 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.48	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645066

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footbills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		16	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Brinkman				8	22
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
Mark Phelan				5	22
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

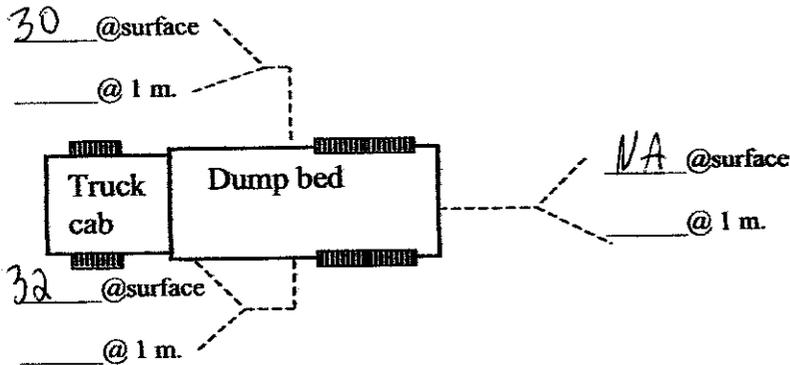
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1341 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

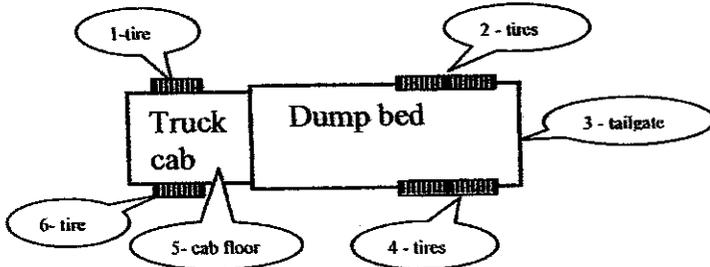
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503.38 78

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
960608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	556207	0000
WEIGHMASTER		
5500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	2:00 pm	
DATE OUT	TIME OUT	
22 August 2007	2:00 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645065		

Gross Weight 77,440.00 lb  
Tare Weight 36,580.00 lb  
Net Weight 40,860.00 lb 20.43 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.43	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645065

710

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998									
4. Phone ( ) 303-273-3998				6. Phone ( )									
7. Transporter #1 Company Name				8. US EPA ID Number		9. Transporter #1's Phone							
10. Transporter #2 Company Name				11. US EPA ID Number		12. Transporter #2's Phone							
13. Designated T/S/D Facility Name and Site Address Footfalls Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 90003 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone							
16. Waste Shipping Name and Description				17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity		20. Unit Wt/Vol			
						No.	Type	D-Drums	C-Gallons	Y-Yards	T-Tons		
a. Norm Soil				CO L87 070903 Y511915									
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Brinkman				Signature				Month 8		Day 22		Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name Fernando Lopez				Signature				Month 9		Day 22		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name				Signature				Month		Day		Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

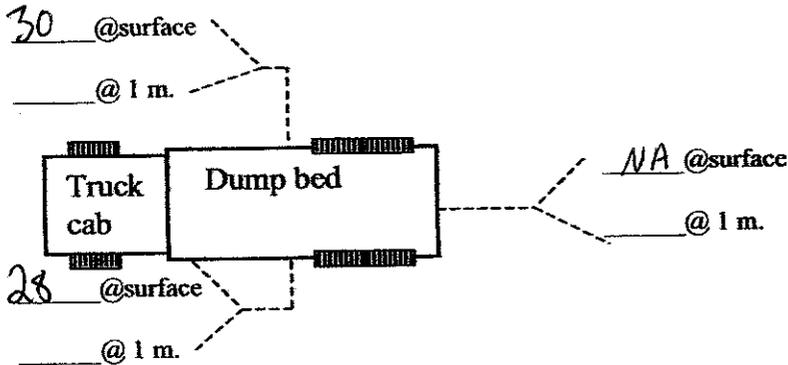
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1347 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

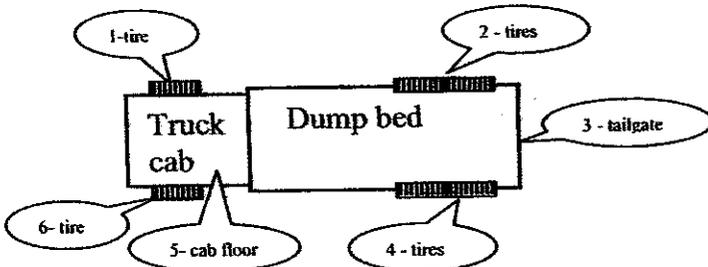
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

50379# 13

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	882213	0000
WEIGHMASTER		
3500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	2:07 pm	
DATE OUT	TIME OUT	
22 August 2007	2:07 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
845064		

Contract: Y511915

00 Gross Weight 84,360.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 48,660.00 lb 24.33 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.33	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0645084

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3996			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Rafael Calhazo Lopez</i>			Signature <i>[Signature]</i>		Month Day Year 08 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 08 22 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

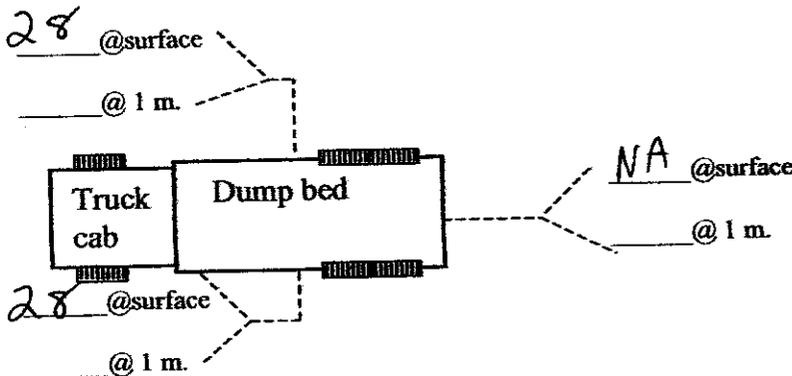
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1404 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: 12

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

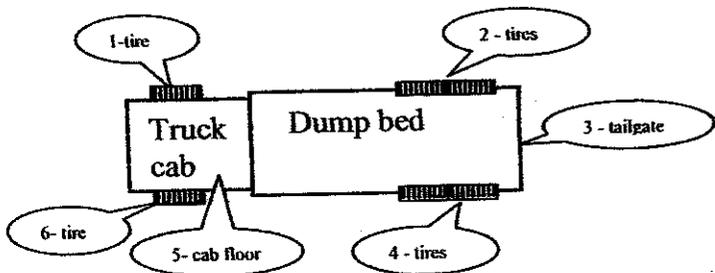
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 µrem/hr	5 cpm α	252 cpm β	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

503796 10

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586215	0000
WEIGHMASTER		
ES00056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	2:22 pm	
DATE OUT	TIME OUT	
22 August 2007	2:22 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645057		

OO Gross Weight 84,560.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 46,860.00 lb 23.43 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.43	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645059

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Greene Trucking H12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960616 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		15	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month 8	Day Year 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean O'Brien		Signature <i>[Signature]</i>		Month 8	Day Year 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

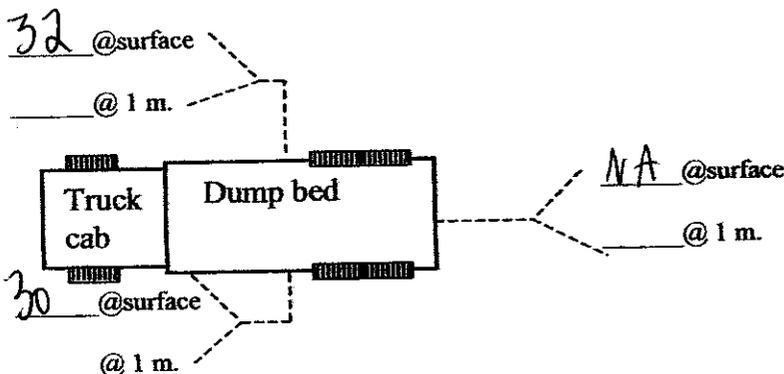
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1408 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

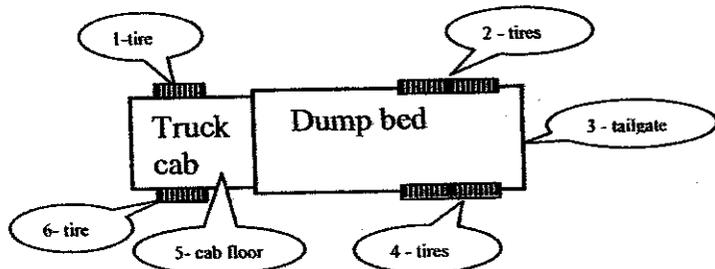
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	5220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586219	0000
WEIGHMASTER		
E500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	2:25 pm	
DATE OUT	TIME OUT	
22 August 2007	2:25 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645060		

00 Gross Weight 79,100.00 lb  
 Tare Weight 35,580.00 lb Inbound -  
 Net Weight 43,520.00 lb 21.76 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.76	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645060

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998						
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone					
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone					
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 92803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol		
				No.	Type	D-Drums	P-Pallets		
				a. Norm Soil	CO L87 070900 Y511916	18	Y	Y-Yards	T-Tons
				b.					
				c.					
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name: Steve Brinkman				Signature: <i>[Signature]</i>		Month: 8 Day: 22 Year: 07			
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name: JOSE W Ruiz				Signature: <i>[Signature]</i>		Month: Day: Year:			
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name:				Signature:		Month: Day: Year:			
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name:				Signature:		Month: Day: Year:			

GENERATOR

TRANSPORTER

T/S/D FACILITY

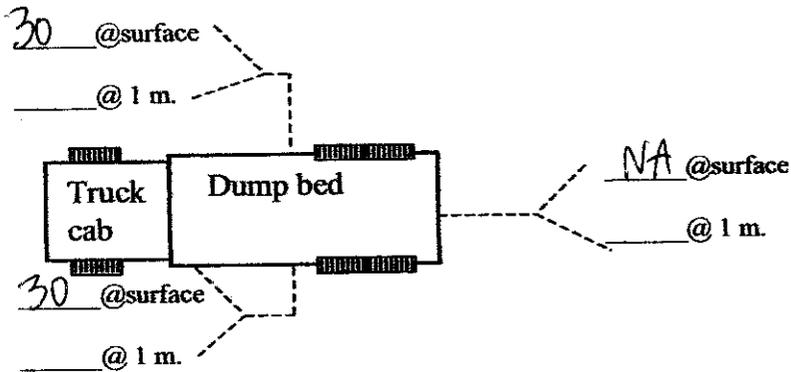
TRANSPORTER #2

COM060033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1415 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

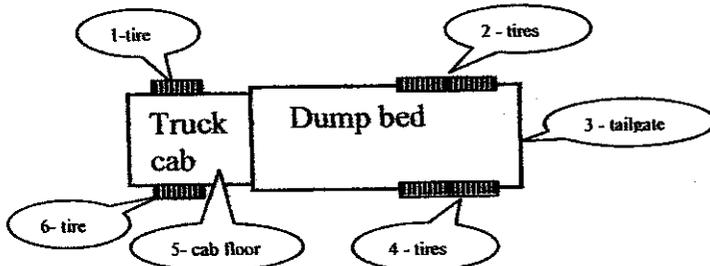
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0





24

# NON-HAZARDOUS WASTE MANIFEST

## 0645061

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3936			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3936		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name <i>Joe Grieve-Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8900 Hwy 83 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non Soil		CO 067 070008 7511915		19. Total Quantity 0 Drums 20. Unit 1 Gallons	
b.				Y Yards T Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>		Signature <i>[Signature]</i>		Month Day Year 8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Ken Shannon</i>		Signature <i>[Signature]</i>		Month Day Year 08 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

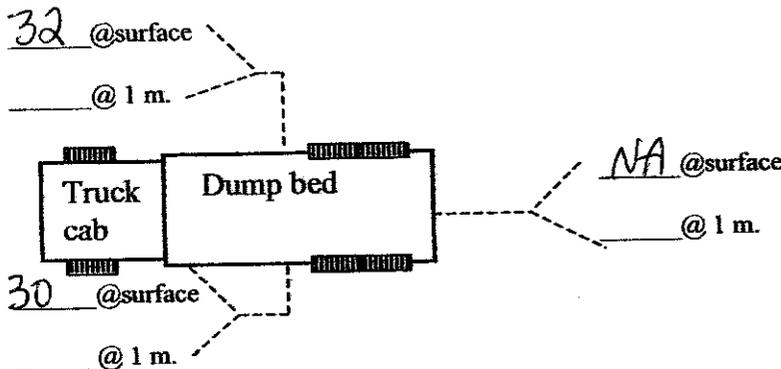
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1421 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

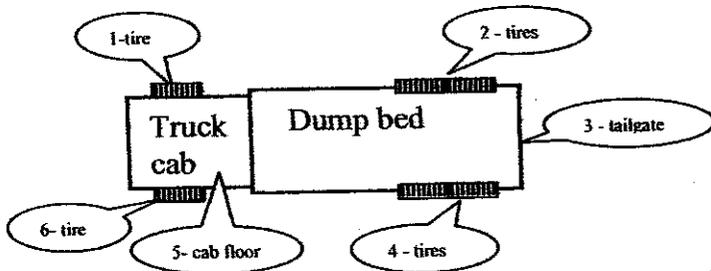
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2200				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503821 461

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 556230	GRID 0600
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 2:38 pm	
DATE OUT 22 August 2007	TIME OUT 2:38 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645062	ORIGIN	

00 Gross Weight 82,800.00 lb  
 Tare Weight 34,260.00 lb Inbound -  
 Net Weight 48,540.00 lb 24.27 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.27	TN	SW-DONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Dak M*



# NON-HAZARDOUS WASTE MANIFEST

# 0645062

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998			
4. Phone ( )		6. Phone ( )		7. Transporter #1 Company Name		8. US EPA ID Number	
9. Transporter #1's Phone		10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Schools Landfill 8900 Hwy 93 Golden CO ACCOUNT # 9606703 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil				17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers	
						No.	Type
						19. Total Quantity D-Drums G-Gallons	
						20. Unit Y-Yards T-Tons	
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Brinkman</i>				Signature <i>[Signature]</i>		Month Day Year 8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Mike Murray</i>				Signature <i>[Signature]</i>		Month Day Year 8 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>		Month Day Year 8 22 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

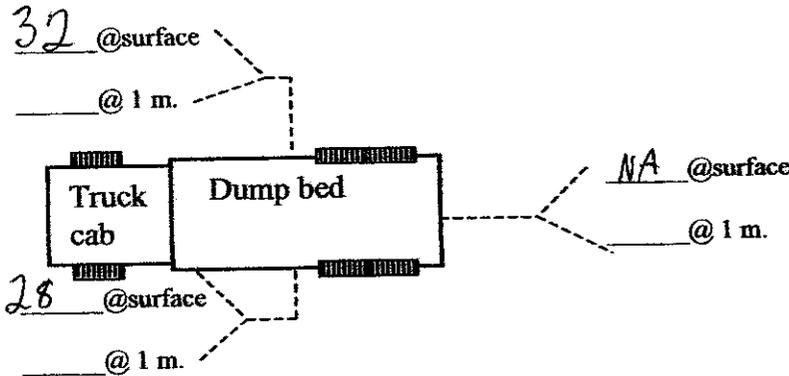
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1433 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Onirve Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

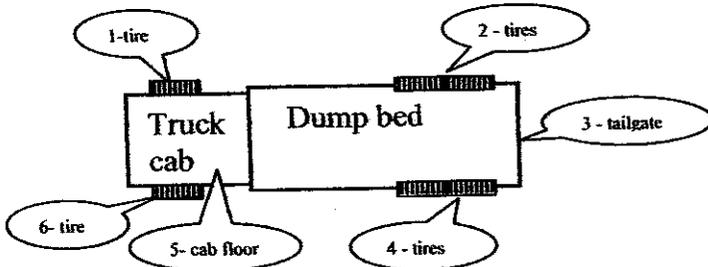
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0





# NON-HAZARDOUS WASTE MANIFEST

# 0645063

761

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		76	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Miguel Morales				8	22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
				8	22 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

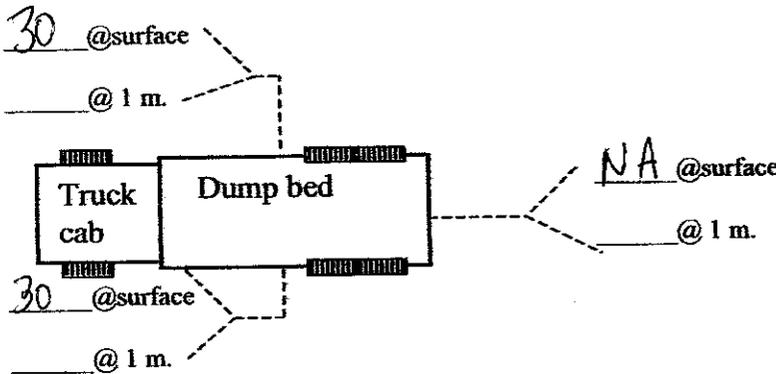
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1440 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

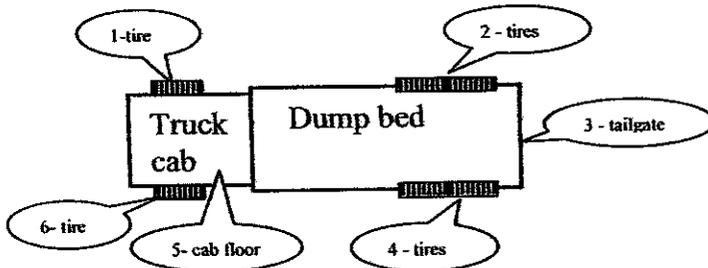
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

583824 45

FOOTMILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
960608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	586244	0000
WEIGHMASTER		
R500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	3:01 pm	
DATE OUT	TIME OUT	
22 August 2007	3:01 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
64508		

Contract: Y511915

Gross Weight 52,080.00 lb  
Tare Weight 36,980.00 lb  
Net Weight 45,100.00 lb 22.55 TN  
Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.55	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0645058

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998										
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone									
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone									
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone									
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960403 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone									
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO L87 070903 Y511915		18. Containers		19. Total Quantity		20. Unit Wt/Vol					
				No.		Type		Drums		Gallons			
				a. Norm Soil				Y-Yards		T-Tons			
				b.									
				c.									
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Brinkman				Signature				Month 8		Day 22		Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature				Month 8		Day 27		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name				Signature				Month 10		Day 1		Year 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

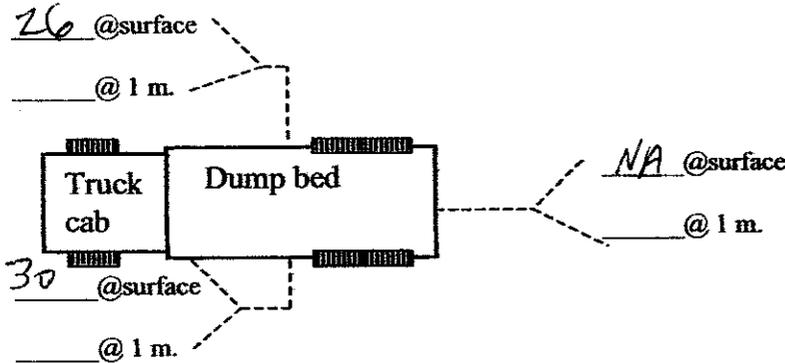
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1445 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: J004

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

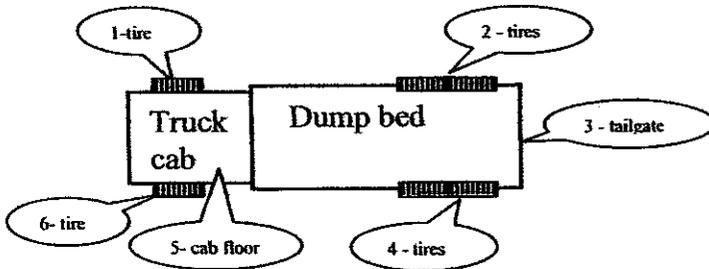
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	4220				4220		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503828 01

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760606  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586245	GRID 0000
WEIGHMASTER #500056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 3:06 pm	
DATE OUT 22 August 2007	TIME OUT 3:06 pm	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645057	ORIGIN	

Gross Weight 76,360.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 40,720.00 lb 20.36 TN Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.36	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-22-07



# NON-HAZARDOUS WASTE MANIFEST

# 0645057

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		8	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brakman</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Santiago Vargas</i>			Signature <i>[Signature]</i>		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

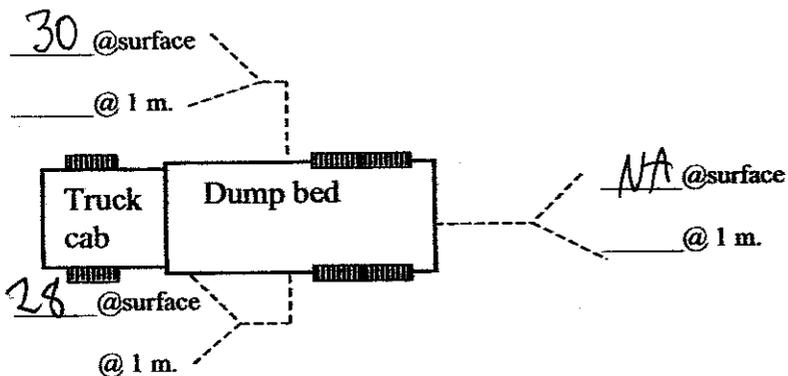
TRANSPORTER #2

COM000034

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1452 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

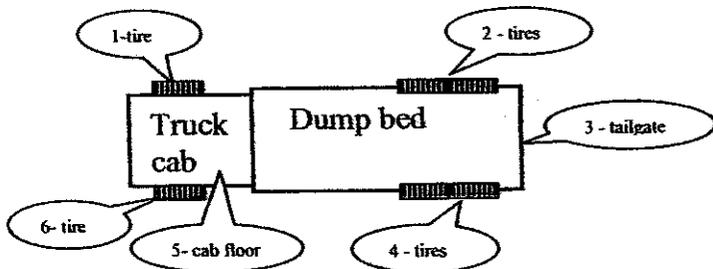
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	2220				2220		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503830

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401  
 Contracts: Y511915

SITE	TICKET	GRID
01	503830	0000
WEIGHMASTER		
B500056 Barbara Jo S		
DATE IN		TIME IN
22 August 2007		3:10 pm
DATE OUT		TIME OUT
22 August 2007		3:10 pm
VEHICLE		ROLL OFF
Y511915		
REFERENCE	ORIGIN	
645098		

Gross Weight 33,300.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 46,760.00 lb 23.38 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.38	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645038

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )				6. Phone ( )	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footprints Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 860603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				D-Drums	
				G-Gallons	
a. Norm Soil		CO LE7 070908 Y511915		18 4 Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature	
				Month Day Year 8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy				Signature	
				Month Day Year 08 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

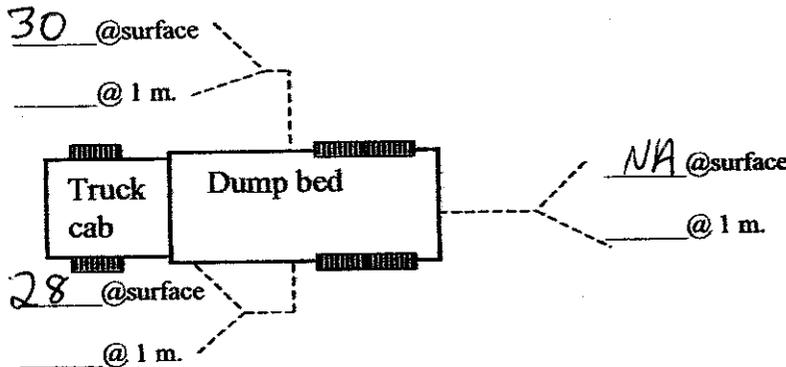
TRANSPORTER #2

COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1500 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

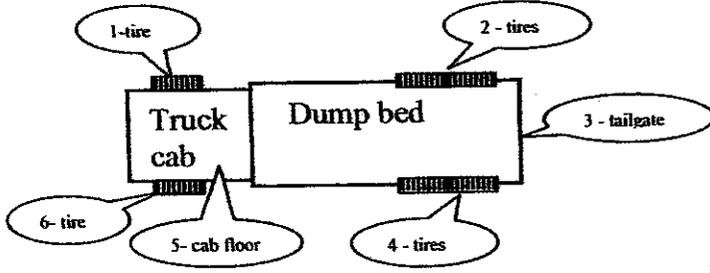
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

583835 22

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
806608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	583835	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	3:20 pm	
DATE OUT	TIME OUT	
22 August 2007	3:20 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645039		

Contract: Y511915

Gross Weight 32,600.00 lb  
Tare Weight 35,100.00 lb  
Net Weight 47,500.00 lb 23.75 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.75	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645039

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 981603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				D-Drums C-Gallons	
				Y-Yards -Tons	
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Benkman				8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
MARK PHELAN				8 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

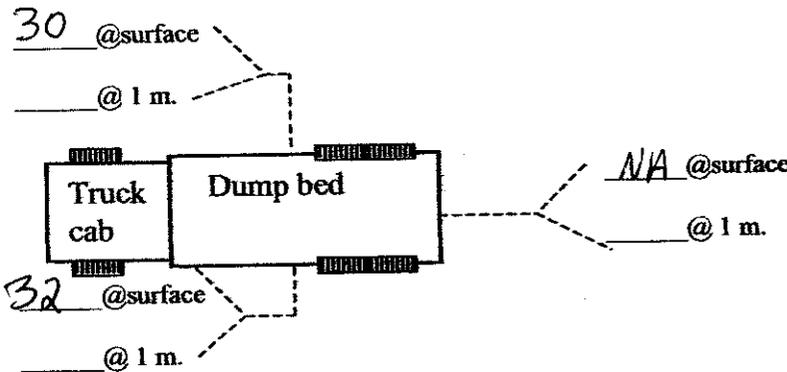
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1505 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

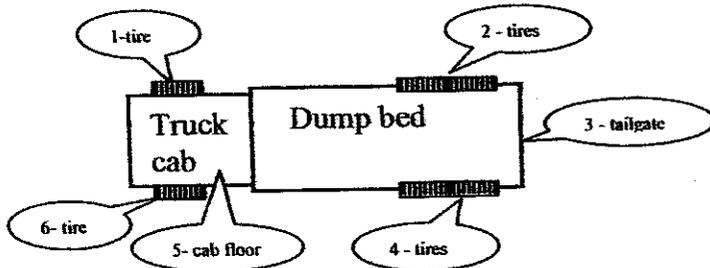
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$	
Efficiency	NA	17.6%	13.9%	
MDA	NA	76.2	553.0	

003340 76

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80608  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	886260	0000
WEIGHMASTER		
8800056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	3:25 pm	
DATE OUT	TIME OUT	
22 August 2007	3:25 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645048		

Contract: Y511915

Gross Weight 77,740.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 41,160.00 lb 20.58 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.58	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_





# NON-HAZARDOUS WASTE MANIFEST

0645048

16

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 460603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y51191E		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman		Signature <i>[Signature]</i>		Month Day Year 8 12 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Fernando Barba		Signature <i>[Signature]</i>		Month Day Year 8 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

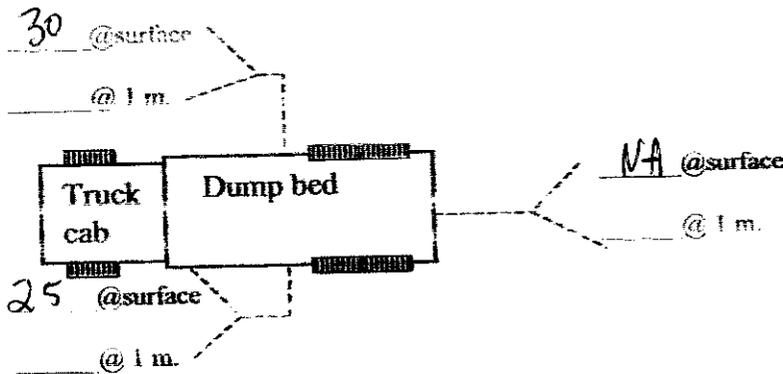
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1512 Surveyed by: C Hicks / S Mattson

Trucking Company: Innovative Truck license plate no. /state: 13

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

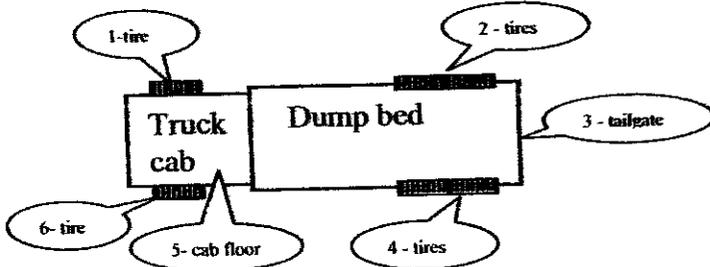
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503845

13

FOOTHILLE LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	556266	0000
WEIGHMASTER		
R300056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	04:32 pm	
DATE OUT	TIME OUT	
22 August 2007	04:32 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
545047		

Gross Weight 82,760.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 47,060.00 lb 23.53 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.53	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645047

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 96003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				18		0 Drums	6 Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month	Day Year		
Steve Brinkman				8	22 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day Year		
Maia Colazo Lopez				08	22 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

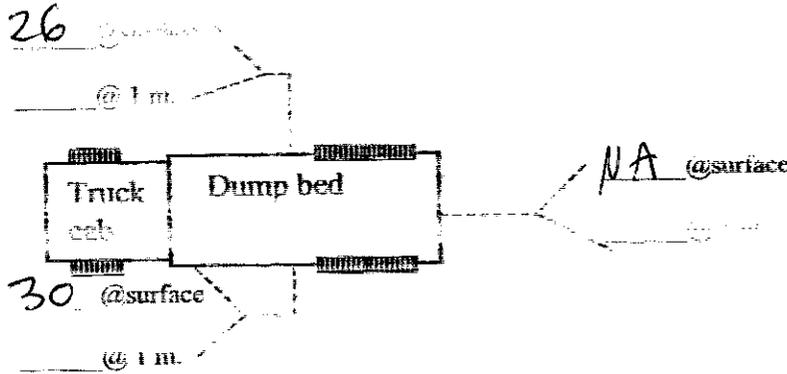
TRANSPORTER #2

COM000633

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1519 Surveyed by: C Hicks / J Mattson  
 Trucking Company: \_\_\_\_\_ Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Dose rates should be recorded at highest reading for each side

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

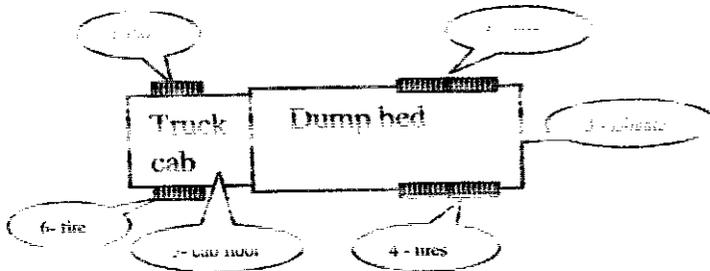
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is contaminated, survey is complete.)

**Transport Index (TI)** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (< 0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

TI = \_\_\_\_\_  
 A only:  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination Limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	10	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	235249 / PR-22/111	235249 / PR-22/111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg	18 $\mu\text{rem/hr}$	5 $\mu\text{rem/hr}$	2.53 $\mu\text{rem/hr}$
Efficiency	NA	17.6%	13.7%
MDA	NA	76.2	553.6

505875 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	586265	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	3:35 pm	
DATE OUT	TIME OUT	
22 August 2007	3:35 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645046		

Contract: Y511915

Gross Weight 81,220.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 43,520.00 lb 21.76 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.76	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645046

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Green Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Potholes Landfill 8000 Hwy 93 Golden, CO ACCOUNT # 960803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		8	Yards
b.					Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day Year 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Semin Olson		Signature 		Month 8	Day Year 09 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

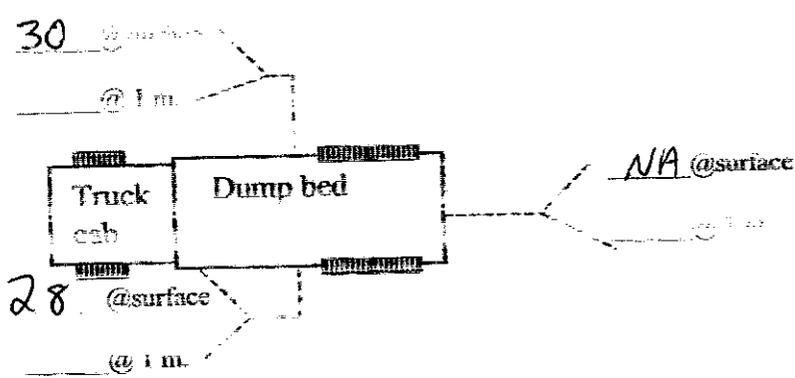
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1524 Surveyed by: C Hicks / J Mattson  
 Trucking Company: 1-800-4 Truck license plate no./state: JD01

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
Dose rates should be recorded at highest reading for each side

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

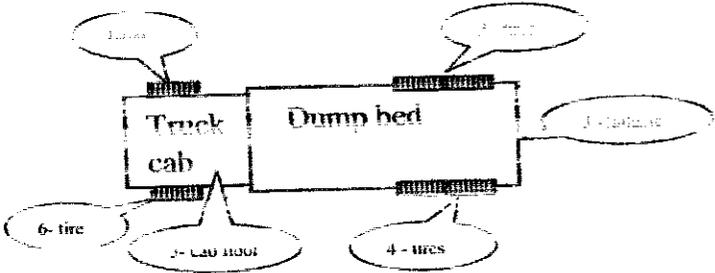
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If any part of the survey is incomplete.)

**Transport Index (TI)** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth

Dose Rate at 1 meter	TI
< 50 µrem (< 0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25 mrem)	0.2

Enter TI:  
A only:  
TI:     

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination Limits:  
Alpha: 226 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	10	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-22/111	233249 / PR-22/111
Cal Due	8-14-08		
Bkg.	18 µrem/hr	5 cpm	252 cpm
Efficiency	NA	13.6%	13.9%
MDA	NA	26.2	553.0

003032

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586272	0000
WEIGHMASTER		
600056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	3:40 pm	
DATE OUT	TIME OUT	
22 August 2007	3:40 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645056		

Gross Weight 76,480.00 lb  
Tare Weight 35,580.00 lb  
Net Weight 40,900.00 lb 20.45 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.45	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645056

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L87 070908 Y511915		19. Total Quantity 0 Drums 6 Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Jose W Ruiz		Signature 		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Douglas J...		Signature 		Month Day Year	

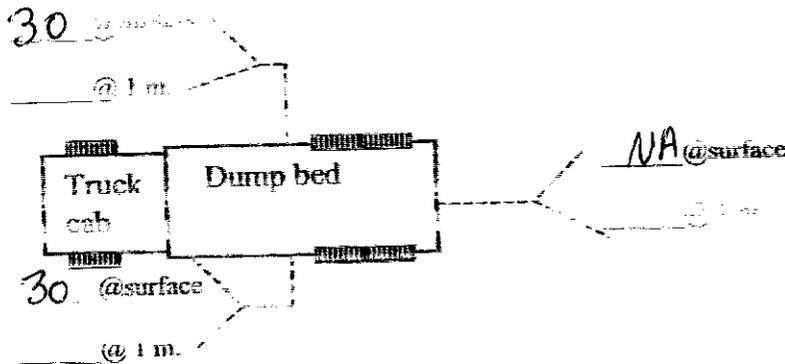
GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1532 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Tru-Flow Truck license plate no. /state: 24

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
 Dose rates should be recorded at highest reading for each side

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

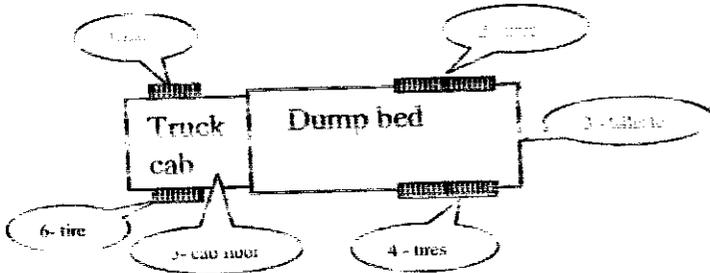
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If any of the above readings are not complete.)

**Transport Index (TI)** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth

Dose Rate at 1 meter	TI
< 50 µrem (< 0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25 mrem)	0.2

TI =  
**A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination Limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm	dpm/100 cm	cpm/100 cm	dpm/100 cm	cpm/100 cm	dpm/100 cm	cpm/100 cm	dpm/100 cm
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	10	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144045	235249 / PR-22/111	235249 / PR-22/111
Cal Due	8-14-08	8-15-09	8-15-09
Bkg.	18 µrem/hr	3.5 µrem/hr	3.5 µrem/hr
Efficiency	NA	11.6%	13.9%
NDA	NA	76.2	553.0

003881 7A

FOOTHILLS LANDFILL  
8700 HIGHWAY 93  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	566277	0000
WEIGHMASTER		
8800056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	3:50 pm	
DATE OUT	TIME OUT	
22 August 2007	3:50 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645055		

Contract: Y511915

Gross Weight 84,340.00 lb  
Tare Weight 37,200.00 lb  
Net Weight 47,140.00 lb 23.57 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.57	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Keas*



# NON-HAZARDOUS WASTE MANIFEST

0645055

9/4

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3000			6. Phone ( ) 303-273-3000		
7. Transporter #1 Company Name Soe Grieve Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 12000 E. Lowell Golden, CO ACCOUNT # 000003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 107 070912 YS11915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Shannon			Signature		Month Day Year 08 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

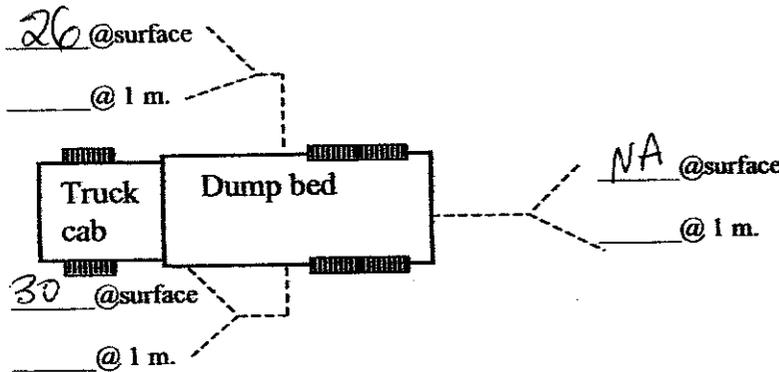
TRANSPORTER #1

QM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1547 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

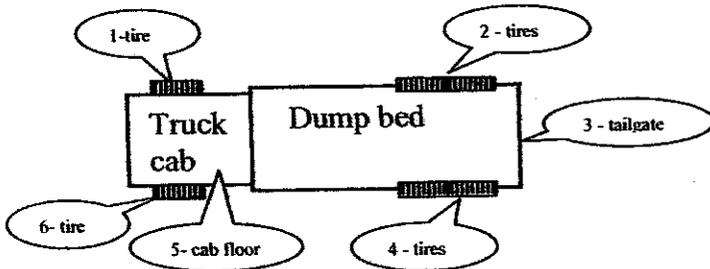
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	6220				52200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	26.2	553.0

503860

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	586285	0000
WEIGHMASTER		
BS00056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	4:05 pm	
DATE OUT	TIME OUT	
22 August 2007	4:05 pm	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
645054		

Contract: YS11915

Gross Weight 80,640.00 lb  
Tare Weight 34,260.00 lb  
Net Weight 46,380.00 lb 23.19 TN

Included -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.19	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE M. L. H.



# NON-HAZARDOUS WASTE MANIFEST

461  
0645054

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Facilities Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 907603 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Drums	Gallons
a. Norm Soil			CO 167 070908 Y511915		18	4	Y-Yards	-Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name				Signature		Month	Day	Year
Steve Brinkman						8	22	07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
Mike Murray						8	23	07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year
						8	23	07

GENERATOR

TRANSPORTER

T/S/D FACILITY

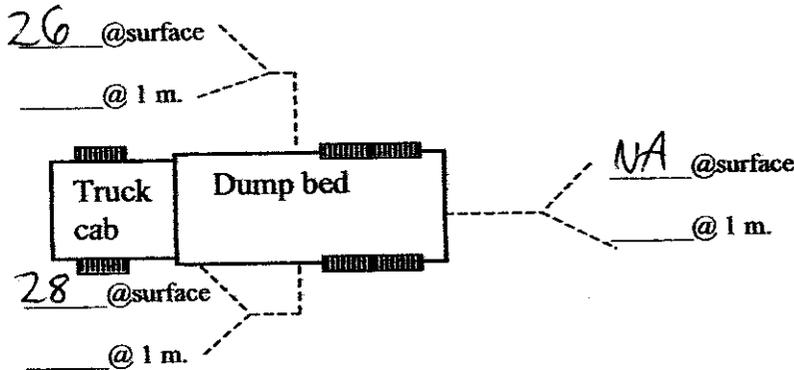
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1553 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 9

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

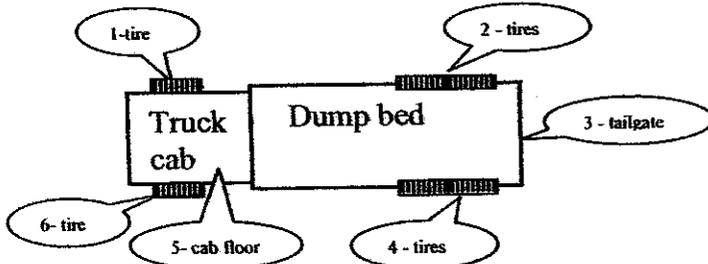
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

533858 0

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	586266	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	4:10 pm	
DATE OUT	TIME OUT	
22 August 2007	4:10 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645053		

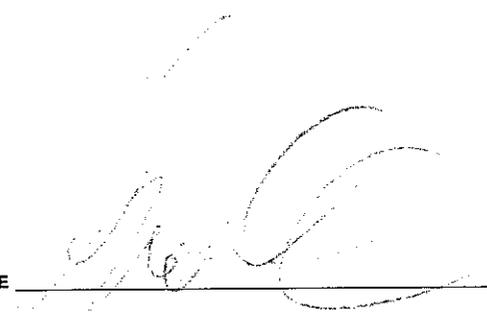
Contract: Y511915

Gross Weight 79,360.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 42,820.00 lb 21.41 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.41	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE 

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

0645053

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3996		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fossil Fuel Landfill 4300 Hwy 93 Gorrie, CO ACCOUNT # 540033 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		CO L67470000 YS11915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Brannon				8	27
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
Chuck Foy				08	29
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

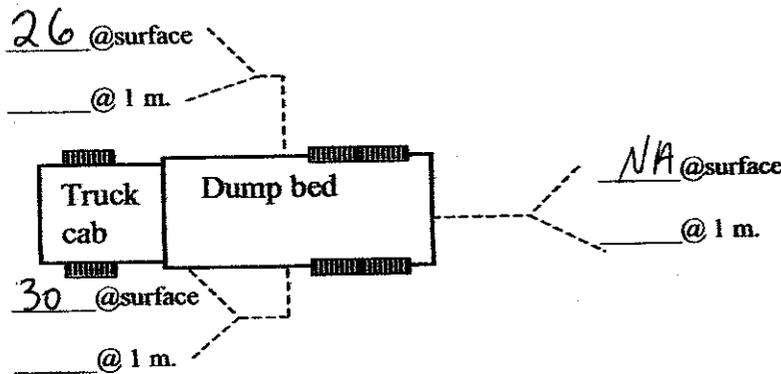
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1600 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

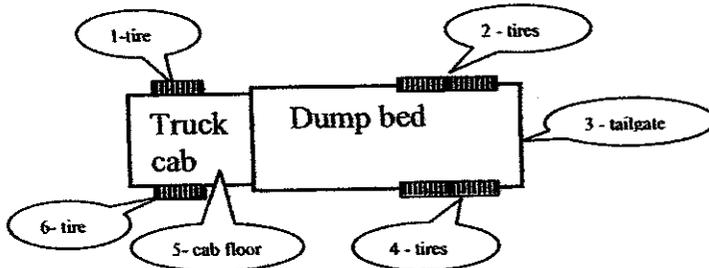
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	586290	0000
WEIGHMASTER		
8600056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	4:19 pm	
DATE OUT	TIME OUT	
22 August 2007	4:19 pm	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
645052		

Gross Weight 81,050.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 44,080.00 lb 22.04 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.04	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL REDCOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645052

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3996			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 984613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Brinkman				8	22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Maurice Ruiz				5	20 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

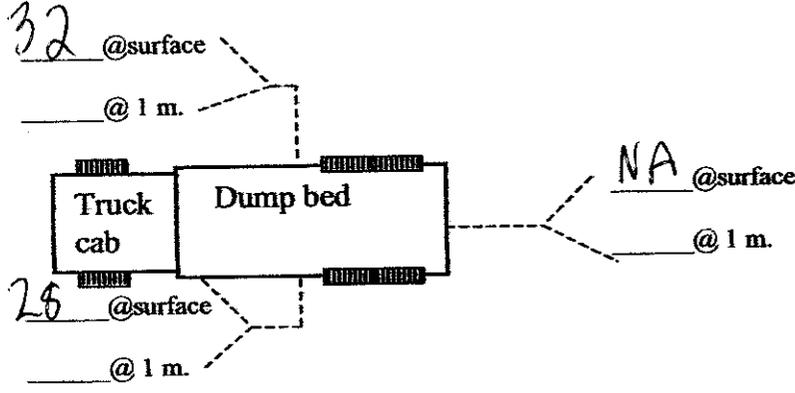
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1608 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

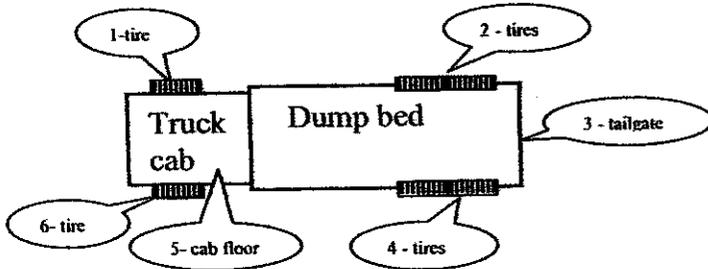
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	72.76.2	553.0

503877 712

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
940608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	386297	0000
WEIGHMASTER		
NS00056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	4:30 pm	
DATE OUT	TIME OUT	
23 August 2007	4:30 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645049		

Contract: Y511915

Gross Weight 81,360.00 lb  
 Tare Weight 34,400.00 lb  
 Net Weight 46,960.00 lb 23.48 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.48	TN	SUB-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

701  
0645049

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3898			6. Phone ( ) 303-273-3898		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benjamin</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Amanda Marquez</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

COM000633

Pile B 8/22/07

## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	Gross wt
Grievé 8	8/22/07	0700	0707	18	
Grievé 23	8/22/07	0700	0715	18	
Collazo 13	8/22/07	0700	0720	18	
JD 01	8/22/07	0700	0722	18	
Marquez 961	8/22/07	0700	0728	18	
Ruiz 95	8/22/07	0700	0733	18	
Grievé 24	8/22/07	0700	0737	18	
Grievé 12	8/22/07	0700	0741	18	
Murray 461	8/22/07	0700	0746	18	
Marquez 96	8/22/07	0700	0752	18	
JD 04	8/22/07	0700	0755	18	
Grievé 8	8/22/07	0800	0818	18	
Grievé 23	8/22/07	0810	0823	18	
Collazo 13	8/22/07	0815	0829	18	
JD 01	8/22/07	0840	0847	18	
Marquez 961	8/22/07	0840	0853	18	74800
Ruiz 95	8/22/07	0845	0900	18	72300
Grievé 24	8/22/07	0850	0903	18	78400
Grievé 12	8/22/07	0900	0909	18	78000
Murray 461	8/22/07	0905	0914	18	79500

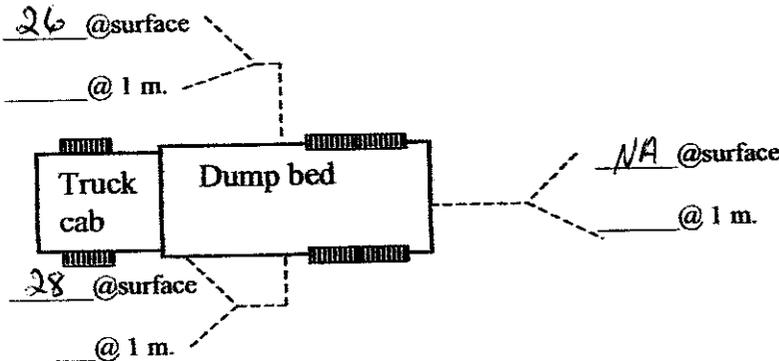
# Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)	Gross WT
Marquez 96	8/22	0910	0920	18	75600
JD 04		0915	0923		68100
Griene 08		0920	0930		78300
Griene 23		0925	0934		80,400
Collazo 13		0930	0940		78,400
JD 04 01 AM		0950	1001		75,600
Marquez 961		1010	1016		74900
Ruiz 95		1015	1021		71200
Griene 12		1015	1025		78720
Griene 24		1020	1032		78500
Murray 461		1030	1038		76700
Marquez 96		1030	1043		73800
JD 04		1040	1047		72600
Griene 8		1045	1053		80,300
Griene 23		1050	1058		80,100
Collazo 13		1055	1105		79800
JD 01		1100	1113		78300
Griene 12		1125	1135		82800
Marquez 961		1130	1139		78020
Ruiz 95	↓	1135	1145	↓	80200

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0707 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

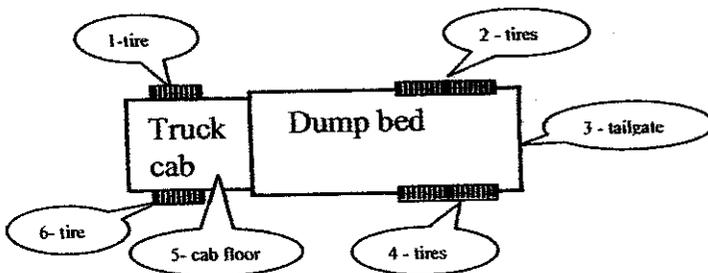
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

510530 8

FOOTHILLS LANDFILL  
8900 HIGHWAY 90  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 58977	GRID 0007
WEIGHMASTER 350005 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 7:30 am	
DATE OUT 23 August 2007	TIME OUT 7:30 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 643131	ORIGIN	

Gross Weight 74,900.00 lb  
Tare Weight 36,540.00 lb  
Net Weight 38,360.00 lb 19.13 TN

Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.13	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0645121

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of						
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998						
4. Phone ( ) 303-273-3998				6. Phone ( )						
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980203 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol		
					No.	Type	D Drums	G Gallons		
a. Norm Soil			CO L67 070908 Y511915		18	Y	Y-Yards	T-Tons		
b.										
c.										
d.										
21. Additional Descriptions for Materials Listed Above										
22. Special Handling Instructions and Additional Information										
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.										
Printed/Typed Name Steve Berkman				Signature		Month 8	Day 22	Year 07		
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name Chuck Foy		Signature		Month 08	Day 22	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name		Signature		Month	Day	Year
26. Discrepancy Indication Space										
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)										
Printed/Typed Name				Signature		Month 8	Day 22	Year 07		

GENERATOR

TRANSPORTER

T/S/D FACILITY

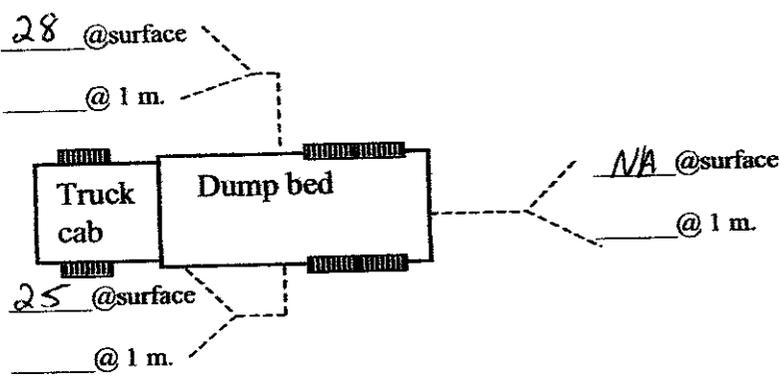
TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0715 Surveyed by: C Hicks / J Mattson

Trucking Company: Conve Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

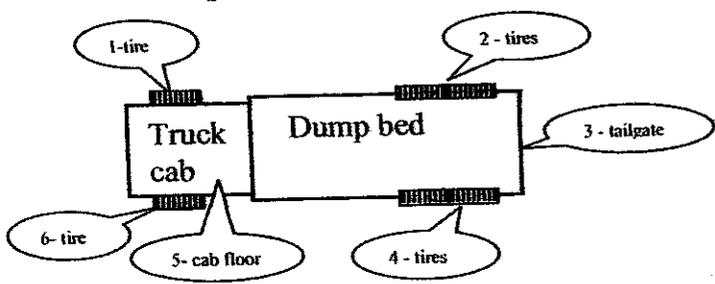
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.6

503581 23

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	585980	0000
WEIGHMASTER		
150003e Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	7:33 am	
DATE OUT	TIME OUT	
22 August 2007	7:35 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645115		

Contract: Y511915

Gross Weight 78,400.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 43,300.00 lb 21.65 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.65	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

## 0645118

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benkman</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>MARK PHELAN</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

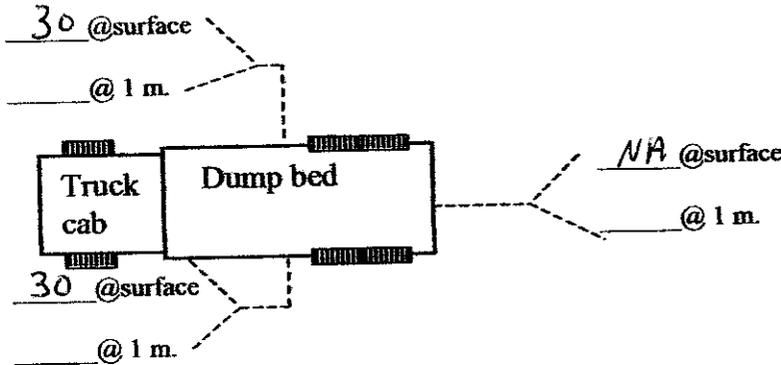
TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0720 Surveyed by: C Hicks / J Mattson

Trucking Company: Onive Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

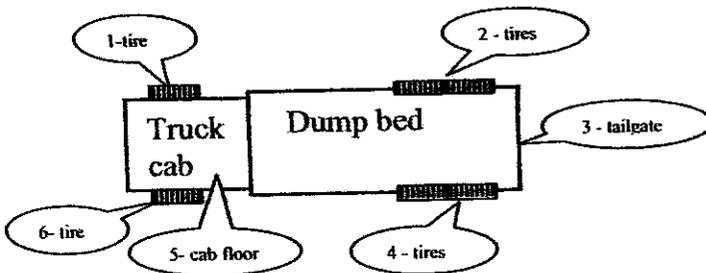
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

595564 13

FOOTHILLS LANDFILL  
 8900 HIGHWAY 78  
 GOLDEN  
 CO  
 780605  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 1511715

SITE 01	TICKET 285933	GRID 0000
WEIGHMASTER 1500055 Barbara Jo S		
DATE IN 25 August 2007	TIME IN 7:38 am	
DATE OUT 28 August 2007	TIME OUT 7:38 am	
VEHICLE Y811915	ROLL OFF	
REFERENCE 045117	ORIGIN	

Gross Weight 77,730.00 lb  
 Tare Weight 35,730.00 lb Incasura -  
 Net Weight 42,000.00 lb 21.01 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.00	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

13  
0645117

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brakman</i>			Signature <i>[Signature]</i>		Month Day Year 8 12 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Printed/Typed Name <i>Rafael Colazo Lopez</i>		Signature <i>[Signature]</i> Month Day Year 08 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Printed/Typed Name		Signature Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 6 20 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

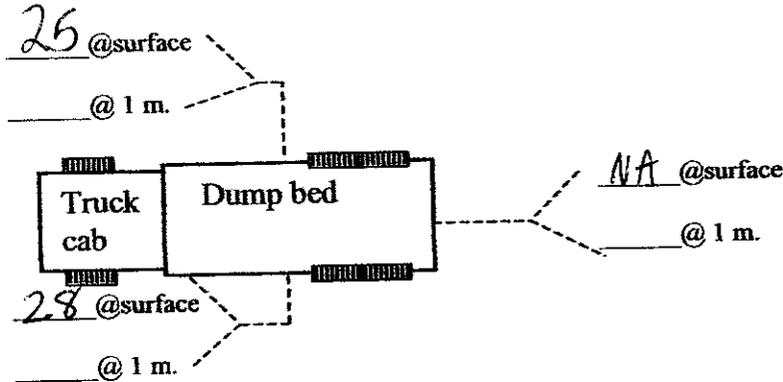
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0722 Surveyed by: C Hicks / J Mattson

Trucking Company: Conve Truck license plate no. /state: 1D01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

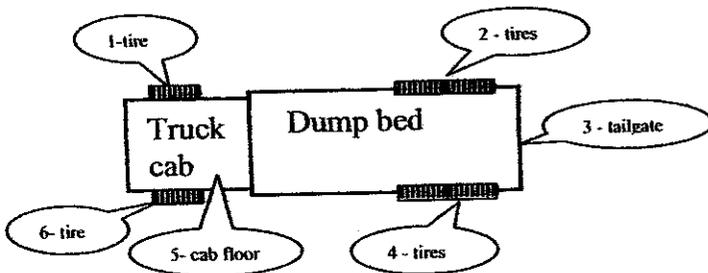
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503538 57

FOOTHILLS LANDFILL  
 8700 HIGHWAY 76  
 GOLDEN  
 CO  
 80609  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YB1191E

SITE	TICKET	GRID
01	503538	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	7:47 AM	
DATE OUT	TIME OUT	
22 August 2007	7:47 AM	
VEHICLE	ROLL OFF	
YB1191E		
REFERENCE	ORIGIN	
e-5116		

Gross Weight 70,740.00 lb  
 Tare Weight 35,580.00 lb Inbound -  
 Net Weight 35,160.00 lb 17.58 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.58	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

01  
0645116

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		15	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brachman			Signature		Month Day Year 8 12 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name JOSE Ruiz			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

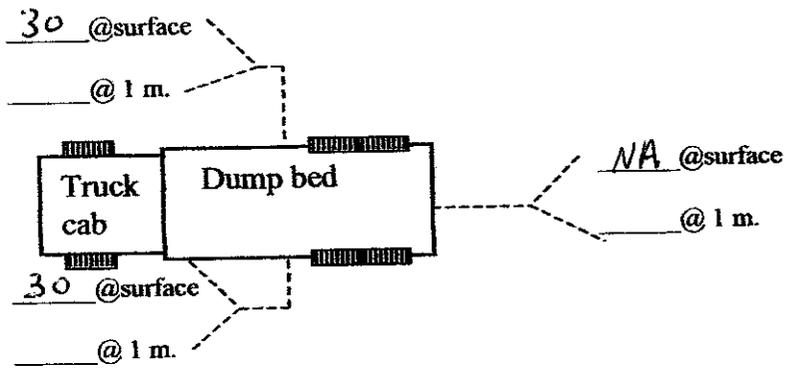
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0728 Surveyed by: C Hicks / J Mattson

Trucking Company: Onire Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

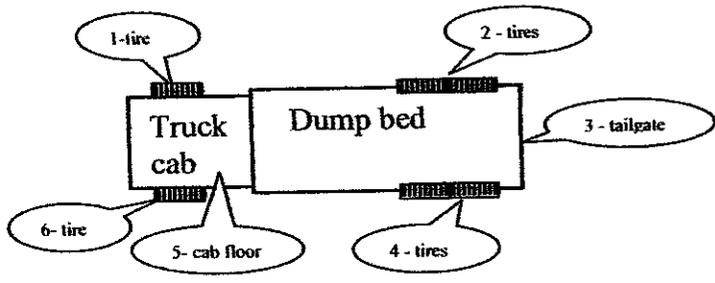
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$	
Efficiency	NA	17.6%	13.9%	
MDA	NA	76.2	553.0	

309570 21

PIOTHSVILLE LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLONAS SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 000977	GRID 0000
WEIGHMASTER #000054 Barbara Jo B		
DATE IN 22 August 2007	TIME IN 7:55 am	
DATE OUT 22 August 2007	TIME OUT 9:08 am	
VEHICLE 7511915	ROLL OFF	
REFERENCE 000000	ORIGIN	

OS Gross Weight 74,560.00 lb  
 Tare Weight 34,400.00 lb Inbound  
 Net Weight 40,160.00 lb 20.09 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.09	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE A. J.



# NON-HAZARDOUS WASTE MANIFEST

161  
0645115

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( ) 303-273-3998		6. Phone ( )							
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address FootHills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 950603 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Drums	Gallons	
a. Norm Soil			CO L67 070908 Y511915		18	Y	Y-Yards	T-Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Schuman				Signature 			Month 8	Day 22	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Dennis M... ..				Signature 			Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name Dennis M... ..				Signature 			Month	Day	Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #2

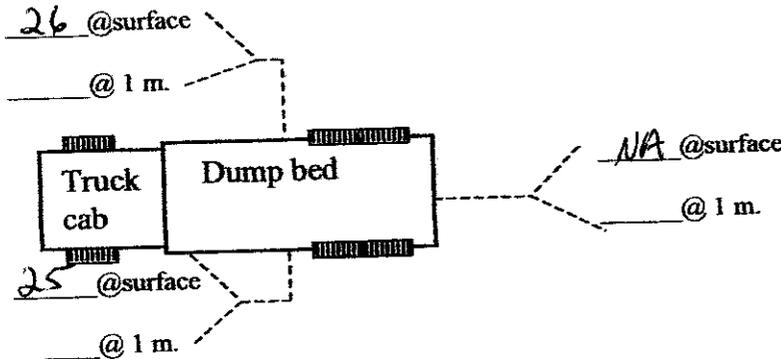
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0733 Surveyed by: C Hicks / J Mattson

Trucking Company: Onive Truck license plate no. /state: Ruiz 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**

0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**

200 mrem/hr at surface (200,000  $\mu\text{rem}$ )

10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )

(If surface is <10mrem/hr, survey is complete.)

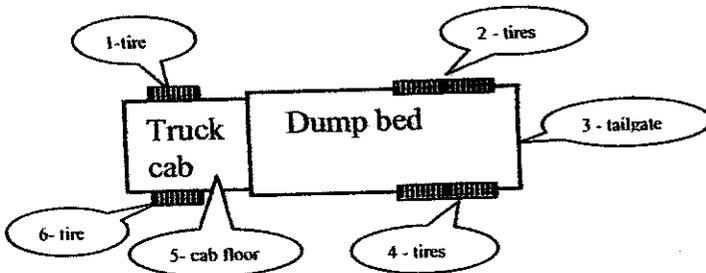
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

583530 43

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	583530	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	7:59 AM	
DATE OUT	TIME OUT	
22 August 2007	9:10 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
643114		

GS Gross Weight 75,060.00 lb  
 Tare Weight 36,960.00 lb  
 Net Weight 38,100.00 lb 19.05 TN Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.05	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

95  
0645114

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>			Signature <i>[Signature]</i>		Month Day Year 8 2 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Mark Hill</i>			Signature <i>[Signature]</i>		Month Day Year 08 27 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>Building Dept</i>			Signature <i>[Signature]</i>		Month Day Year 08 27 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

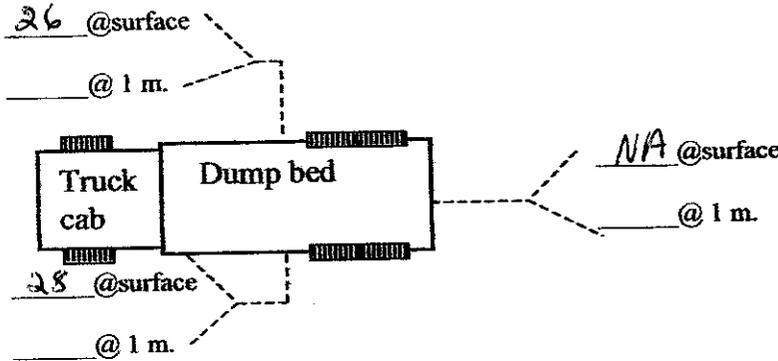
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0737 Surveyed by: C Hicks / J Mattson

Trucking Company: Onieva Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

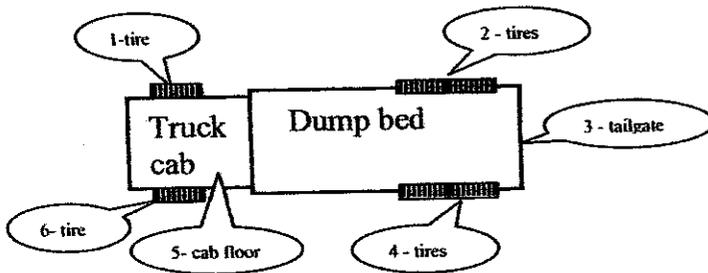
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
<b>Efficiency</b>	NA	17.6%	13.9%
<b>MDA</b>	NA	76.2	553.0

503574 °24

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 760403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 503574	GRID 0000
WEIGHMASTER 500056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 8:01 am	
DATE OUT 22 August 2007	TIME OUT 8:01 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 545113	ORIGIN	

Gross Weight 77,920.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 40,720.00 lb 20.36 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.36	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kear*



# NON-HAZARDOUS WASTE MANIFEST

24  
0645113

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098				
4. Phone ( ) 303-273-3098			6. Phone ( )				
7. Transporter #1 Company Name Joe Grievr Trucking		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Gold Hill Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 400003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date COLEP 070906 15:1916		18. Containers			
				No.	Type	19. Total Quantity	20. Unit
						Drums	Gallons
				18	Y	7 Yards	1-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Seaman			Signature <i>[Signature]</i>		Month Day Year 8 2 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Kelli Shannon			Signature <i>[Signature]</i>		Month Day Year 08 22 07		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

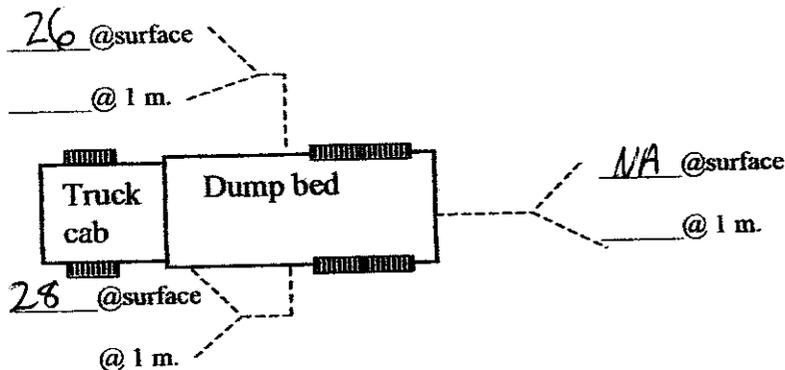
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0741 Surveyed by: C Hicks / J Mattson

Trucking Company: Greve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

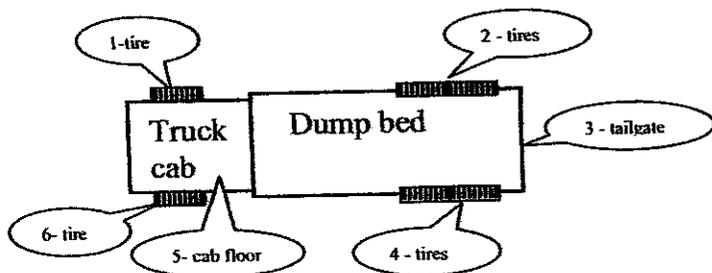
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

303573 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	235794	0000
WEIGHMASTER		
1200056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	8:03 am	
DATE OUT	TIME OUT	
22 August 2007	8:03 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
64-5112		

Gross Weight 75,820.00 lb  
 Tare Weight 37,700.00 lb Inbound  
 net weight 41,150.00 lb 20.87 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.87	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

12  
0645112

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )			
7. Transporter #1 Company Name Garcia Trucking - #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footfalls Landfill 8900 Hwy 83 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkmen			Signature		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean Johnson			Signature		Month Day Year 8 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

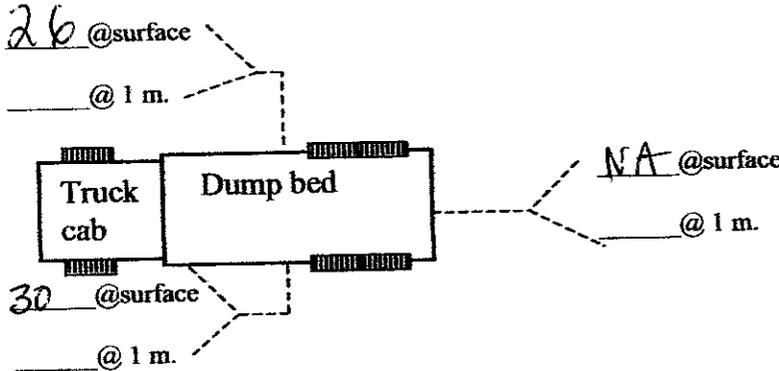
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0746 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Conere Truck license plate no. /state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

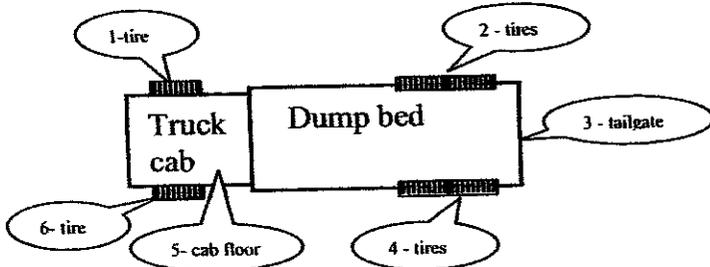
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	26.2	553.0

503579

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 7511915

SITE 01	TICKET 525793	GRID 0306
WEIGHMASTER		
6500056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 8:09 AM	
DATE OUT 22 August 2007	TIME OUT 8:09 AM	
VEHICLE 7511915	ROLL OFF	
REFERENCE 345111	ORIGIN	

CG Gross Weight 76,580.00 lb  
 Tare Weight 34,260.00 lb      Inbound ---  
 Net Weight 44,260.00 lb 22.13 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.13	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

461  
0645111

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998 6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Norm Soil		CO L87 070908 Y511915		18	Y	Y-Yards	1-Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Benkman				Signature		Month Day Year 8/22/07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Mike Murray				Signature		Month Day Year 8/22/07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

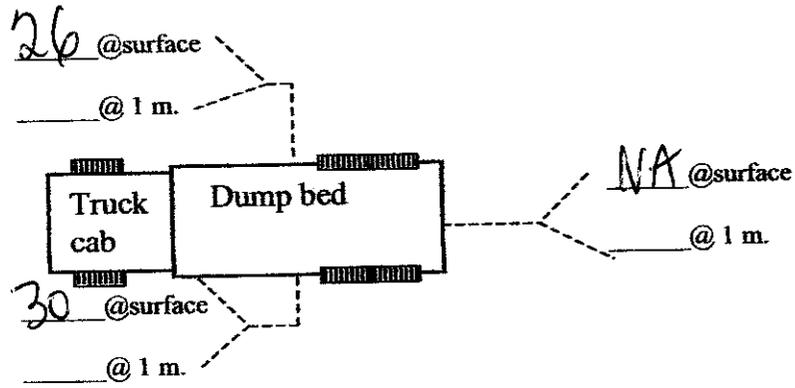
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0752 Surveyed by: C Hicks / J Mattson

Trucking Company: Geneve Truck license plate no. /state: 96

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

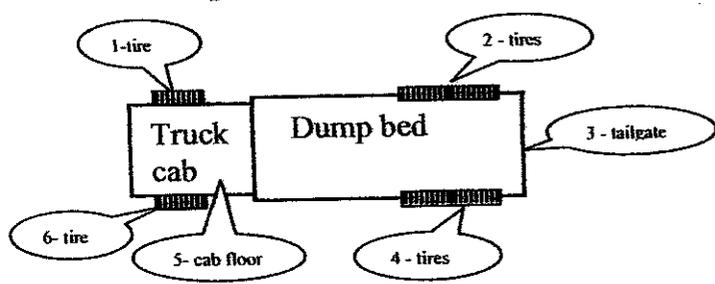
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	4220				42200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503588 78

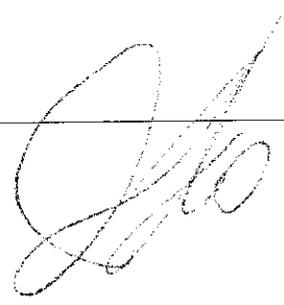
FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806008  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 584007	GRID 0000
WEIGHMASTER 500036 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 8:13 AM	
DATE OUT 22 August 2007	TIME OUT 6:24 AM	
VEHICLE Y511915	ROLL OFF	
REFERENCE 5-5110	ORIGIN	

00 Gross Weight 74,340.00 lb  
 Tare Weight 36,580.00 lb  
 Net Weight 37,760.00 lb 18.88 TN Inbound ---

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.88	TR	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645110

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998			
4. Phone ( ) 303-273-3998		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8800 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L87 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit
						0 Drums	0 Gallons
				18	Y	Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Binkman				Signature			
				Month Day Year 8 22 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Fernando Viana				Signature			
				Month Day Year 8 22 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature			
				Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature			
				Month Day Year 8 22 07			

GENERATOR

TRANSPORTER

T/S/D FACILITY

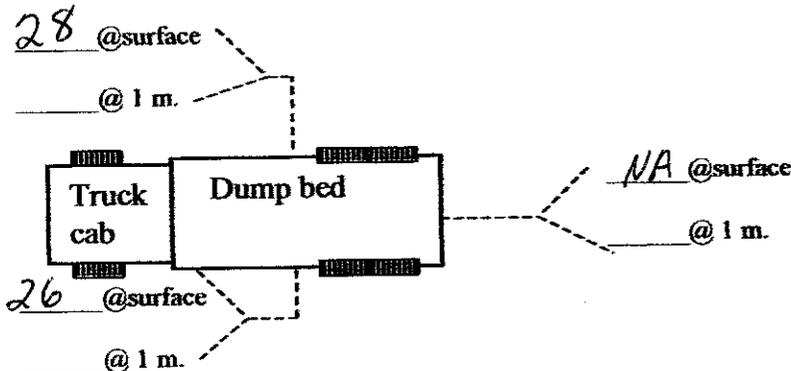
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0755 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: 04

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

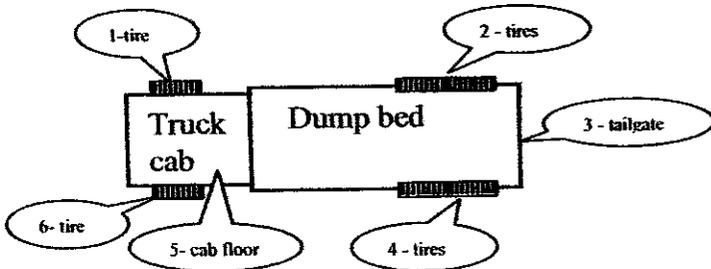
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

500004

FOOTHILLS LANDFILL  
2900 HIGHWAY 90  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	888003	0000
WEIGHMASTER		
1600036 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	8:17 am	
DATE OUT	TIME OUT	
22 August 2007	8:17 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645107		

Contract: Y511915

GB Gross Weight 75,440.00 lb  
 Tare Weight 35,640.00 lb      Inbound -  
 Net Weight 39,800.00 lb 19.90 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.90	TN	SM-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



8-22-07

SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645109

04

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980610 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				a.			
				b.			
				c.			
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07		
24. TRANSPORTER #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Santiago Vargas</i>			Signature <i>[Signature]</i>		Month Day Year 8 22 07		
25. TRANSPORTER #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

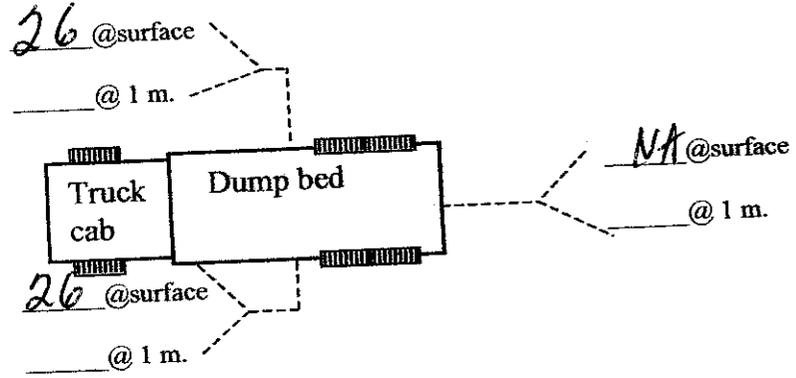
TRANSPORTER #2

CQM000039

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0818 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

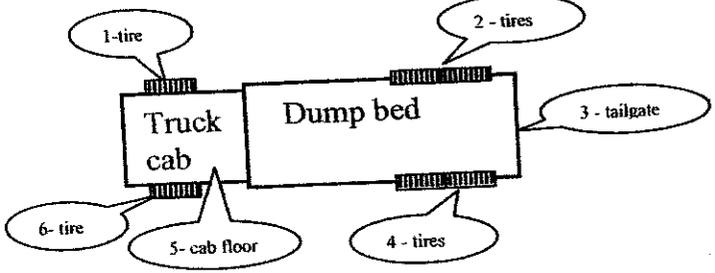
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 µrem/hr	5 cpm α	252 cpm β	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

333593 8

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
930603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE 01	TICKET 586012	GRID 0000
WEIGHMASTER #S00056 Barbara Jo S		
DATE IN 22 August 2007		TIME IN 8:40 AM
DATE OUT 22 August 2007		TIME OUT 8:40 AM
VEHICLE Y511915		ROLL OFF
REFERENCE 645069	ORIGIN	

Contract: Y511915

00 Gross Weight 78,940.00 lb  
 Tare Weight 36,540.00 lb      Inbound -  
 Net Weight 42,400.00 lb 21.20 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.20	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645089

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footwall Landfill 8900 Hwy 92 Golden, CO ACCOUNT # 891633 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 187 070906 1511015		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Spitzer				6	24
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Chuck Foy				08	2007
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

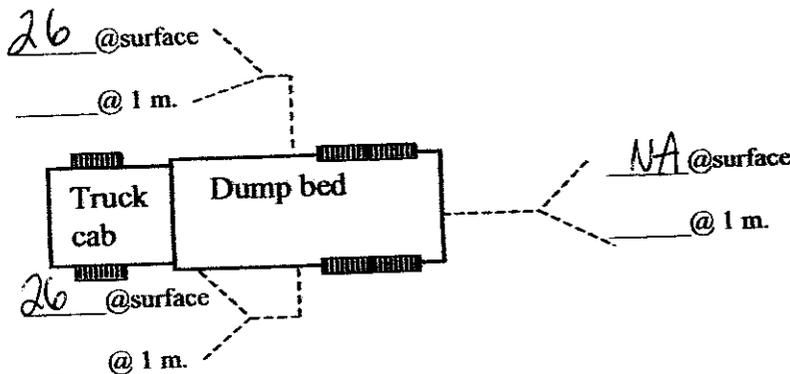
TRANSPORTER #1

COM00003S

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0823 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Conve Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

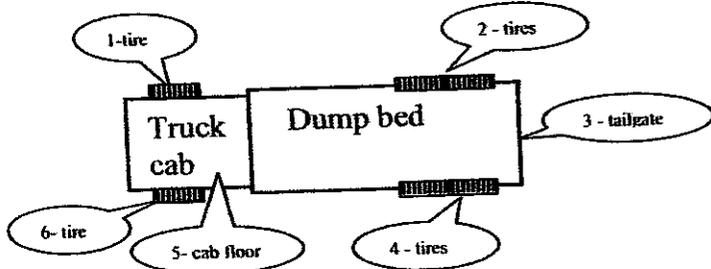
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

505594

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	886013	0000
WEIGHMASTER		
PS00056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	8:43 am	
DATE OUT	TIME OUT	
22 August 2007	8:43 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645090		

Contract: Y511915

00 Gross Weight 75,780.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 40,680.00 lb 20.34 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.34	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645090

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Metals Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 800803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <u>Steve Brinkman</u>				Signature	
				Month	Day Year
				8	22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <u>MARK PHELAN</u>				Signature	
				Month	Day Year
				8	22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

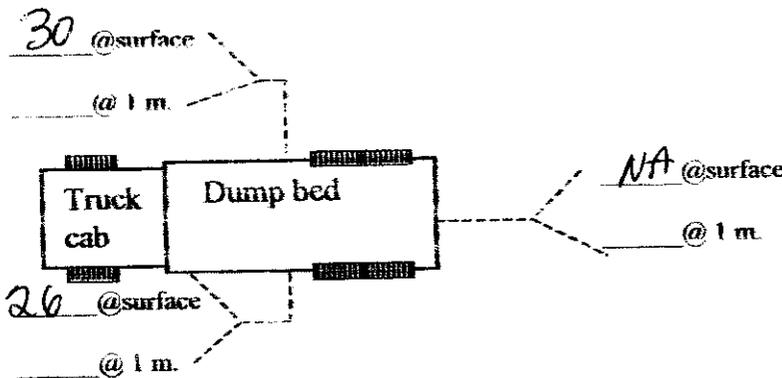
TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0829 Surveyed by: C. Hicks / S. Mattson

Trucking Company: Greve Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

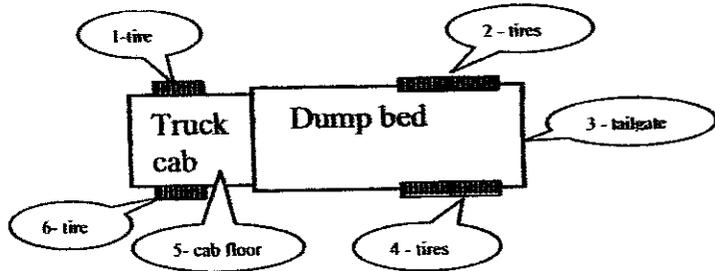
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	76.2	553.0	

500598

FOOTHILLS LANDFILL  
 8500 HIGHWAY 95  
 GOLDEN  
 CO  
 806605  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586015	0000
WEIGHMASTER		
8000056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	8:48 am	
DATE OUT	TIME OUT	
22 August 2007	8:48 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645091		

Gross Weight 77,840.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 42,140.00 lb 21.07 TN  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.07	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645091

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070906 Y511915		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bankman			Signature:		Month Day Year: 8/2/07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature:		Month Day Year: 08/22/07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature:		Month Day Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month Day Year:

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

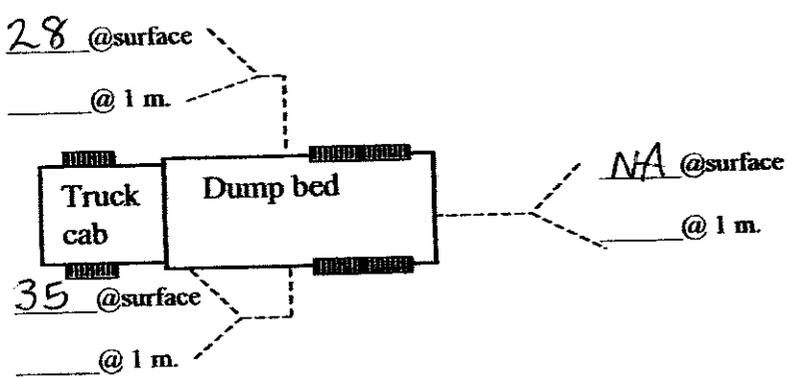
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0847 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: JD01

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

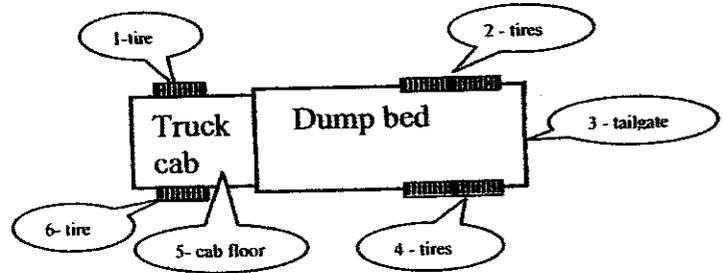
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 µrem/hr	5 cpm α	252 cpm β	
Efficiency	NA	17.6%	13.9%	
MDA	NA	76.2	553.0	

503607 01

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	584026	0000
WEIGHMASTER		
2600056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	9:11 am	
DATE OUT	TIME OUT	
22 August 2007	9:11 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645092		

Gross Weight 72,340.00 lb  
 Tare Weight 35,580.00 lb      Inbound --  
 Net Weight 36,760.00 lb 18.38 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.38	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

JDO1  
0645092

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 860803 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description a. Norm Soil			17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	Drums	Gallons	
b.					18	Y	Y-Yards	T-Tons	
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Beckman				Signature 			Month 8	Day 2	Year 01
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name JOSE W Ruiz				Signature 			Month 8	Day 2	Year 01
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

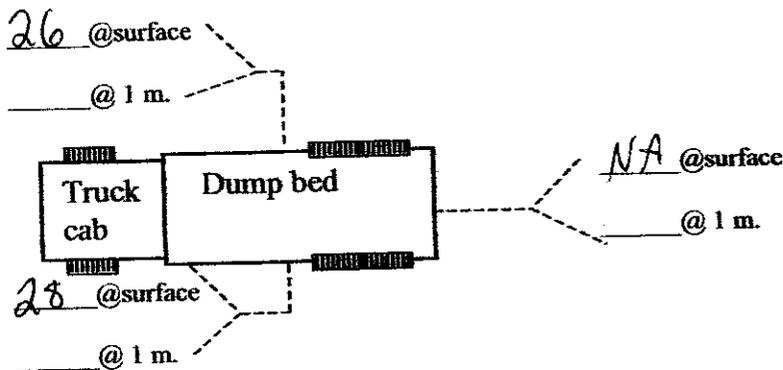
TRANSPORTER #2

COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0853 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

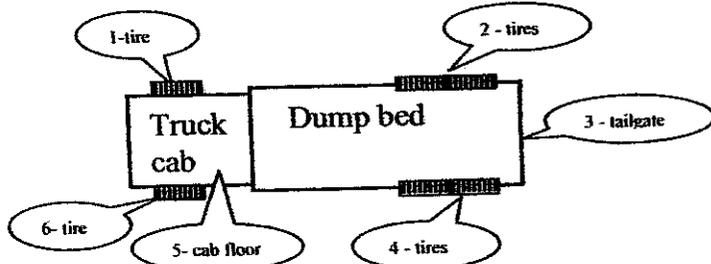
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25 mrem)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503609 9/1

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	556028	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	9:21 am	
DATE OUT	TIME OUT	
22 August 2007	9:21 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645093		

Contract: Y511915

Gross Weight 74,860.00 lb  
 Tare Weight 34,400.00 lb Inbound ---  
 Net Weight 40,460.00 lb 20.23 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.23	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

761  
0645093

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		16	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Berkman			Signature		Month 8 Day 22 Year 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

TRANSPORTER #2

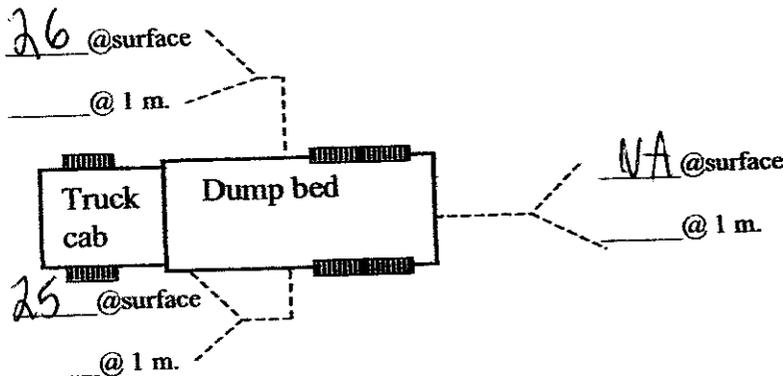
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0900 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

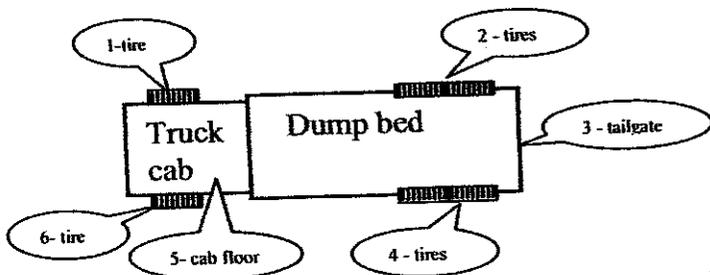
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	5220				52200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

500611 1-

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586030	GRID 0000
WEIGHMASTER #500056 Barbera Jo S		
DATE IN 22 August 2007	TIME IN 7:24 am	
DATE OUT 22 August 2007	TIME OUT 9:24 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645094	ORIGIN	

Gross Weight 72,340.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 35,360.00 lb 17.68 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.68	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

95  
0645094

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of						
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998						
4. Phone ( ) 303-273-3998				6. Phone ( )						
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980003 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit		
					No.	Type	D-Drums	G-Gallons		
					a.	Norm Soil	CO L87 070908 Y511915		Y-Yards	T-Tons
					b.					
					c.					
21. Additional Descriptions for Materials Listed Above										
22. Special Handling Instructions and Additional Information										
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.										
Printed/Typed Name Steve Benkman			Signature		Month Day Year 6 2 97					
24. Transporter #1: Acknowledgement of Receipt of Materials										
Printed/Typed Name			Signature		Month Day Year					
25. Transporter #2: Acknowledgement of Receipt of Materials										
Printed/Typed Name			Signature		Month Day Year					
26. Discrepancy Indication Space										
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)										
Printed/Typed Name			Signature		Month Day Year 6 2 97					

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

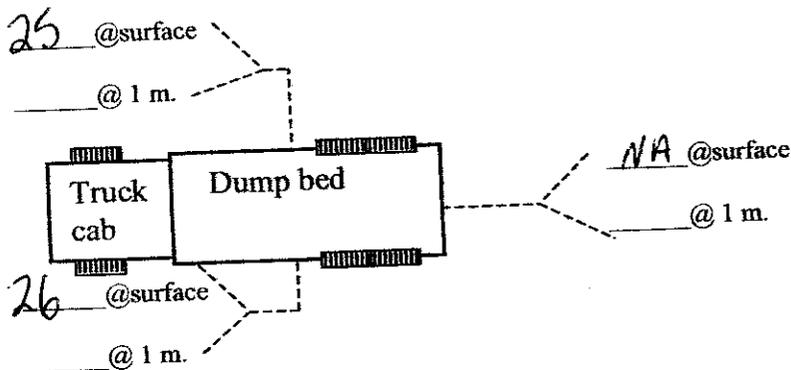
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0903 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

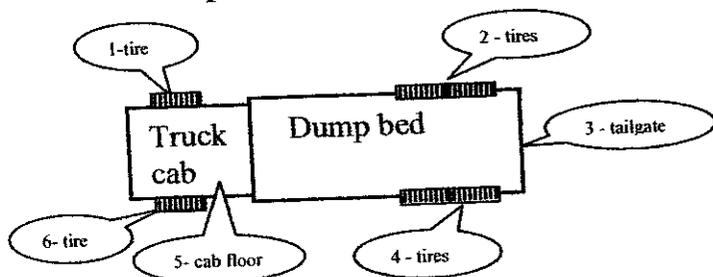
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
		2360 / 43-89 probe	2360 / 43-89 probe
<b>Model</b>	19	233249 / PR-227111	233249 / PR-227111
<b>Serial #</b>	144043		
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	76.2	553.0

ST-RAD-GEN-006

24 503814

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 80600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	586033	0000
WEIGHMASTER		
K600056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	9:27 AM	
DATE OUT	TIME OUT	
22 August 2007	9:27 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645095		

Contract: Y511915

Gross Weight 78,420.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 41,220.00 lb 20.61 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.61	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kent*



# NON-HAZARDOUS WASTE MANIFEST

0645095

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3598			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3598						
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone					
7. Transporter #1 Company Name Joe Grive Trucking		8. US EPA ID Number		12. Transporter #2's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone					
13. Designated T/S/D Facility Name and Site Address Central Sanfill 3900 Hwy 55 Golden, CO ACCOUNT # 147813 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity		20. Unit Wt/Vol	
				No. Type		D-Tons G-Dollars		G-Dollars	
a. Norm Sol		001870700037511915		18 Y		Y-Yards		T-Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Schuman				Signature				Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature				Month Day Year	
Printed/Typed Name Keith Shannon				Signature				08 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature				Month Day Year	
Printed/Typed Name				Signature				Month Day Year	
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature				Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

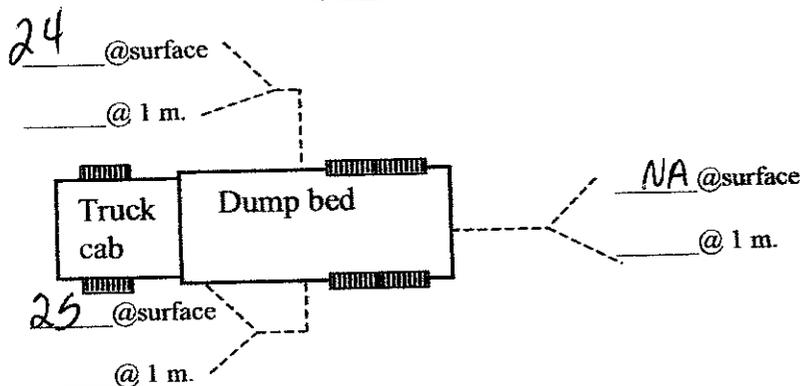
TRANSPORTER #1

COM

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0909 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

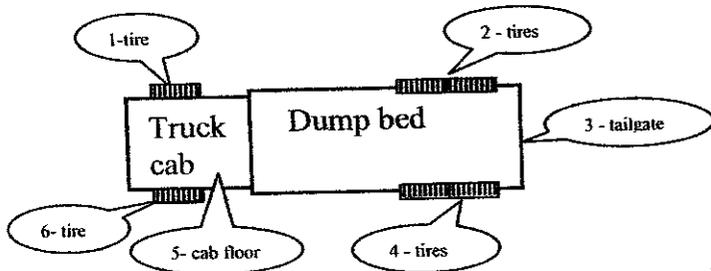
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503615 12

FOOTHILLE LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

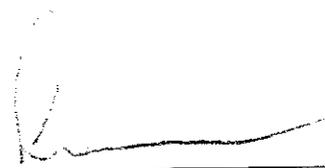
Contract: Y511915

SITE	TICKET	GRID
01	586065	0000
WEIGHMASTER		
8500056 Barbara Jo C		
DATE IN	TIME IN	
23 August 2007	7:32 am	
DATE OUT	TIME OUT	
22 August 2007	9:32 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645096		

Gross Weight 75,040.00 lb  
Tare Weight 37,700.00 lb Inbound --  
Net Weight 40,340.00 lb 20.17 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.17	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE 

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0645096

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name GRIUC Trucking #12		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foot Hills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 060603 (Colorado School of Mines)		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit	
a. Norm Soil		CO LE7 070908 Y511915		18 Drums 6 Gallons	
b.				Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benkman			Signature: [Signature]		Month Day Year: 1 2 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Signature]			Signature: [Signature]		Month Day Year: [ ] [ ] [ ]
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month Day Year: [ ] [ ] [ ]
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name: [Signature]			Signature: [Signature]		Month Day Year: 6 2 97

GENERATOR

TRANSPORTER

T/S/D FACILITY

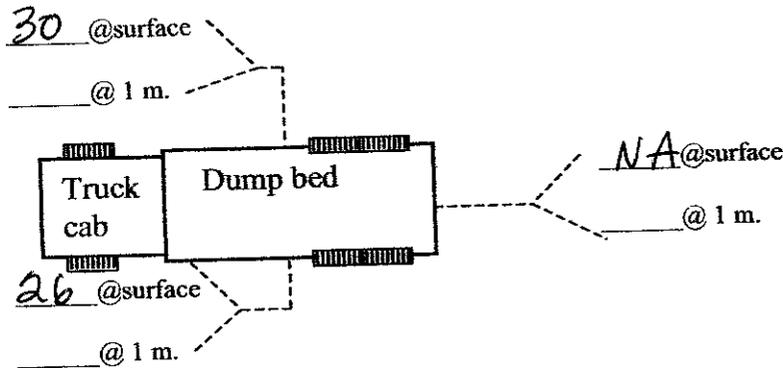
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0914 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

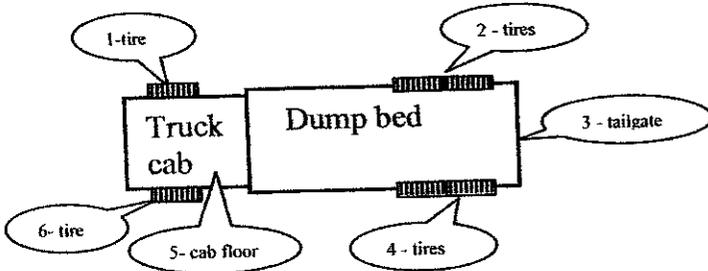
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	18 µrem/hr	5 cpm α	252 cpm β
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	26.2	553.0

503820 43

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586037	0000
WEIGHMASTER		
8900056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	9:37 am	
DATE OUT	TIME OUT	
22 August 2007	9:37 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645077		

Gross Weight 79,540.00 lb  
 Tare Weight 34,260.00 lb Inbound --  
 Net Weight 45,280.00 lb 22.64 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.64	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *M. K.*



# NON-HAZARDOUS WASTE MANIFEST

0645097

461

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 6. Phone ( ) 303-273-3998									
7. Transporter #1 Company Name				8. US EPA ID Number		9. Transporter #1's Phone							
10. Transporter #2 Company Name				11. US EPA ID Number		12. Transporter #2's Phone							
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960803 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone							
16. Waste Shipping Name and Description				17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity		20. Unit Wt/Vol			
						No.	Type	D Drums	G Gallons				
a. Norm Soil				CO L67 070908 Y511915		18	Y	Y-Yards	T-Tons				
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Steve Brinkman				Signature				Month 8		Day 22		Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name Mike Murray				Signature				Month 8		Day 22		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name Dan ...				Signature				Month 8		Day 22		Year 07	

GENERATOR

TRANSPORTER

T/S/D FACILITY

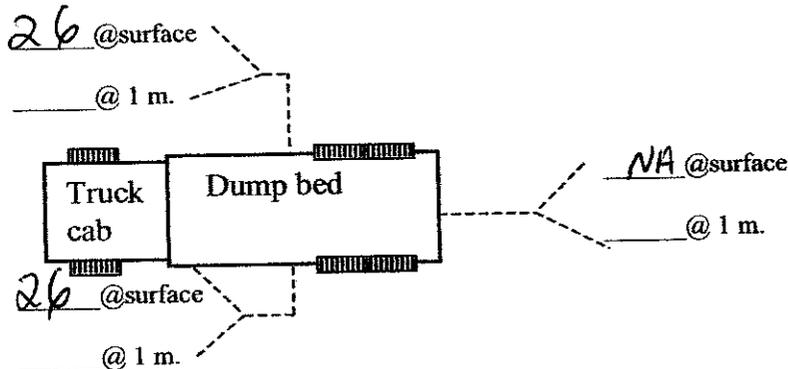
TRANSPORTER #2

COM000038

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0920 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

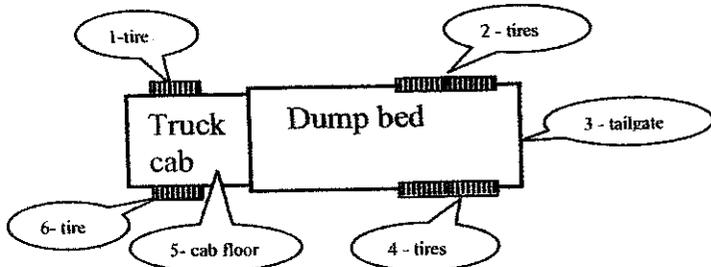
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

513823 76

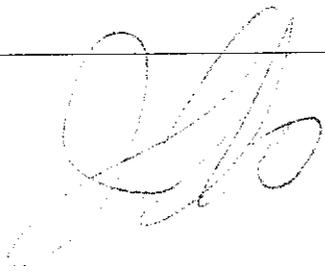
FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586042	GRID 0000
WEIGHMASTER 8500056 Barbara Jo B		
DATE IN 22 August 2007	TIME IN 9:40 am	
DATE OUT 22 August 2007	TIME OUT 9:40 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645098	ORIGIN	

Gross Weight 75,620.00 lb  
 Tare Weight 36,580.00 lb Inbound ---  
 Net Weight 39,040.00 lb 19.52 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.52	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645098

76

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different from generator) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CC L87 070900 Y511915		18. Containers			
				No.	Type	19. Total Quantity D-Drums	20. Unit G-Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman		Signature		Month Day Year 8 22 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Fernando Barre		Signature		Month Day Year 8 22 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year 8 22 07			

GENERATOR

TRANSPORTER

T/S/D FACILITY

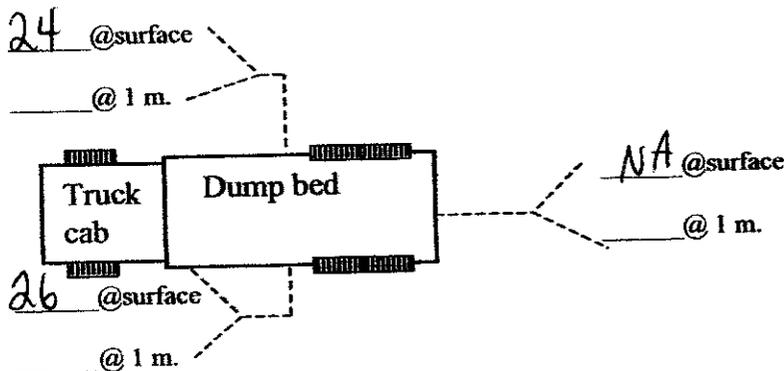
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0923 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Onive Truck license plate no. /state: JD04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

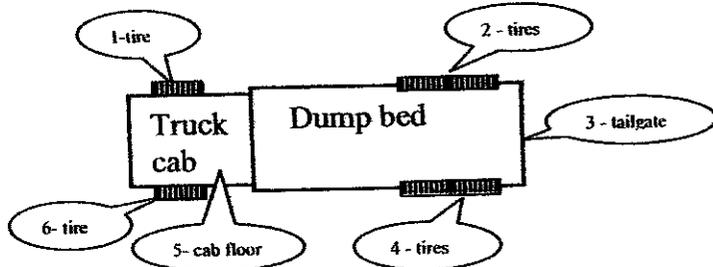
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	26.2	553.0

503628 4

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806002  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586047	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 9:46 am	
DATE OUT 22 August 2007	TIME OUT 9:46 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 648099	ORIGIN	

Gross Weight 68,100.00 lb  
Tare Weight 35,640.00 lb      Inbound ---  
Net Weight 32,460.00 lb 16.23 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.23	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE [Signature] 8-22-07



# NON-HAZARDOUS WASTE MANIFEST

04  
0645099

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3988				
4. Phone ( ) 303-273-3988			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2900 Hwy 93 Golden, CO ACCOUNT # 930803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						0 Drums	0 Gallons
						1 Yards	1-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Beckman		Signature		Month	Day Year		
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year		
Printed/Typed Name Santiago Vargas		Signature		Month	Day Year		
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year		
Printed/Typed Name		Signature		Month	Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

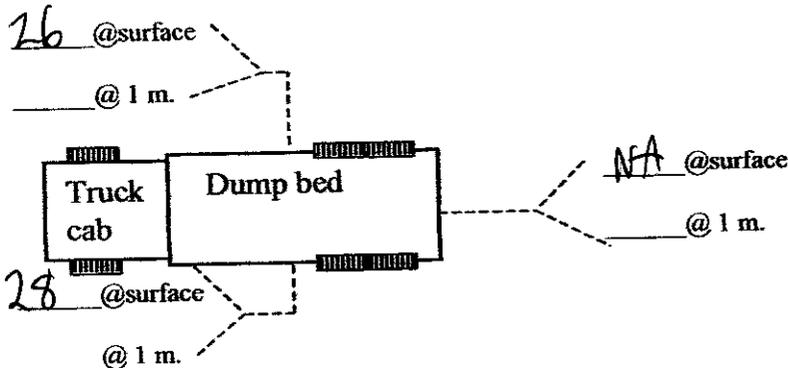
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0930 Surveyed by: C Hicks / J Mathson  
 Trucking Company: Greve Truck license plate no. /state: 08

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

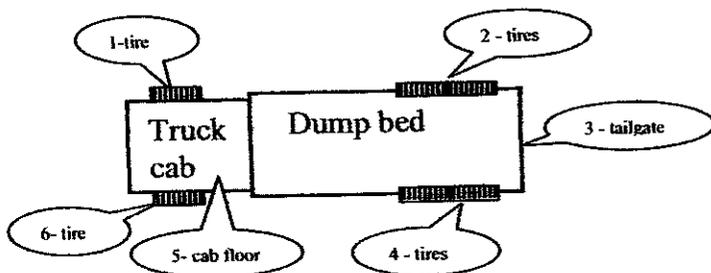
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	5220				5220		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503633 7

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 800603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	586052	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	9:53 am	
DATE OUT	TIME OUT	
22 August 2007	7:53 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645100		

Contract: Y511915

Gross Weight 78,320.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 41,780.00 lb 20.89 TM

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.89	TM	SG-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

NET AMOUNT \_\_\_\_\_

TENDERED \_\_\_\_\_

CHANGE \_\_\_\_\_

CHECK NO. \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645100

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 99 Golden, CO ACCOUNT # 960803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						<input type="checkbox"/> Drums	<input checked="" type="checkbox"/> Gallons
						Y-Yards	T-Tons
a. Norm Soil		CO L67 070908 Y511915		18	Y		
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month	Day		
Steve Benhman				8	2		
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day		
Printed/Typed Name		Signature		Month	Day		
Chuck Foy							
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day		
Printed/Typed Name		Signature		Month	Day		
26. Discrepancy Indication Space				Month	Day		
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)		Signature		Month	Day		
Printed/Typed Name		Signature		Month	Day		
				8	2		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

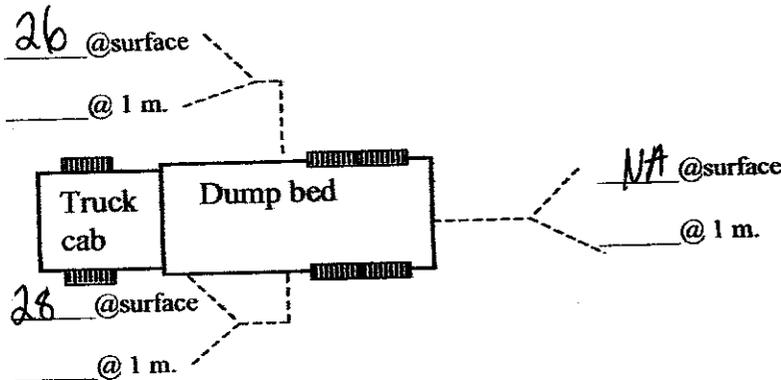
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0934 Surveyed by: C Hicks / J Mattson

Trucking Company: Oniave Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

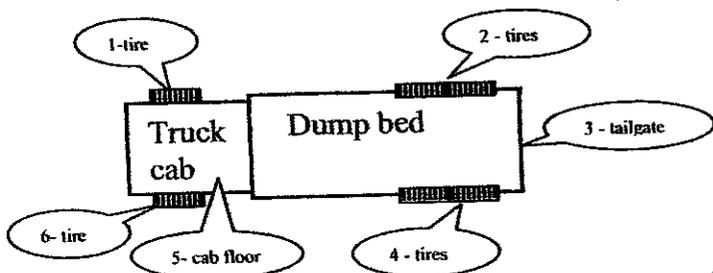
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

300056 25

FOOTHILLE LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
980608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	586054	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	9:54 AM	
DATE OUT	TIME OUT	
22 August 2007	9:54 AM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645101		

Contract: Y511915

Gross Weight 80,400.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 45,300.00 lb 22.65 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.65	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645101

23

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fcottell's Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960013 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO167 070908 Y511915		0 Drums	0 Gallons
b.				Y-Yards	T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benkman			Signature 		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN			Signature 		Month Day Year 8 22 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Dustin [unclear]			Signature 		Month Day Year 8 22 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

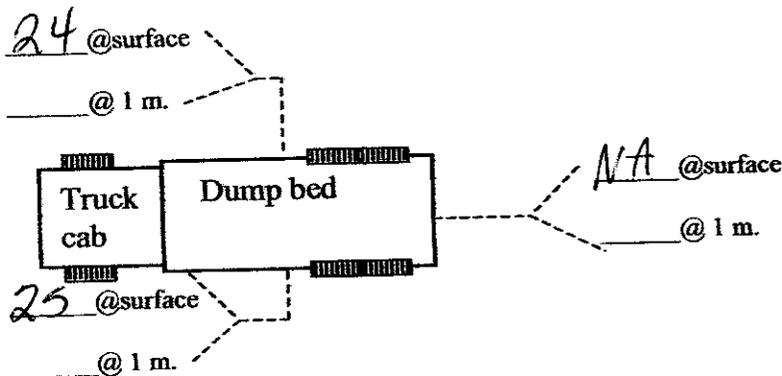
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 0940 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

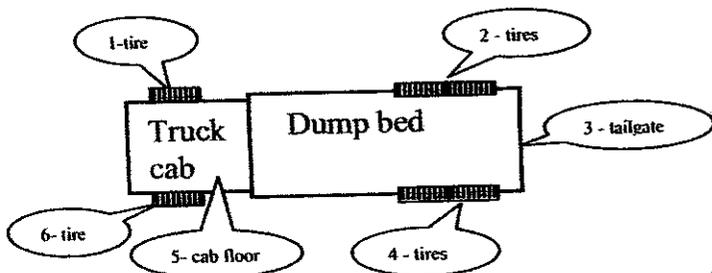
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503033 15

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 980603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	556057	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	10:01 am	
DATE OUT	TIME OUT	
22 August 2007	10:01 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645102		

Gross Weight 78,440.00 lb  
 Tare Weight 35,700.00 lb Inbound -  
 Net Weight 42,740.00 lb 21.37 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.37	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645102

10

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 4. Phone ( ) 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3898 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 (Golden, CO) ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Benjamin				8	2007
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Rafael Coltro Lopez				08	2007
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

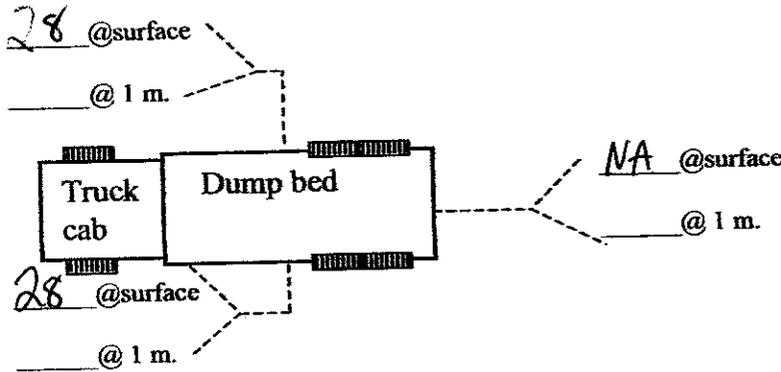
TRANSPORTER #2

CGM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1001 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Onive Truck license plate no./state: FD04 JD01 WA

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

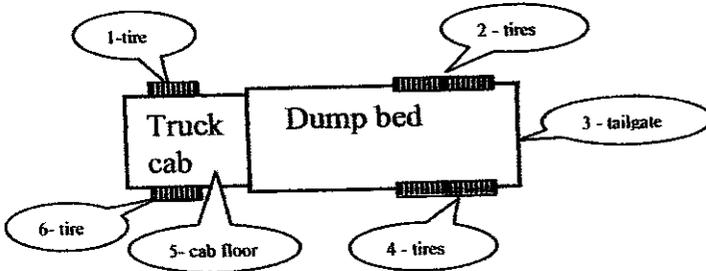
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

509648 ✓✓✓

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 960603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 556067	GRID 0000
WEIGHMASTER 8200056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 10:20 am	
DATE OUT 22 August 2007	TIME OUT 10:20 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 545103	ORIGIN	

OO Gross Weight 75,660.00 lb  
 Tare Weight 35,580.00 lb Inbound -  
 Net Weight 40,080.00 lb 20.04 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.04	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645103

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2900 Hwy 93 Golden, CO ACCOUNT # 960803 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol
					No.	Type	Drums	Gallons
a. Norm Soil			CO L87 070918 Y511915		18	Y	Y-Yards	-Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Benkman				Signature		Month 8	Day 28	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name JOSE W RUIZ				Signature		Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

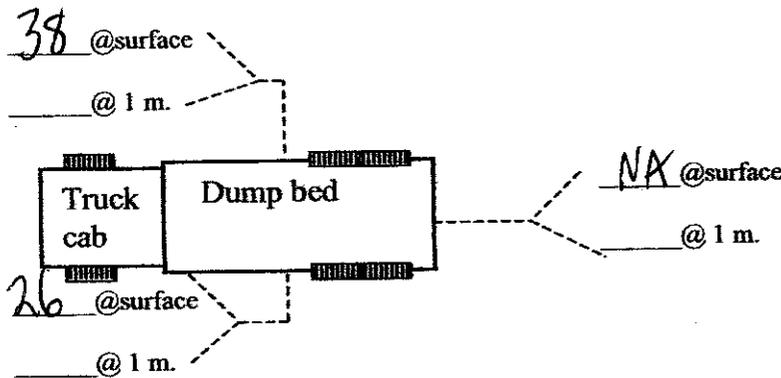
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1016 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 961

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

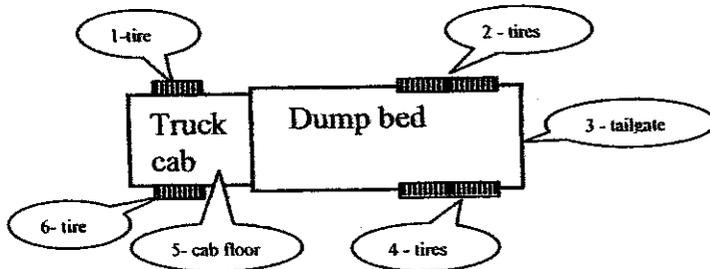
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

503557 461

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	EB6076	0000
WEIGHMASTER		
NS00056 Barbara Jo B		
DATE IN	TIME IN	
22 August 2007	10:38 am	
DATE OUT	TIME OUT	
22 August 2007	10:38 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645056		

00 Gross Weight 74,880.00 lb  
 Tare Weight 34,400.00 lb      Inbound -  
 Net Weight 40,480.00 lb 20.24 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.24	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

961  
0645036

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Booths Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		16 Y-Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day 22
Year 07					
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Armando Alvarez		Signature 		Month	Day
Year 07					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Year					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
Year					

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

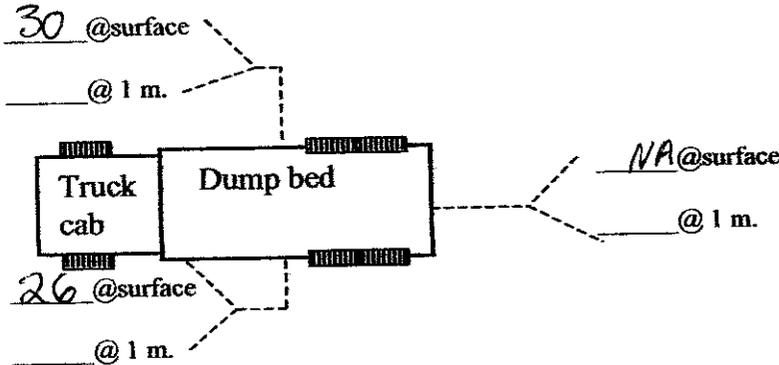
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1021 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Onive Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

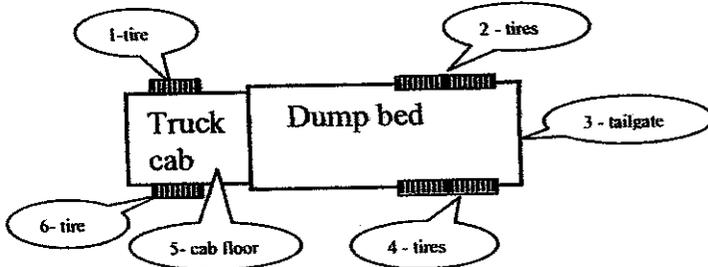
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

583838 95

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 960600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586077	0000
WEIGHMASTER		
1300036 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	10:42 am	
DATE OUT	TIME OUT	
22 August 2007	10:42 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
585007		

OO Gross Weight 71,240.00 lb  
 Tare Weight 36,980.00 lb  
 Net Weight 34,260.00 lb 17.13 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.13	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

75  
0645037

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of						
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3008						
4. Phone ( ) 303-273-3008				6. Phone ( )						
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Footfalls Landfill 8900 Hwy 99 Golden, CO ACCOUNT # 860913 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol		
					No.	Type	D-Drums	G-Gallons		
a. Non Soil			CO L67 070908 Y511915				Y-Yards	T-Tons		
b.										
c.										
d.										
21. Additional Descriptions for Materials Listed Above										
22. Special Handling Instructions and Additional Information										
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.										
Printed/Typed Name Steve Burkman				Signature <i>[Signature]</i>		Month 8	Day 23	Year 07		
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name Marcel Ruiz		Signature <i>[Signature]</i>		Month 8	Day 23	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name		Signature		Month	Day	Year
26. Discrepancy Indication Space										
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)										
Printed/Typed Name				Signature <i>[Signature]</i>		Month	Day	Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

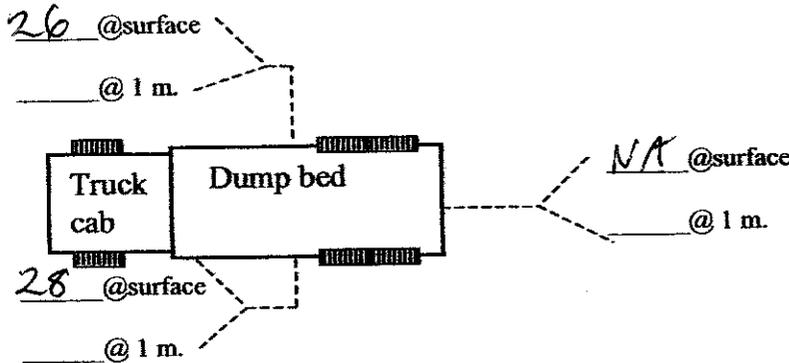
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1025 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

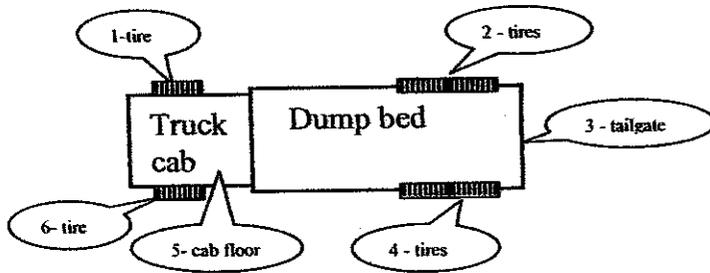
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	26.2	553.0

503652 12

FOOTHILLS LANDFILL  
8900 HIGHWAY 95  
GOLDEN  
CO  
760603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	526050	0000
WEIGHMASTER		
E500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	10:47 am	
DATE OUT	TIME OUT	
22 August 2007	10:47 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645005		

00 Gross Weight 78,720.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 41,020.00 lb 20.51 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.51	TN	SU-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0645088

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Grove Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y-Yards
b.					T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Blackmer			Signature		Month Day Year 8 22 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Jim O'Brien			Signature		Month Day Year 8 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

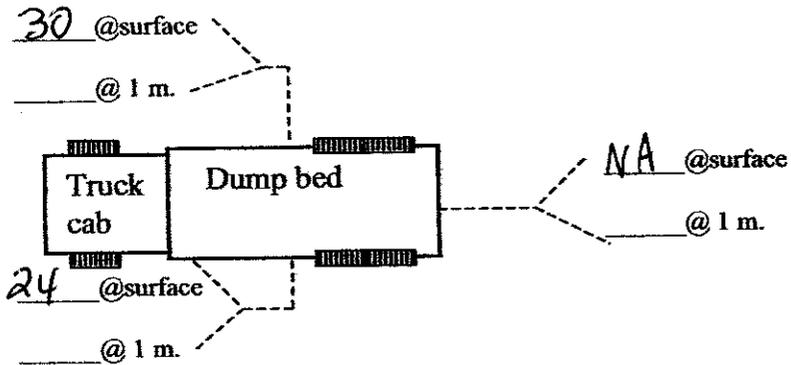
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1032 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 24

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

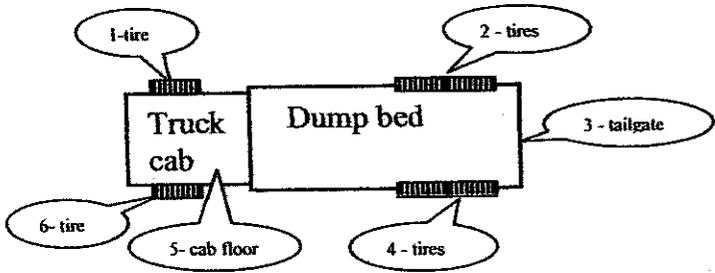
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

47 583833

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	586064	0000
WEIGHMASTER		
28300056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	10:53 am	
DATE OUT	TIME OUT	
22 August 2007	10:53 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645079		

Contract: Y511915

00 Gross Weight 79,520.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 41,320.00 lb 20.66 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.66	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Reas*



# NON-HAZARDOUS WASTE MANIFEST

# 0645079

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 Phone (303) 273-3908				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
7. Transporter #1 Company Name <i>Joe Geneve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Proctor's Landfill 2000 Hwy 90 Golden, CO ACCOUNT # 900903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L07 070908 Y611315		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Joe Geneve</i>				Signature <i>[Signature]</i>	
Month Day Year				8 0 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Kevin Shannon</i>				Signature <i>[Signature]</i>	
Month Day Year				08 22 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
Month Day Year					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
Month Day Year					

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

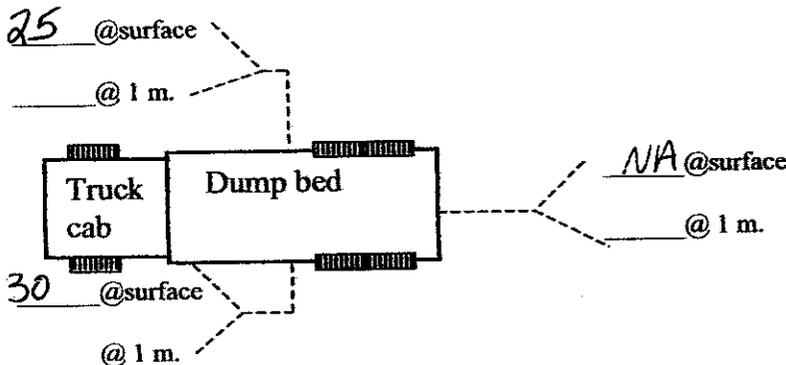
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1038 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

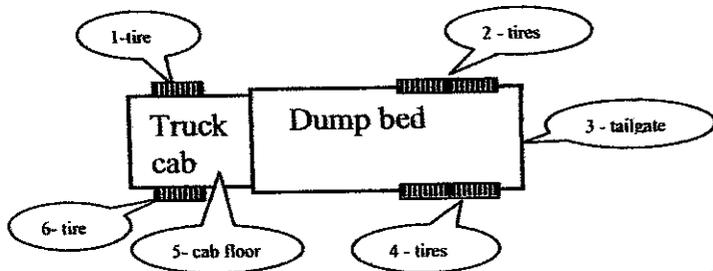
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

353579 401

FOOTHILLS LANDFILL  
 6900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586087	6000
WEIGHMASTER		
350096 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	11:02 am	
DATE OUT	TIME OUT	
22 August 2007	11:02 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645080		

Gross Weight 76,720.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 42,460.00 lb 21.23 Tn  
 Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.23	TN	SW-COINT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

701  
0645080

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Non Soil		COL67 070908 Y511915		19. Total Quantity D-Drums G-Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				8 22 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Mike Murray				8 22 07	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

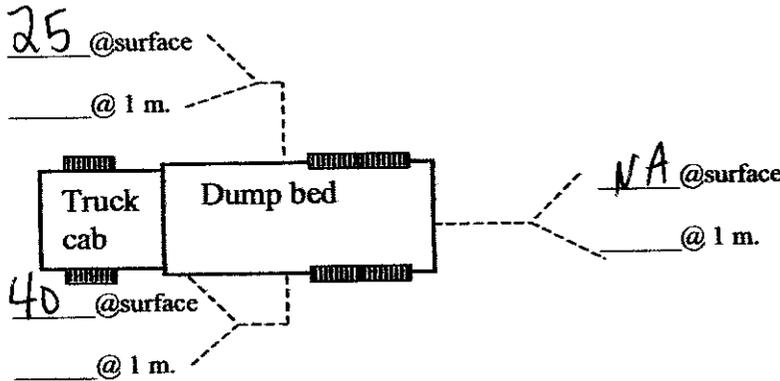
COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1043 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no./state: 96

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

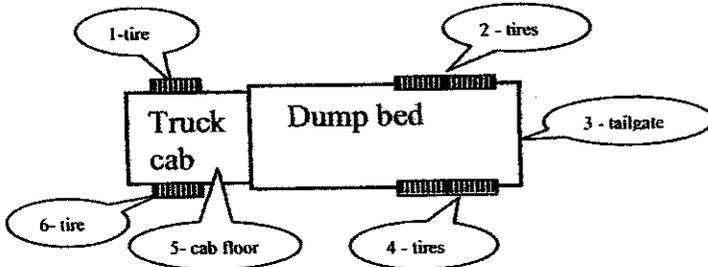
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	2220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

583675 70

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 586092	GRID 0000
WEIGHMASTER #200056 Barbara Jo S		
DATE IN 22 August 2007	TIME IN 11:05 am	
DATE OUT 22 August 2007	TIME OUT 11:05 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 045081	ORIGIN	

00 Gross Weight 73,520.00 lb  
 Tare Weight 36,530.00 lb Inbound -  
 Net Weight 37,240.00 lb 18.62 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.62	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LE	FUEL RECOVERY FEE				

*[Handwritten Signature]*

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

76  
0645081

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of													
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401													
4. Phone ( ) 303-273-3998				6. Phone ( )													
7. Transporter #1 Company Name			8. US EPA ID Number			9. Transporter #1's Phone											
10. Transporter #2 Company Name			11. US EPA ID Number			12. Transporter #2's Phone											
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 58 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)			14. US EPA ID Number			15. Facility's Phone											
16. Waste Shipping Name and Description a. Norm Soil b. c. d.			17. Allied Waste Approval # and Exp. Date COL97 070908 Y511915			18. Containers		19. Total Quantity		20. Unit							
						No.	Type	<input type="checkbox"/> Drums	<input checked="" type="checkbox"/> Gallons	Y-Yards	T-Tons						
21. Additional Descriptions for Materials Listed Above																	
22. Special Handling Instructions and Additional Information																	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																	
Printed/Typed Name Steve Buchanan				Signature				Month 8		Day 22		Year 07					
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name Fernando Borne				Signature				Month 8		Day 22		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space																	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																	
Printed/Typed Name				Signature				Month		Day		Year					

GENERATOR

TRANSPORTER

T/S/D FACILITY

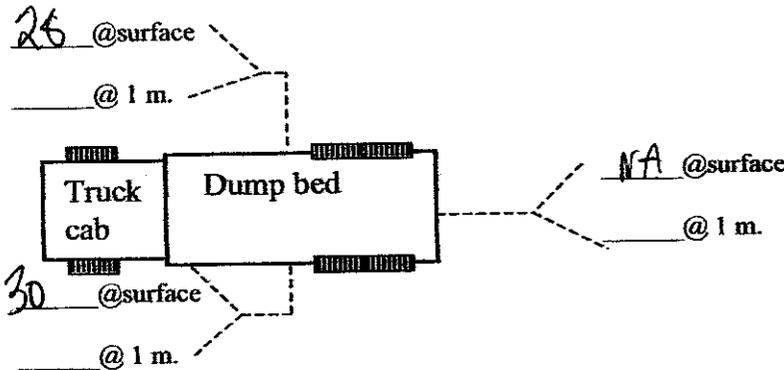
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1047 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

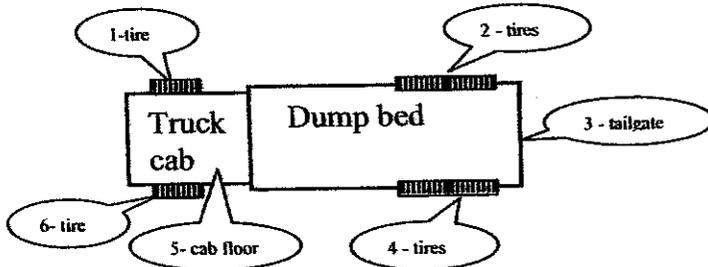
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

503513

FOOTYVILLE LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
720602  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	586075	0000
WEIGHMASTER		
8500056 Barbara Jo E		
DATE IN	TIME IN	
22 August 2007	1:07 am	
DATE OUT	TIME OUT	
22 August 2007	11:07 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645002		

00 Gross Weight 72,620.00 lb  
Tare Weight 35,620.00 lb  
Net Weight 36,980.00 lb 13.49 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
13.49	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]* 8-22-07



# NON-HAZARDOUS WASTE MANIFEST

# 0645082

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070000 Y511915			Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beahm		Signature		Month	Day Year
				8	23 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Santiaso Vargas		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

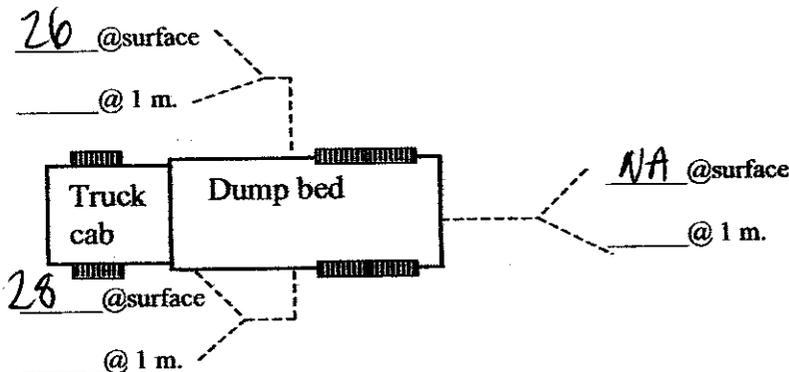
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1053 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Cnieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

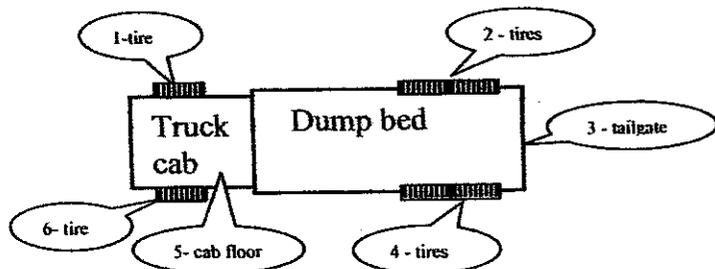
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				4220		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

0038.00

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	526098	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	11:14 am	
DATE OUT	TIME OUT	
22 August 2007	11:14 am	
VEHICLE	ROLL OFF	
VE11915		
REFERENCE	ORIGIN	
645053		

Contract: VE11915

00 Gross Weight 80,290.00 lb  
Tare Weight 36,540.00 lb  
Net Weight 43,740.00 lb 21.87 TN

Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.87	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645083

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of													
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Broth St Golden, CO 80401 303-273-3998														
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone													
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone													
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone													
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO ACCOUNT # 000000 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone													
16. Waste Shipping Name and Description a. Norm Sul b. c. d.		17. Allied Waste Approval # and Exp. Date 00107 070908 7511915		18. Containers		19. Total Quantity		20. Unit									
				No.		Type		Drums		Gallons							
				18		4		7-Yards		Tons							
21. Additional Descriptions for Materials Listed Above																	
22. Special Handling Instructions and Additional Information																	
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.																	
Printed/Typed Name Steve Brakeman				Signature <i>[Signature]</i>				Month 8		Day 22		Year 07					
24. Transporter #1: Acknowledgement of Receipt of Materials				Printed/Typed Name Chuck Foy				Signature <i>[Signature]</i>				Month 08		Day 22		Year 07	
25. Transporter #2: Acknowledgement of Receipt of Materials				Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space																	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)																	
Printed/Typed Name				Signature				Month		Day		Year					

GENERATOR

TRANSPORTER

T/S/D FACILITY

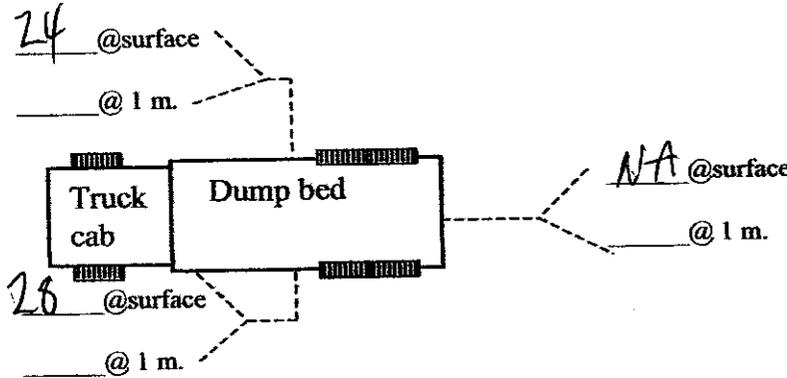
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1058 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Geneve Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

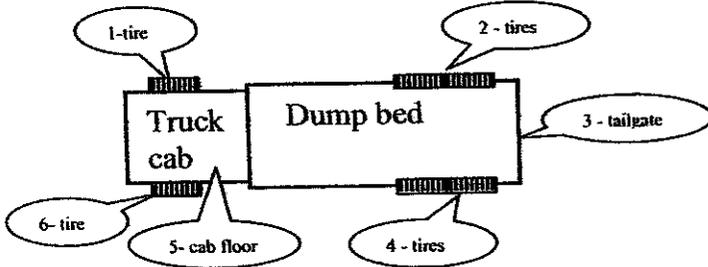
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

00000004

FOOTHILLE LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
940600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	EB6101	000
WEIGHMASTER		
00000004 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	11:17 am	
DATE OUT	TIME OUT	
22 August 2007	11:17 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
045004		

Contract# Y511915

00 Gross Weight 80,100.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 45,000.00 lb 22.50 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.50	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645084

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( )				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foot Hills Landfill 2600 Hwy 93 Golden, CO ACCOUNT # 981003 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil			17. Allied Waste Approval # and Exp. Date CO L67 070906 YS11915		18. Containers		19. Total Quantity	20. Unit W/Vol
					No.	Type	Drums	Gallons
							Yards	Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brinkman				Signature 		Month 8	Day 22	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name MARIL PHELAN				Signature 		Month 8	Day 22	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

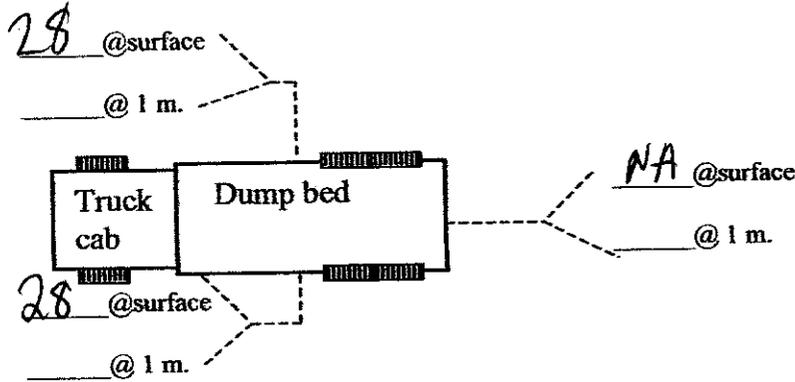
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1105 Surveyed by: C Hicks / J Mattson  
 Trucking Company: Greve Truck license plate no. /state: 13

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

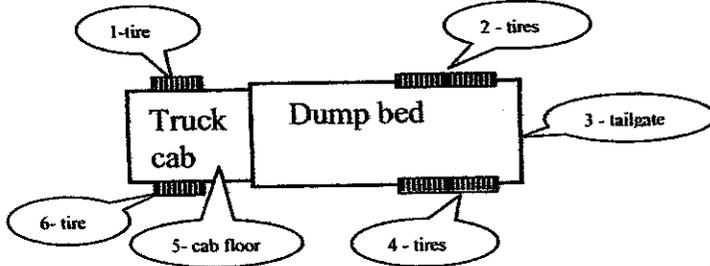
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (0.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 µrem/hr	5 cpm α	252 cpm β
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

0050851

FOOTHILLS LANDFILL  
8900 HIGHWAY 90  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	588106	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	11:26 am	
DATE OUT	TIME OUT	
22 August 2007	11:26 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645085		

OO Gross Weight 79,840.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 44,140.00 lb 22.07 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.07	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0645085

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 3900 Hwy 93 Golden, CO ACCOUNT # 860603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 8   22   07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Rafael Collazo Lopez</i>			Signature <i>[Signature]</i>		Month Day Year 08   22   07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 8   22   07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

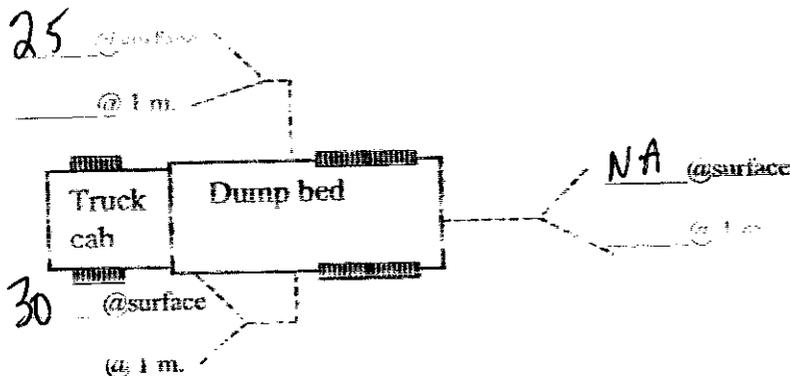
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1113 Surveyed by: C Hicks / J Mattson

Trucking Company: Lawrence Truck license plate no. /state: J001

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
Dose rates should be recorded at highest reading for each side

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is  $< 10 \text{ mrem/hr}$ , survey is complete.)

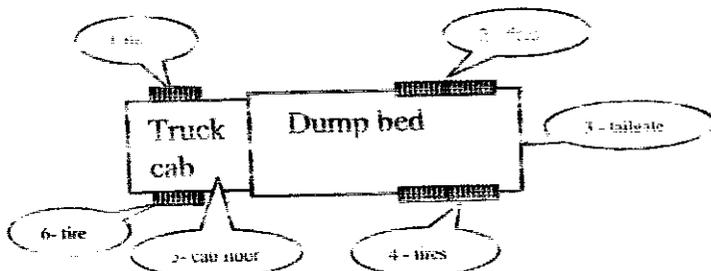
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth

Dose Rate at 1 meter	TI
$< 50 \mu\text{rem} (< 0.05 \text{ mrem})$	0
$50-149 \mu\text{rem} (0.05-0.15 \text{ mrem})$	0.1
$150-249 \mu\text{rem} (0.15-0.25 \text{ mrem})$	0.2

For Stockpiles  
A only:

TI =     

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination Limits:  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<u>&lt; 220</u>				<u>&lt; 2200</u>		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-22/111	233249 / PR-22/111
Cal Due	8-14-08	<del>8-15-08</del>	<del>8-15-08</del>
Bkg.	18 $\mu\text{rem/hr}$	5 cpm X	2.53 cpm B
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0

030834

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
830603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN CO 80401

SITE	TICKET	GRID
01	836113	0000
WEIGHMASTER		
1600086 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	11:34 am	
DATE OUT	TIME OUT	
22 August 2007	11:34 am	
VEHICLE	ROLL OFF	
Y811915		
REFERENCE	ORIGIN	
845086		

Contract: Y811915

Gross Weight 78,300.00 lb  
Tare Weight 35,580.00 lb  
net Weight 42,720.00 lb 21.36 TN  
Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.36	TN	SW-COMY SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645086

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3908		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 6900 Hwy 93 Golden, CO ACCOUNT # 960813 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Bruckman				8	22
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
JOSE W Ruiz					
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

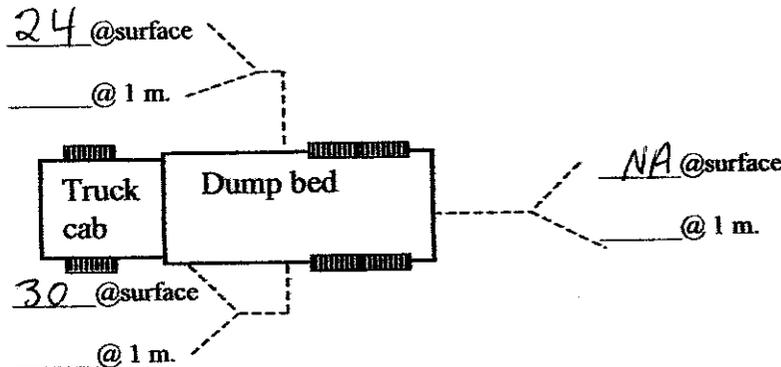
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1135 Surveyed by: C Hicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

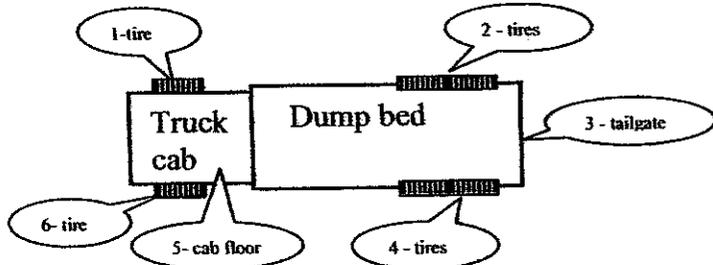
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

000702 12

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
800803  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	584120	0000
WEIGHMASTER		
4500056 Barbara Jo E		
DATE IN	TIME IN	
22 August 2007	11:49 am	
DATE OUT	TIME OUT	
22 August 2007	11:49 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645067		

GC Gross Weight 82,860.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 45,160.00 lb 22.58 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.58	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645087

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name Greene Trucking #113		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
				18		0 Drums	0 Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 22 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Sean J. Clancy			Signature		Month Day Year		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #2

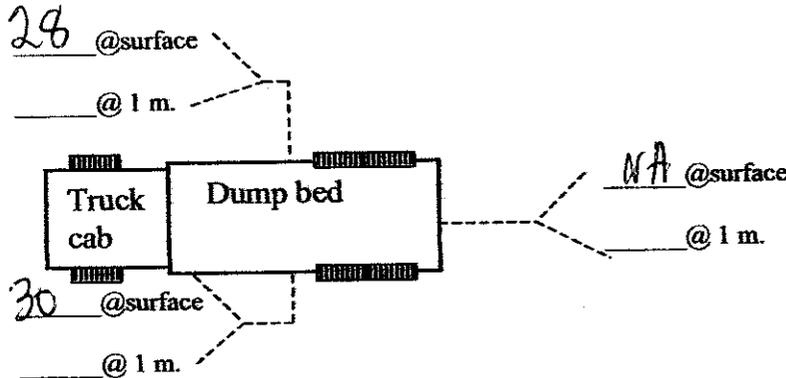
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1139 Surveyed by: C Hicks / J Mattson

Trucking Company: Grive Truck license plate no. /state: 961

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

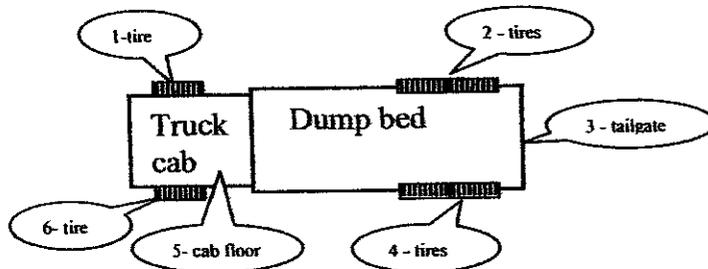
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6%	13.9%
MDA	NA	76.2	553.0



NON-HAZARDOUS WASTE MANIFEST

0645104

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 3900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO L67 070908 Y511915		19. Total Quantity D-Drums Y-Yards	
b.				20. Unit Wt/Vol G-Gallons T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Berkman		Signature 		Month Day Year 8 20 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Arnoldo Marquez		Signature 		Month Day Year 8 20 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

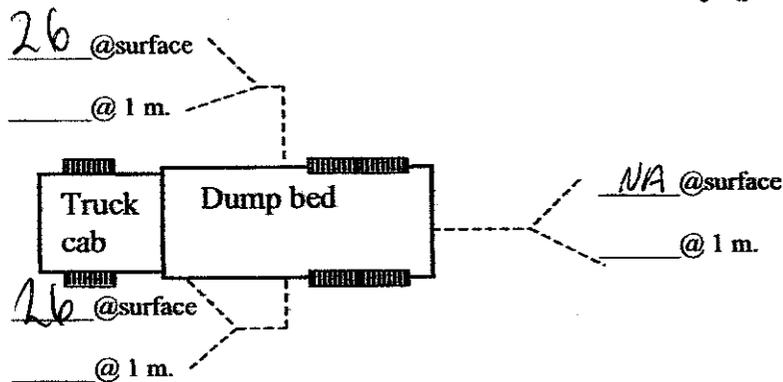
TRANSPORTER #2

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/22/07 1149 Surveyed by: C Hicks / J Mattson

Trucking Company: Onire Truck license plate no. /state: 95

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

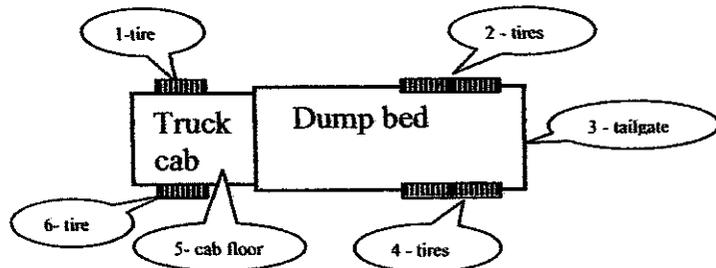
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	5220				5220		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem/hr}$	5 cpm $\alpha$	252 cpm $\beta$
Efficiency	NA	17.6 %	13.9 %
MDA	NA	76.2	553.0

FOOTHILLS LANDFILL  
 8700 HIGHWAY 95  
 GOLDEN  
 CO  
 80460  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80441

Contract: Y51195

SITE	TICKET	GRID
01	Y51195	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
22 August 2007	12:03 pm	
DATE OUT	TIME OUT	
22 August 2007	12:03 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645105		

Gross Weight 60,240.00 lb  
 Tare Weight 36,980.00 lb Inbound --  
 Net Weight 23,260.00 lb 21.43 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.43	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LF	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_

NON-HAZARDOUS WASTE MANIFEST

0645105

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 (Golden, CO ACCOUNT # 960603 (Colorado School of Mines))		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		6	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Benkman				6	2 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Manuel Ruiz				9	2 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

COM000033

Pile B p. 2

## Truck Departure Record Form

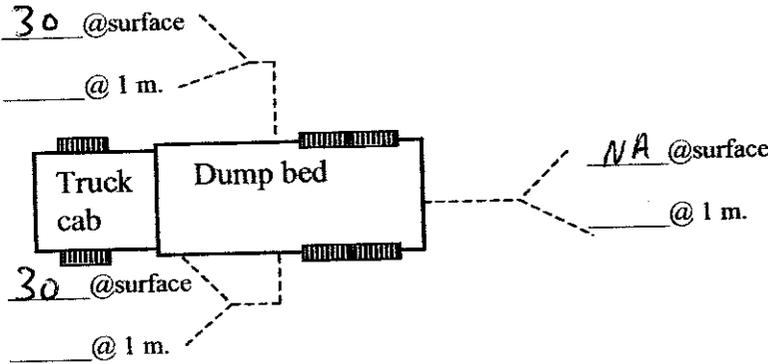
Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Collazo 13	8/21/07	1035	1049	
Murray 461	8/21/07	1045	1056	
JD 01	8/21/07	1050	1106	
JD 04	8/21/07	1130	1139	
Grieve 23	8/21/07	1130	1145	
Grieve 24	8/21/07	1140	1152	
Grieve 12	8/21/07	1150	1158	
Grieve 8	8/21/07	1204	1209	
Collazo 13	8/21/07	1210	1215	
Murray 461	8/21/07	1215	1219	
JD 01	8/21/07	1220	1228	
JD 04	8/21/07	1305	1310	
Grieve 23	8/21/07	1310	1315	
Grieve 24	8/21/07	1315	1320	
Grieve 12	8/21/07	1320	1326	
Grieve 8	8/21/07	1325	1334	
Collazo 13	8/21/07	1334	1340	
Murray 461	8/21/07	1340	1345	
JD 01	8/21/07	1345	1351	
JD 04	8/21/07	1425	1434	



# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1049 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

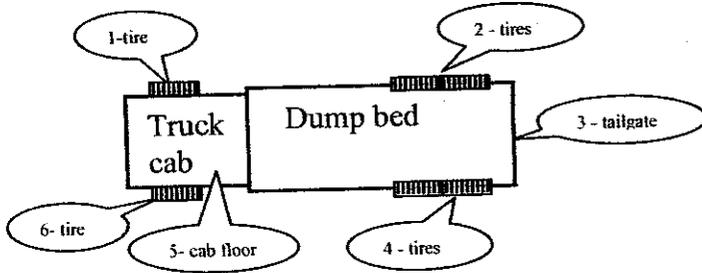
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503308 ✓

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
150 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	58574E	0000
WEIGHMASTER		
#500006 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	11:09 am	
DATE OUT	TIME OUT	
21 August 2007	11:09 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645137		

Contract: YE11915

Gross Weight 82,100.00 lb  
 Tare Weight 35,700.00 lb      Inbound -  
 Net Weight 46,400.00 lb 23.20 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.20	TN	SL-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0645139

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8500 Hwy 93 Golden, CO ACCOUNT # 960903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						D Drums	G Gallons
					18	Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Bruchman			Signature <i>[Signature]</i>		Month Day Year 6 2 07		
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature <i>[Signature]</i>		Month Day Year 6 8 07		
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name			Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

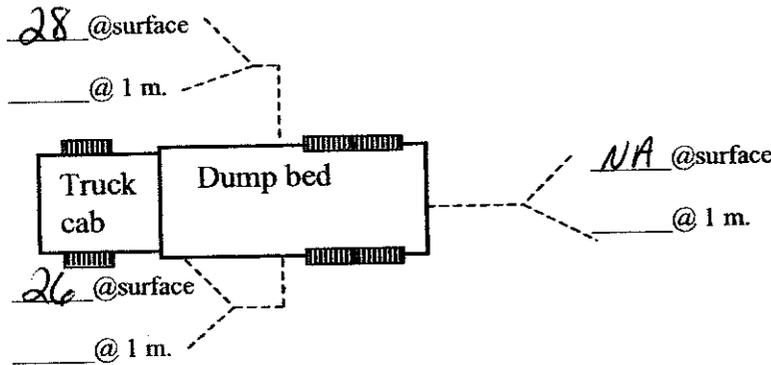
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1056 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no./state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

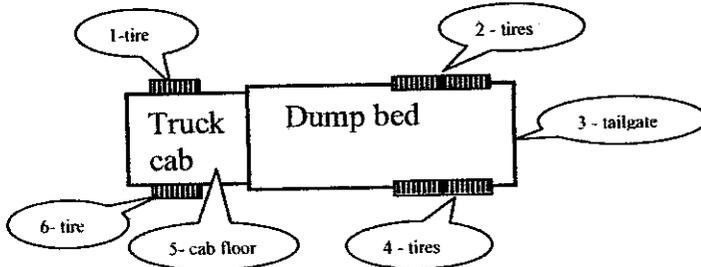
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

003310 70/

FOOTHILLS LANDFILL  
 2700 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	525746	0000
WEIGHMASTER		
K300056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	11:15 am	
DATE OUT	TIME OUT	
21 August 2007	11:15 am	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
645140		

Gross Weight 30,800.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 46,540.00 lb 23.27 TN

Inboured -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.27	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645140

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960913 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benhamer		Signature 		Month 2	Day 21
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature Mike Murray		Month 8	Day 21
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month 7	Day 11

GENERATOR

TRANSPORTER

T/S/D FACILITY

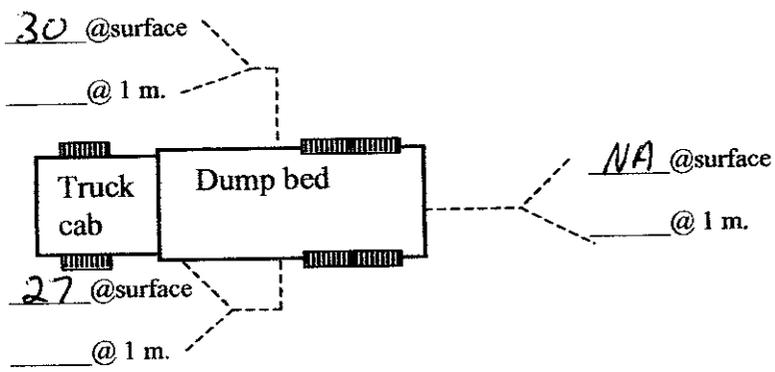
TRANSPORTER #2

CON000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1106 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD01

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

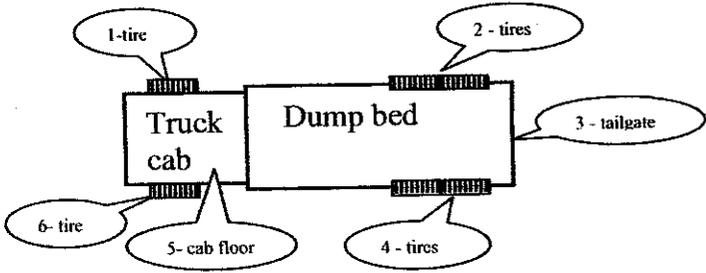
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 µrem/hr	α 0 cpm	β 202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

J001

503322

FOOTHILLS LANDFILL  
 2700 HIGHWAY 90  
 GOLDEN  
 CO  
 80401  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YEL191E

SITE	TICKET	GRID
01	525754	0000
WEIGHMASTER		
2900026 Barbara Jo B		
DATE IN	TIME IN	
21 August 2007	11:26 am	
DATE OUT	TIME OUT	
21 August 2007	11:26 am	
VEHICLE	ROLL OFF	
YEL191E		
REFERENCE	ORIGIN	
545141		

Gross Weight 80,000.00 lb  
 Tare Weight 35,580.00 lb  
 Net Weight 44,420.00 lb 22.21 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.21	TN	SW-CONT SOIL				
1.00	LF	ENVIRONMENTAL FEE				
1.00	LF	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645141

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of									
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401									
4. Phone ( ) 303-273-3596				6. Phone ( )									
7. Transporter #1 Company Name				8. US EPA ID Number		9. Transporter #1's Phone							
10. Transporter #2 Company Name				11. US EPA ID Number		12. Transporter #2's Phone							
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)				14. US EPA ID Number		15. Facility's Phone							
16. Waste Shipping Name and Description				17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity		20. Unit Wt/Vol			
						No.	Type	D Drums	G Gallons				
a. Norm Soil				CO L67 070908 0511915			16	Yards	Tons				
b.													
c.													
d.													
21. Additional Descriptions for Materials Listed Above													
22. Special Handling Instructions and Additional Information													
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.													
Printed/Typed Name Gene Bachman				Signature <i>[Signature]</i>				Month 8		Day 2		Year 07	
24. Transporter #1: Acknowledgement of Receipt of Materials													
Printed/Typed Name Joe R...				Signature <i>[Signature]</i>				Month		Day		Year	
25. Transporter #2: Acknowledgement of Receipt of Materials													
Printed/Typed Name				Signature				Month		Day		Year	
26. Discrepancy Indication Space													
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)													
Printed/Typed Name				Signature				Month		Day		Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

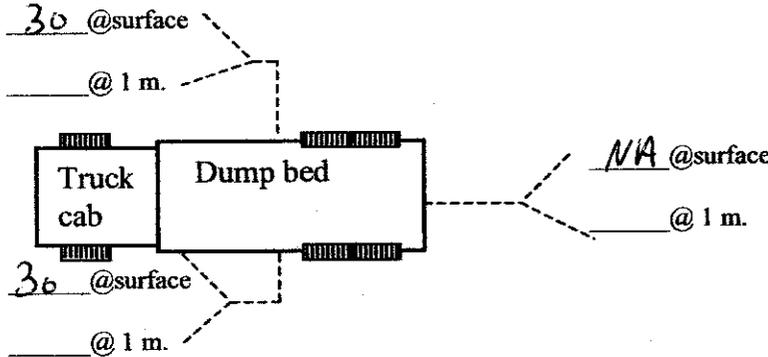
TRANSPORTER #2

COM00033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 139 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

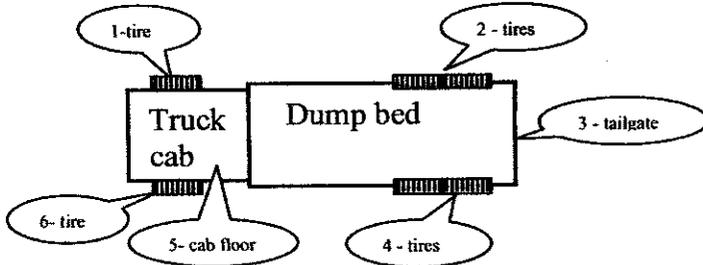
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

505545

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80608  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	555776	0000
WEIGHMASTER		
000056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	12:03 PM	
DATE OUT	TIME OUT	
21 August 2007	12:03 PM	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645148		

Contract: YE11915

00 Gross Weight 78,040.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 43,400.00 lb @ 21.70 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.70	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

## 0645148

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden CO ACCOUNT # 960605 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 YS11915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Binkman				8	21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Santiaso Vargas					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
				8	

GENERATOR

TRANSPORTER

T/S/D FACILITY

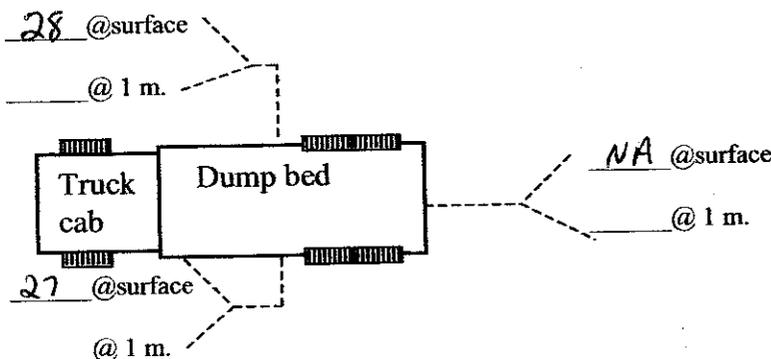
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1145 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

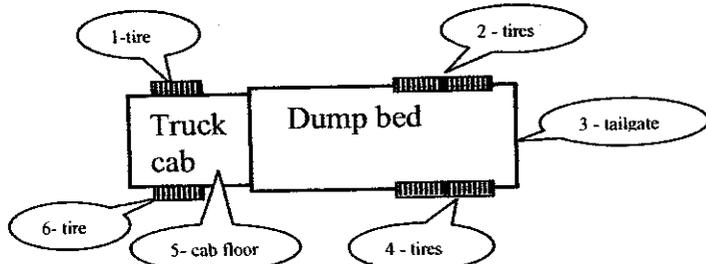
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.6	563.4

585346 23

FOOTHILLS LANDFILL  
 1900 HIGHWAY 93  
 GOLDEN  
 CO  
 804003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585377F	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	2:06 am	
DATE OUT	TIME OUT	
21 August 2007	12:06 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645147		

Gross Weight 84,340.00 lb  
 Tare Weight 35,100.00 lb Inbound ---  
 Net Weight 49,240.00 lb 24.62 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.62	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645147

LD

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 8 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>MARK PHELAN</i>			Signature <i>[Signature]</i>		Month Day Year 8 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name <i>Brian Taylor</i>			Signature <i>[Signature]</i>		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

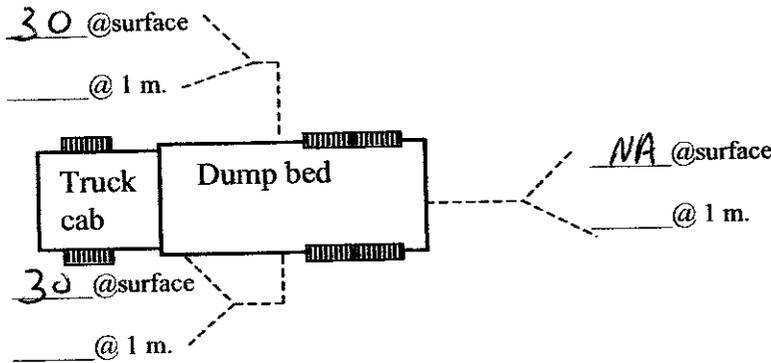
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1152 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

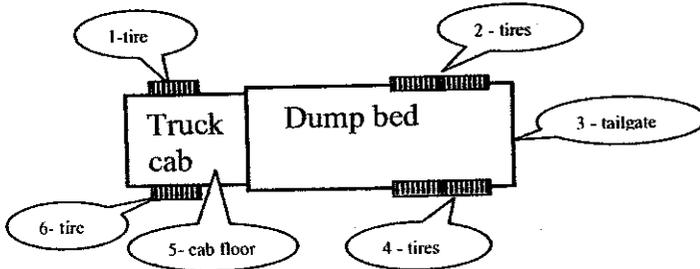
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

303533

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	58573a	0000
WEIGHMASTER		
0300025 Barbara Jc S		
DATE IN	TIME IN	
21 August 2007	2:13 pm	
DATE OUT	TIME OUT	
21 August 2007	12:13 pm	
VEHICLE	ROLL OFF	
YEL1915		
REFERENCE	ORIGIN	
648146		

Contract: YEL1915

00 Gross Weight 82,200.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 45,000.00 lb 32.54 Tn

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.54	TN	SM-COFT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645146

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3668			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3668		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Joe Grieve Trucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 8000 Hwy 93 Golden, CO APPROX # 10000 (Colorado School of Mines)		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 67 97008 511915		19. Total Quantity 0.0000 0.0000 0.0000 0.0000	
b.				20. Unit Wt/Vol 0.0000 0.0000 0.0000 0.0000	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name JOE GRIEVE		Signature <i>[Signature]</i>		Month Day Year 6 4 17	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name JOHN SHANNON		Signature <i>[Signature]</i>		Month Day Year 08 21 17	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

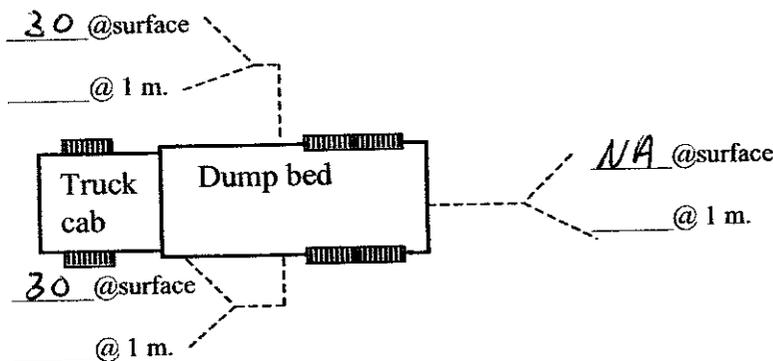
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1154 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

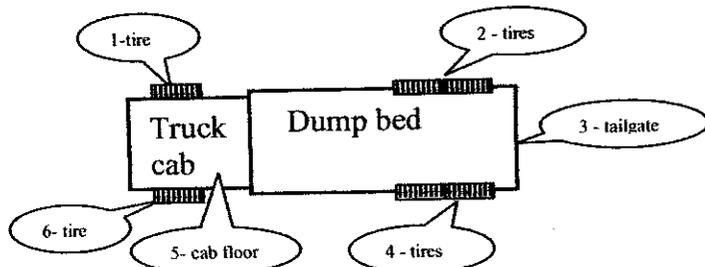
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	543.4

003500

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80401  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	585771	0000
WEIGHMASTER		
350056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	12:12 pm	
DATE OUT	TIME OUT	
21 August 2007	12:18 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645148		

Contract: YE11915

Gross Weight 81,760.00 lb  
 Tare Weight 37,900.00 lb  
 Net Weight 44,040.00 lb 22.03 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.03	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

NET AMOU
TENDERED
CHANGE
CHF



# NON-HAZARDOUS WASTE MANIFEST

1a  
0645145

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Orion Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 99 Golden, CO ACCOUNT # 900803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]			Signature [Signature]		Month Day Year 8 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name SLO JOLION			Signature [Signature]		Month Day Year 8 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name [Signature]			Signature [Signature]		Month Day Year 8 31 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

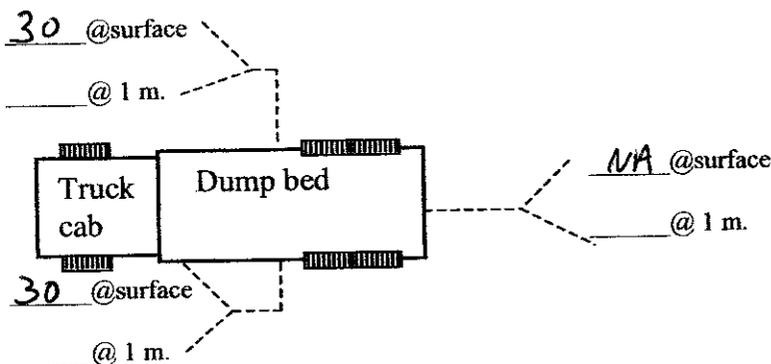
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1209 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

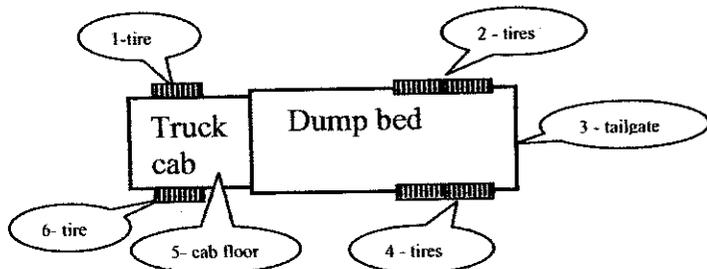
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	$\beta$ 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503372 0

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YB11915

SITE	TICKET	GRID
01	552802	0000
WEIGHMASTER		
R50005e Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	12:28 pm	
DATE OUT	TIME OUT	
21 August 2007	12:38 pm	
VEHICLE	ROLL OFF	
YB11915		
REFERENCE	ORIGIN	
445144		

00 Gross Weight 82,920.00 lb  
 Tare Weight 38,540.00 lb Inbound -  
 Net Weight 44,380.00 lb 23.17 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.17	TN	34-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645144

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address University of Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) University of Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address University of Colorado School of Mines 1500 Illinois St Golden, CO 80401		14. US EPA ID Number		17. Allied Waste Approval # and Exp. Date	
16. Waste Shipping Name and Description		18. Containers		19. Total Quantity	20. Unit
a. Norm Soil		COLEP 970006 1511915		18 Drums	4 Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Williams		Signature <i>[Signature]</i>		Month 12	Day 17
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month 12	Day 21
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

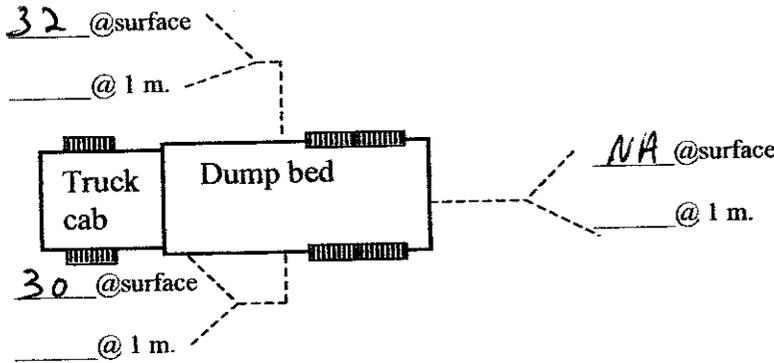
TRANSPORTER #1

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1215 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

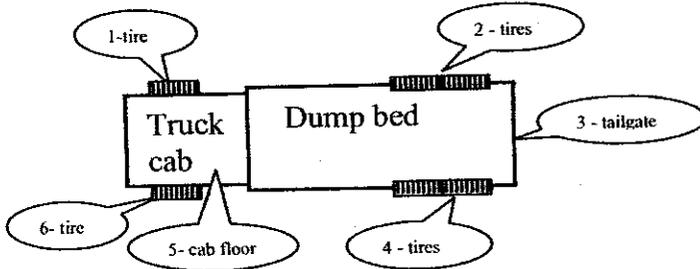
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

003379

FOOTHILLS LANDFILL  
8900 HIGHWAY 73  
GOLDEN  
CO  
80600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YB11915

SITE	TICKET	GRID
01	885810	0000
WEIGHMASTER		
#S00056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	12:36 pm	
DATE OUT	TIME OUT	
21 August 2007	12:26 pm	
VEHICLE	ROLL OFF	
YB11915		
REFERENCE	ORIGIN	
645143		

Gross Weight 60,520.00 lb  
 Tare Weight 39,700.00 lb  
 net Weight 20,820.00 lb 22.43 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.43	TN	SH-COIT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645143

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 4. Phone ( ) 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998 6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 961603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit	
				No.	Type	Drums	Gallons	
				a. Norm Soil	CO L67 070906 Y511915	18	Y-Yards	T-Tons
				b.				
				c.				
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Beckman				Signature		Month Day Year 8 21 07		
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Daniel Collazo Lopez				Signature		Month Day Year 08 21 07		
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

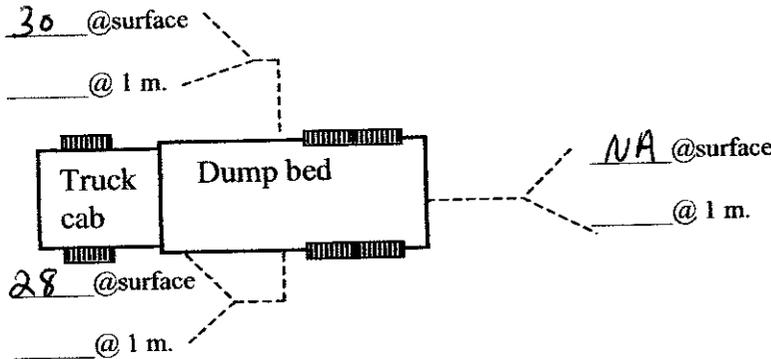
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1219 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 461

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

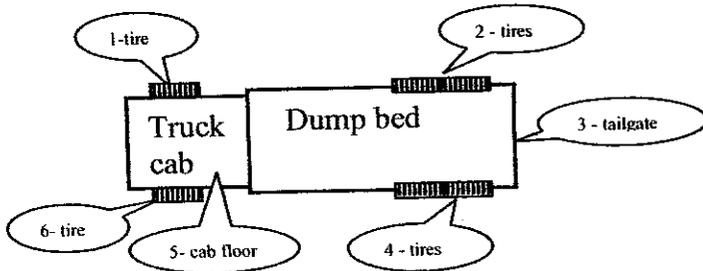
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503334 14/

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585310	0000
WEIGHMASTER		
2800056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	12:40 pm	
DATE OUT	TIME OUT	
21 August 2007	12:40 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645142		

Gross Weight 30,340.00 lb  
Tare Weight 34,260.00 lb  
Net Weight 46,060.00 lb 23.04 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.04	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645142

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998					
4. Phone ( ) 303-273-3998			6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 9606US (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit	
				No.	Type	Drums	Gallons	
a. Norm Soil		CO167 070908 Y511915		18	Y	Y-Yards	T-Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Brinkman				Signature		Month 8	Day 21	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month 8	Day 21	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month 8	Day 21	Year 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

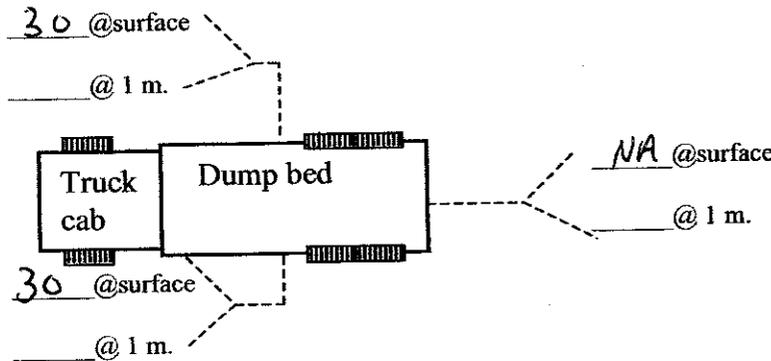
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1228 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JPO1

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

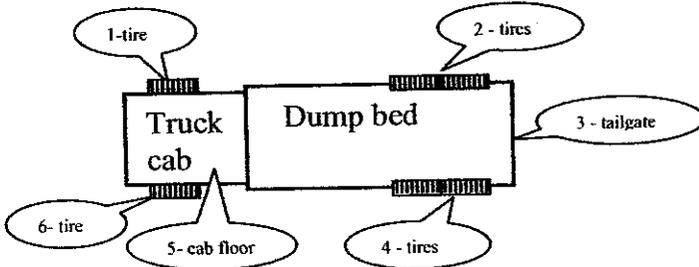
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

000338

FOOTHILLS LANDFILL  
8900 HIGHWAY 70  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract # 7511915

SITE	TICKET	GRID
01	55551F	0000
WEIGHMASTER		
1500036 Barbara Jo B		
DATE IN	TIME IN	
21 August 2007	12:44 PM	
DATE OUT	TIME OUT	
21 August 2007	12:40 PM	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
545138		

Gross Weight 30,400.00 lb  
 Tare Weight 38,500.00 lb  
 Net Weight 44,820.00 lb 22.41 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.41	TN	SO-CONT SOIL				
1.00	LD	EM/ADDITIONAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645138

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998						
4. Phone ( ) 303-273-3998			6. Phone ( )						
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone					
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone					
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone					
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers					
				No.	Type	19. Total Quantity	20. Unit Wt/Vol		
				a. Norm Soil	CO L87 070908 Y511915	18	<del>Drums</del>	Y-Yards	<del>G-Gallons</del>
				b.					
				c.					
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 8 21 07				
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name <i>JOSE W Ruiz</i>			Signature <i>[Signature]</i>		Month Day Year				
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name			Signature		Month Day Year				
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year				

GENERATOR

TRANSPORTER

T/S/D FACILITY

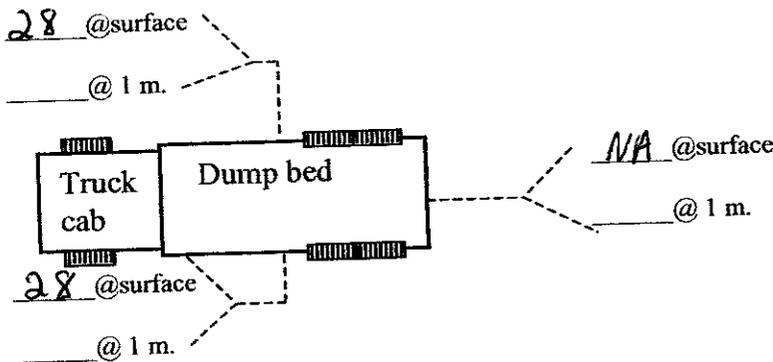
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1310 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: DO 4

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

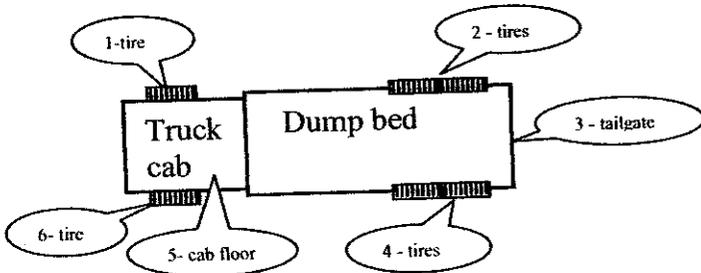
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

303410

FOOTHILLS LANDFILL  
9700 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

SITE	TICKET	GRID
01	5550-3	0000
WEIGHMASTER		
0500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	1:30 pm	
DATE OUT	TIME OUT	
21 August 2007	1:32 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
445137		

Contract: Y511915

00 Gross Weight 80,440.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 44,800.00 lb 22.40 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.40	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

V D 04  
0645137

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2900 Hwy 90 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
						0 Drums	0 Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Benhman			Signature 		Month Day Year 8 21 07		
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Santiago Vazquez			Signature 		Month Day Year		
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name			Signature		Month Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name Steve Benhman			Signature 		Month Day Year 8 21 07		

GENERATOR  
↓  
TRANSPORTER  
↓  
T/S/D FACILITY

TRANSPORTER #2

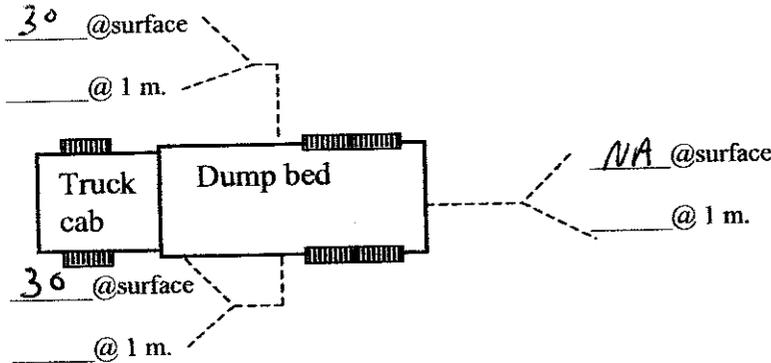
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1315 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 23

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

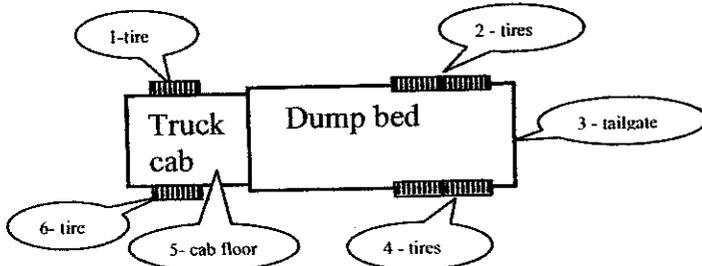
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

00000000

FOOTHILLS LANDFILL  
8740 HIGHWAY 93  
GOLDEN  
CO  
750600  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	58884+	0000
WEIGHMASTER		
DE00056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	1:05 PM	
DATE OUT	TIME OUT	
21 August 2007	1:05 PM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
448136		

00 Gross Weight 82,200.00 lb  
 Tare Weight 35,100.00 lb  
 Net Weight 47,100.00 lb 22.55 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.55	TN	SW-COULT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0645136

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 92 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Bookman				8	21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
MARK PHELAN				8	21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
B. Dina Taylor				8	21 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

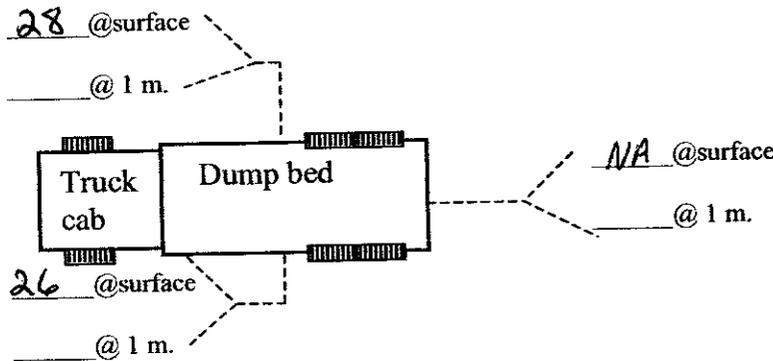
COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1320 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no./state: 24

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

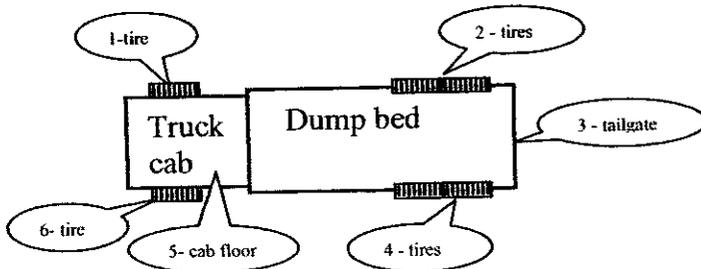
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	2563.4

303420 ✓ 7

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
750205  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	523550	0000
WEIGHMASTER		
#500054 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	1:42 PM	
DATE OUT	TIME OUT	
21 August 2007	1:42 PM	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
548135		

00 Gross Weight 25,550.00 lb  
 Tare Weight 37,200.00 lb      Enclosed -  
 Net Weight 48,360.00 lb 24.10 TP

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.10	TR	SW-COBT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0645135

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3600			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name J De Groot Trucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Sofballe Landfill 1630 Hwy 90 Golden, CO ACCOUNT # 500000 (Colorado School of Mines)		14. US EPA ID Number		18. Containers	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		19. Total Quantity	
a. Non Soil		30187 070900-0511915		D-Drums 3-Gallons	
b.				Y-Yards T-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 8 1 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Keith Shannon		Signature <i>[Signature]</i>		Month Day Year 08 21 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

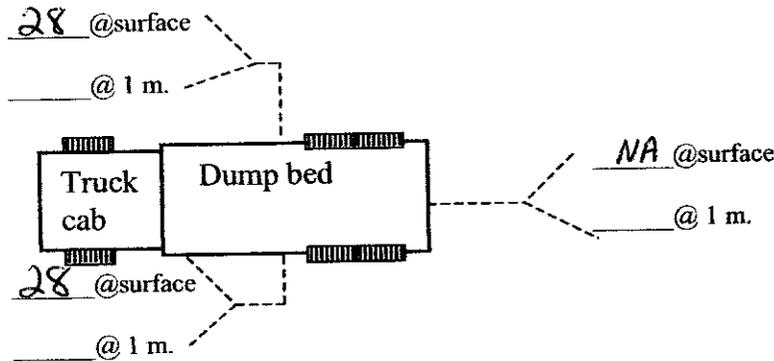
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1326 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

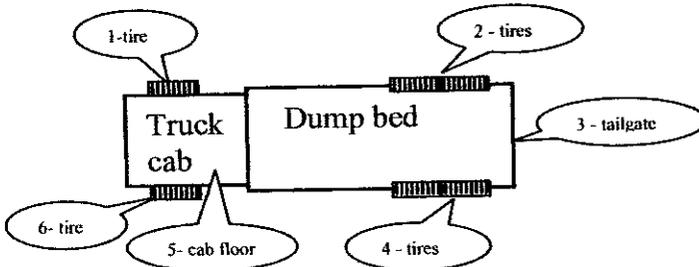
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503428 12

FOOTHILLS LANDFILL  
 8940 HIGHWAY 70  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	768894	0000
WEIGHMASTER		
650056 Barbara Jo S		
DATE IN	TIME IN	
31 August 2007	1:48 pm	
DATE OUT	TIME OUT	
31 August 2007	1:48 pm	
VEHICLE	ROLL OFF	
Y011915		
REFERENCE	ORIGIN	
645134		

Contract# Y011915

GD Gross Weight 83,886.00 lb  
 Tare Weight 37,700.00 lb      Inbound -  
 Net Weight 46,186.00 lb 24.09 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.09	TN	SH-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645134

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Geniec Trucking #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 800003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Sort		CO L67 070903 Y511915		8	Drums
b.					Gallons
c.					Y-Yards
d.					Tons
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month 8	Day 21
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature 		Month 8	Day 21
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

### TRANSPORTER #2

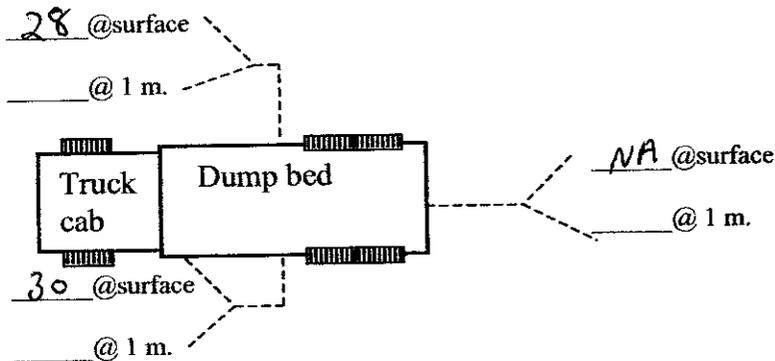
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1334 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

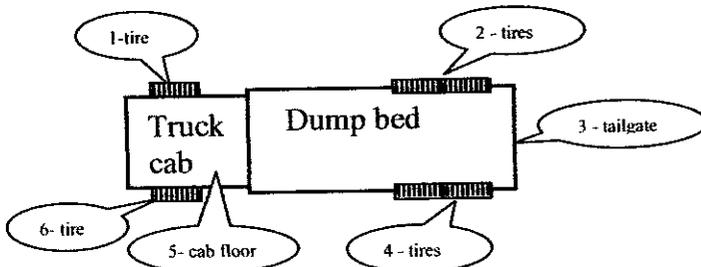
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	β 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

FOOTHILLE LANDFILL  
 8906 HIGHWAY 90  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	555554	0000
WEIGHMASTER		
3500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	1:51 pm	
DATE OUT	TIME OUT	
21 August 2007	1:51 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645153		

Contract: Y511915

Gross Weight 53,940.00 lb  
 Tare Weight 36,540.00 lb  
 Net Weight 17,400.00 lb 23.70 TN  
 Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.70	TN	50-COY SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

# 0645133

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-1000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO ACCOUNT # 000000 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		20 LE7 07908 Y61 1915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brakman		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name Chuck Foy		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #1

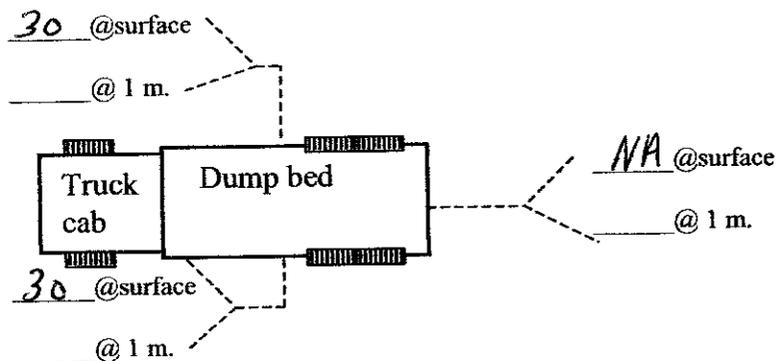
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1340 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 13

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

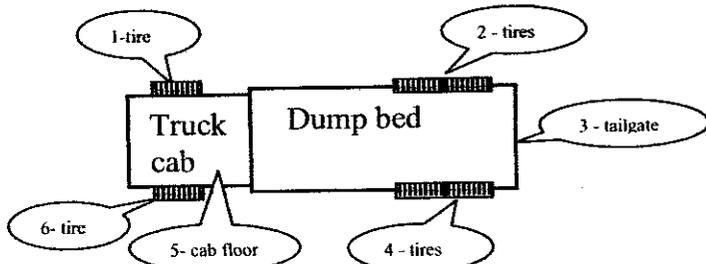
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

513481 13

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 800603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585260	0000
WEIGHMASTER		
6300054 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	1:59 pm	
DATE OUT	TIME OUT	
21 August 2007	1:59 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
54513E		

Gross Weight 81,440.00 lb  
 Tare Weight 35,700.00 lb  
 Net Weight 45,740.00 lb 22.87 TN  
 Incurred -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.87	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

## 0645132

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998			6. Phone ( )				
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Pothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 060603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers			
				19. Total Quantity		20. Unit Wt/Vol	
				No.	Type	D Drums	G Gallons
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 8 21 07			
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Damon Colaco Lopez		Signature <i>[Signature]</i>		Month Day Year 08 21 07			
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month Day Year			
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month Day Year 6 01 07			

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

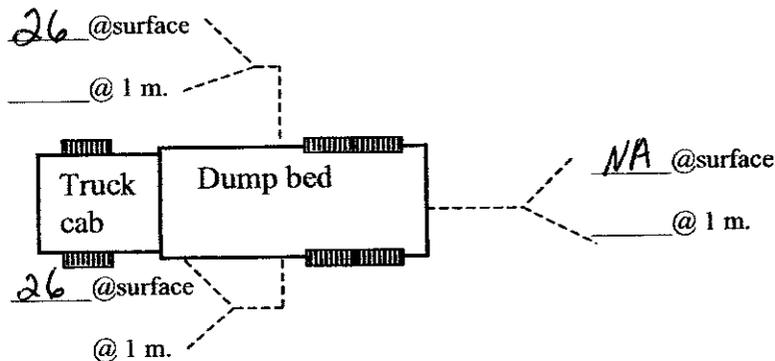
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1345 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 461

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

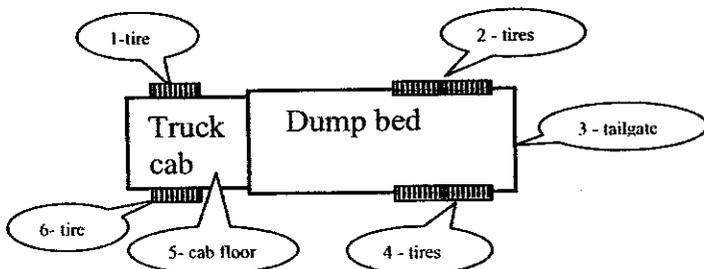
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 µrem/hr	0 cpm	β 202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

533437 48

FOOTHILLS LANDFILL  
 8700 HIGHWAY 98  
 GOLDEN,  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	785866	0000
WEIGHMASTER		
#200056 Barbara Jo E		
DATE IN	TIME IN	
21 August 2007	1:06 pm	
DATE OUT	TIME OUT	
21 August 2007	2:06 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645131		

Gross Weight 80,880.00 lb  
 Tare Weight 34,260.00 lb Inboard -  
 Net Weight 46,620.00 lb 23.21 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.21	TN	SH-COAT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LE	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE MLA



# NON-HAZARDOUS WASTE MANIFEST

401  
0645131

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of		
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998			
4. Phone ( ) 303-273-3998			6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone		
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone		
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone		
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers		
				No.	Type	19. Total Quantity
a. Norm Soil		CO L67 070908 Y511915		18	Y	0 Drums 0 Gallons Y-Yards T-Tons
b.						
c.						
d.						
21. Additional Descriptions for Materials Listed Above						
22. Special Handling Instructions and Additional Information						
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Printed/Typed Name		Signature		Month	Day	Year
Steve Berkman				8	21	07
24. Transporter #1: Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
Mike Murray				8	21	07
25. Transporter #2: Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
26. Discrepancy Indication Space						
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)						
Printed/Typed Name		Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

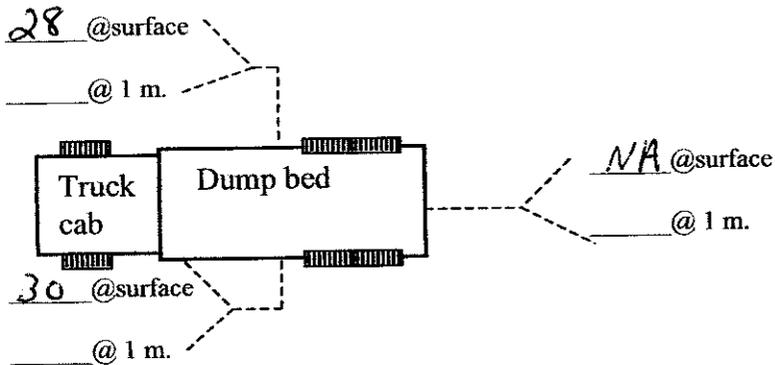
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1351 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve ~~1351~~ Truck license plate no. /state: JD 01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

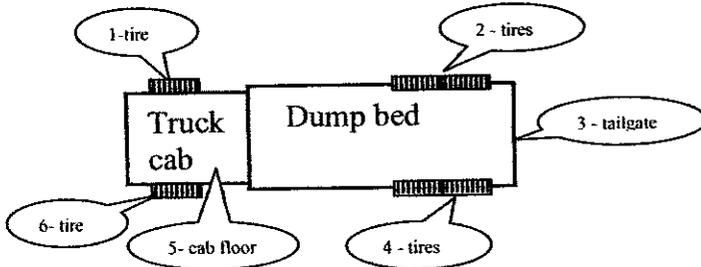
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503438 J D07

FOOTHILLS LANDFILL  
 8900 HIGHWAY 70  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1700 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	ES5868	0000
WEIGHMASTER		
SCOPE: Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	1:10 pm	
DATE OUT	TIME OUT	
21 August 2007	2:10 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645130		

Gross Weight 79,700.00 lb  
 Tare Weight 35,580.00 lb      Inbound -  
 Net Weight 44,120.00 lb @ 22.06 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.06	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0645130

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998				
4. Phone ( ) 303-273-3998				6. Phone ( )				
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Footprints Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit
					No.	Type	D-Drums	G-Gallons
a. Norm Soil			CO LB7 070908 Y511915		18	X	Y-Yards	T-Tons
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Bankman				Signature		Month 8	Day 21	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name JOSE W RUIZ				Signature		Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

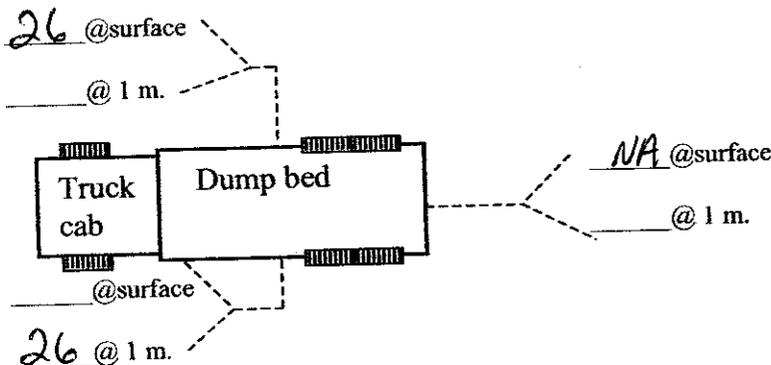
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1434 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve #4 Truck license plate no. /state: JD04

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits** (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

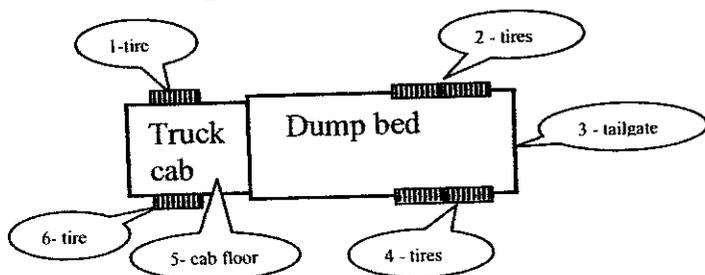
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503455 ✓1004

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585283	0000
WEIGHMASTER		
850005 Barbara To S		
DATE IN	TIME IN	
21 August 2007	3:56 pm	
DATE OUT	TIME OUT	
21 August 2007	2:56 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645129		

Gross Weight 77,920.00 lb  
 Tare Weight 35,640.00 lb  
 net Weight 42,280.00 lb 21.14 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.14	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE 



# NON-HAZARDOUS WASTE MANIFEST

# 0645129

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 93 Golden, CO ACCOUNT # 800003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CC 167 070908 Y511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brinkman</i>			Signature <i>[Signature]</i>		Month Day Year 6 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Santiago Vargas</i>			Signature <i>[Signature]</i>		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature <i>[Signature]</i>		Month Day Year 8 11 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

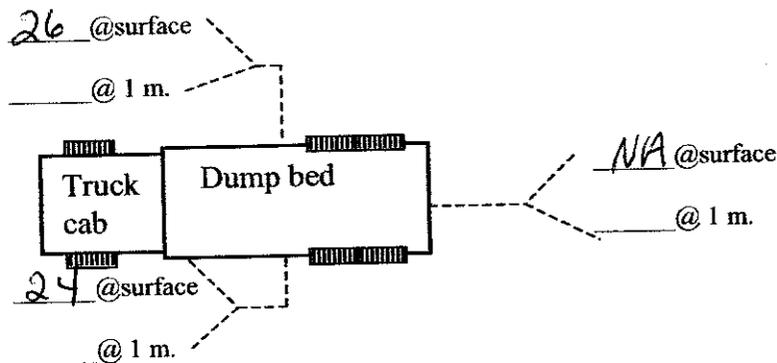
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1439 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 23

## Gamma Dose Rate Survey (µrem/hr)



Notes:

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

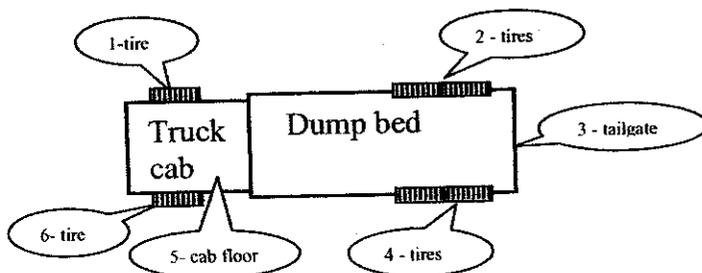
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	β 262 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503457 23

FOOTHILLS LANDFILL  
 8900 HIGHWAY 73  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE1191E

SITE	TICKET	GRID
01	585885	0000
WEIGHMASTER		
IS00056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	2:00 pm	
DATE OUT	TIME OUT	
21 August 2007	3:00 pm	
VEHICLE	ROLL OFF	
YE1191E		
REFERENCE	ORIGIN	
445128		

Gross Weight 81,920.00 lb  
 Tare Weight 38,100.00 lb  
 Net Weight 43,820.00 lb 33.41 TM

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.41	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645128

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( ) 303-273-3998				6. Phone ( )	
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 YS11915			0 Drums 0 Gallons Y-Yards T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Benkman</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				8	21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>MARK PHELAN</i>				Signature <i>[Signature]</i>	
				Month	Day Year
				8	21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

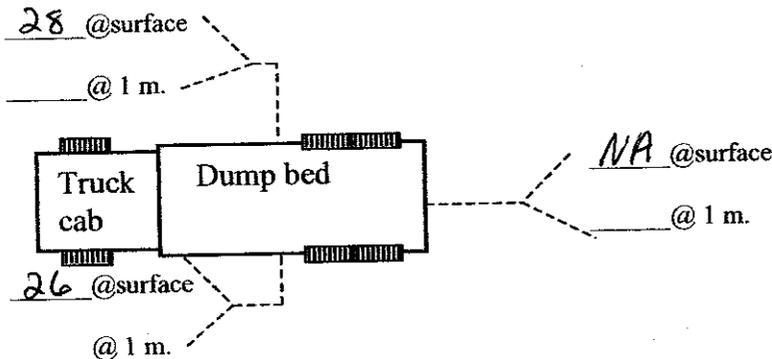
TRANSPORTER #2

COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1445 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 24

## Gamma Dose Rate Survey (µrem/hr)



Notes:  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

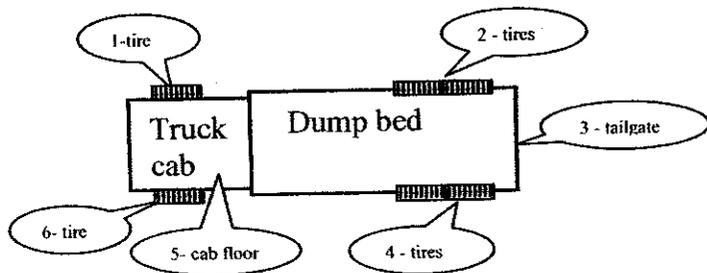
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<u>&lt; 220</u>				<u>&lt; 2200</u>		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	<u>8-15-08</u>	<u>8-15-08</u>	
Bkg.	<u>17 µrem/hr</u>	<u>0 cpm</u>	<u>202 cpm</u>	
Efficiency	<u>NA</u>	<u>17.6 %</u>	<u>13.9 %</u>	
MDA	<u>NA</u>	<u>17.0</u>	<u>563.4</u>	

503453 ay

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

SITE	TICKET	GRID
01	585887	0000
WEIGHMASTER		
0000058 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	3:01 pm	
DATE OUT	TIME OUT	
21 August 2007	3:01 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645127		

Contract: Y511915

Gross Weight 81,960.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 44,760.00 lb 22.38 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.38	TN	30-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

# 0645127

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3898		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Joe Griev Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footprint Landfill 6500 Hwy 93 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. North Soil		17. Allied Waste Approval # and Exp. Date CO L67 075908 Y611915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brakman		Signature		Month 6	Day 21
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name K. J. STANON		Signature		Year 21	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
				Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

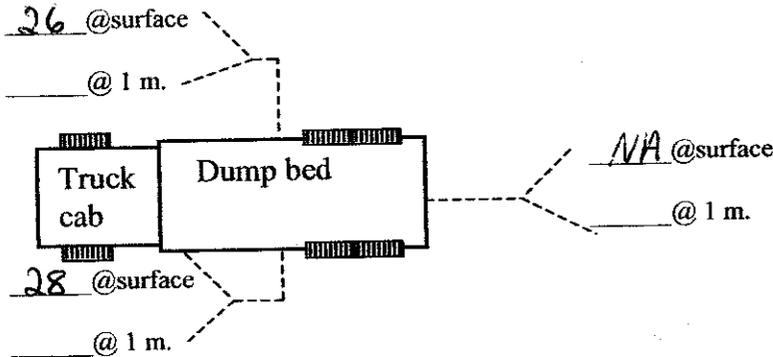
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1450 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 12

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

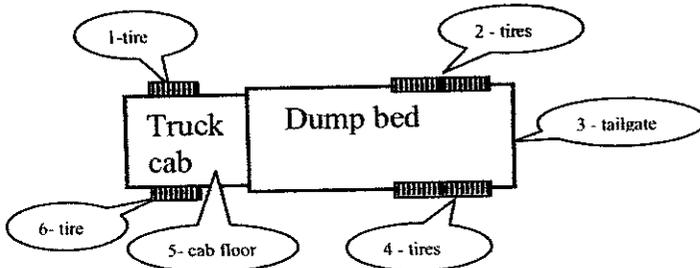
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503482 70

FOOTHILLS LANDFILL  
 8900 HIGHWAY 78  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585390	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
31 August 2007	3:07 pm	
DATE OUT	TIME OUT	
31 August 2007	3:07 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645126		

Gross Weight 53,140.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 15,440.00 lb 22.72 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.72	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

12  
0645126

Please print or type:

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( ) 303-273-3998		6. Phone ( )			
7. Transporter #1 Company Name Cerrill Trucking H/D		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		8	Y-Yards
b.					T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman				Signature	
				Month	Day
				8	21
				Year	07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean Olson				Signature	
				Month	Day
				8	21
				Year	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
				Month	Day
				Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name				Signature	
				Month	Day
				8	21
				Year	07

GENERATOR

TRANSPORTER

T/S/D FACILITY

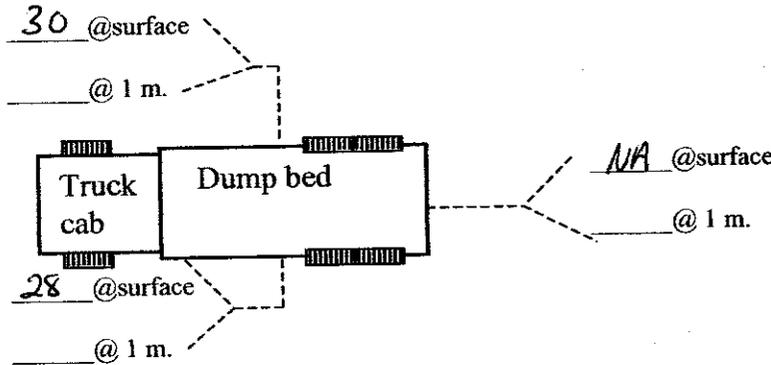
TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1500 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

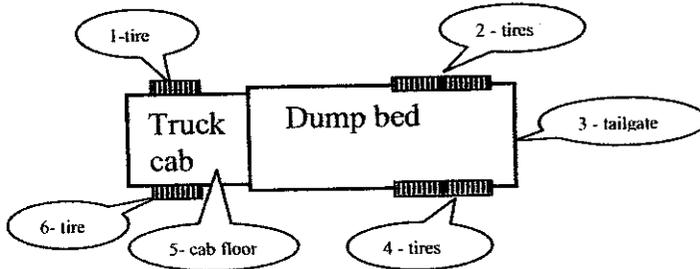
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

506468

8

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511715

SITE		TICKET		GRID	
01		825296		0000	
WEIGHMASTER					
K500056 Barbara Jo S					
DATE IN			TIME IN		
21 August 2007			3:17 pm		
DATE OUT			TIME OUT		
21 August 2007			3:19 pm		
VEHICLE			ROLL OFF		
Y511715					
REFERENCE		ORIGIN			
6-100					

Gross Weight 79,100.00 lb  
Tare Weight 36,540.00 lb  
Net Weight 42,560.00 lb 21.28 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.28	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0645125

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3996			6. Phone ( ) 303-273-3996		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960613 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	4
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 7 31 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

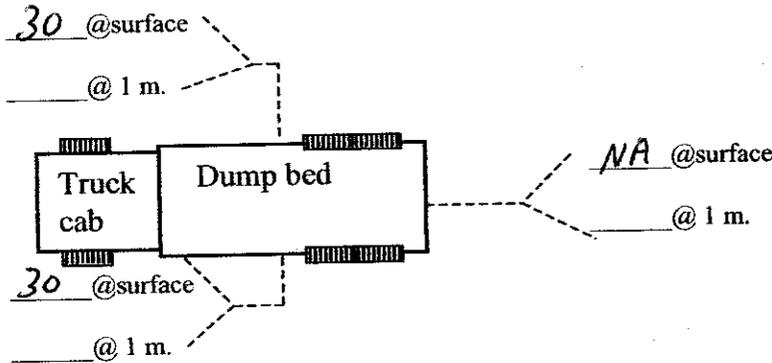
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1505 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 13

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

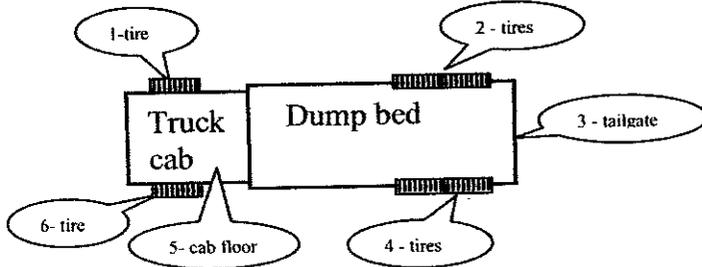
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

5,3470 13

FOOTHILLS LANDFILL  
8700 HIGHWAY 95  
GOLDEN  
CO  
806605  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YB11915

SITE	TICKET	GRID
01	8255795	0000
WEIGHMASTER		
8500056 Barbara Jo S		
DATE IN		TIME IN
21 August 2007		3:23 pm
DATE OUT		TIME OUT
21 August 2007		3:23 pm
VEHICLE		ROLL OFF
YB11915		
REFERENCE	ORIGIN	
645134		

Gross Weight 75,820.00 lb  
Tare Weight 35,700.00 lb  
Net Weight 39,700.00 lb 19.96 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.96	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

13  
0645124

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature		Month Day Year 8 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials			Signature		Month Day Year 08 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year 8 21 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

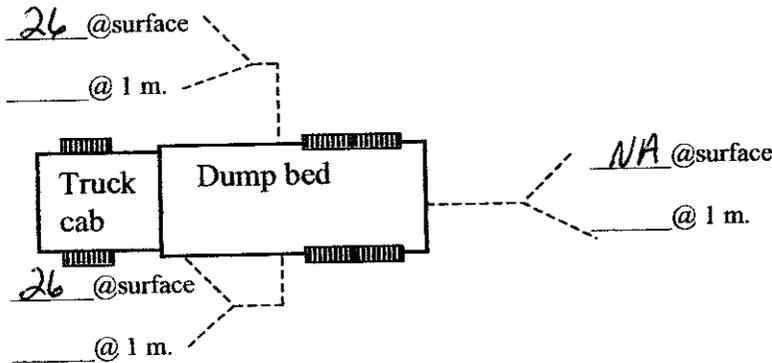
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1508 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

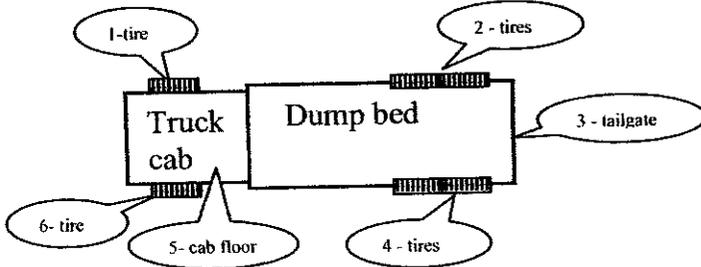
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

508473 461

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YS11915

SITE	TICKET	GRID
01	508473	0300
WEIGHMASTER		
3500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	3:35 pm	
DATE OUT	TIME OUT	
21 August 2007	3:55 pm	
VEHICLE	ROLL OFF	
YS11915		
REFERENCE	ORIGIN	
645123		

Gross Weight 74,340.00 lb  
 Tare Weight 34,260.00 lb  
 Net Weight 40,080.00 lb 20.04 TN

Inbound --

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.04	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Handwritten Signature]*

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

461  
0645123

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401					
4. Phone ( ) 303-273-3998				6. Phone ( ) 303-273-3998					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960003 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit	
					No.	Type	Drums	Gallons	
a. Norm Soil			CO L87 070908 Y511915		18	4	Y-Yards	T-Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Beckman				Signature			Month 8	Day 20	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Mike Murray				Signature			Month 8	Day 21	Year 07
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month 6	Day 11	Year 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

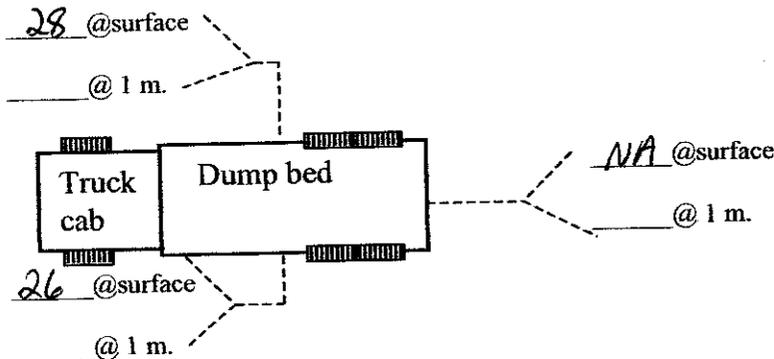
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1515 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: JD 01

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

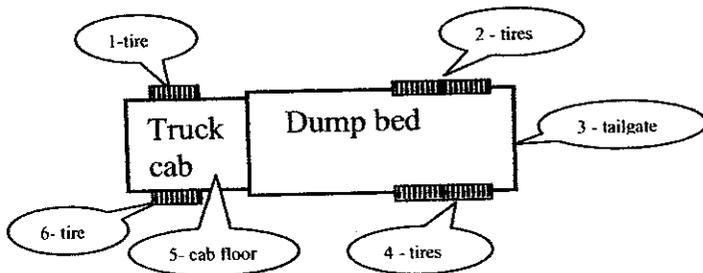
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

583477 07

FOOTHILLS LANDFILL  
 8700 HIGHWAY 98  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1800 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	525408	0000
WEIGHMASTER		
RECORDED Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	9:32 am	
DATE OUT	TIME OUT	
21 August 2007	3:32 pm	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645123		

Gross Weight 71,500.00 lb  
 Tare Weight 35,500.00 lb Inbound -  
 Net Weight 36,000.00 lb 18.11 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.11	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



JDOY

# NON-HAZARDOUS WASTE MANIFEST

0645122

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 3900 Hwy 93 Golden, CO ACCOUNT # 061603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CO L67 070906 Y511916		D Drums 8 Gallons	
b.				Y-Yards 1-Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Bankman				8 21 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
JOSE A. Ruiz					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	
Burtin T...					

GENERATOR

TRANSPORTER

T/S/D FACILITY

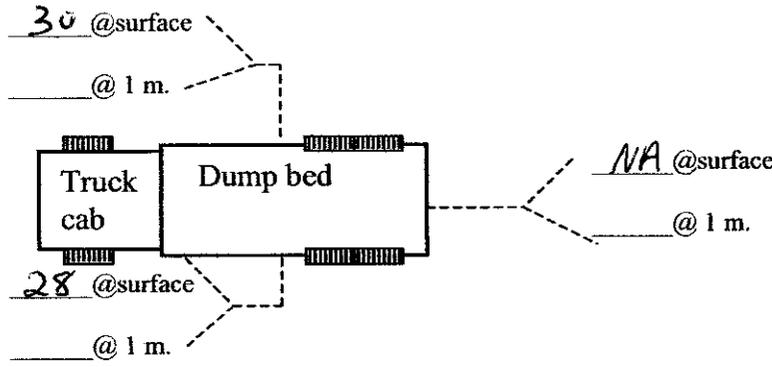
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1550 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD 04

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

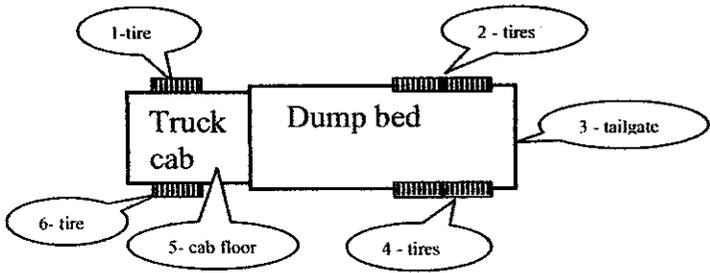
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
<b>Mfg.</b>	Ludlum	Ludlum	Ludlum	
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe	
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111	
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08	
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 202 cpm	
<b>Efficiency</b>	NA	17.6 %	13.9 %	
<b>MDA</b>	NA	17.0	563.4	

503493 04

FOOT-HILL LANDFILL  
 8900 HIGHWAY 70  
 GOLDEN  
 CO  
 80402  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 503493	GRID 6000
WEIGHMASTER 600056 Barbara 375 5		
DATE IN 21 August 2007	TIME IN 4:07 pm	
DATE OUT 21 August 2007	TIME OUT 4:07 pm	
VEHICLE # Y511915	ROLL OFF	
REFERENCE 040117	ORIGIN	

Gross Weight 75,000.00 lb  
 Tare Weight 35,640.00 lb  
 Net Weight 39,360.00 lb 17.83 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.83	TN	SU-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				



SIGNATURE 

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

# 0645119

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of					
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401					
4. Phone ( ) 303-273-3998				6. Phone ( ) 303-273-3998					
7. Transporter #1 Company Name			8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)			14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description			17. Allied Waste Approval # and Exp. Date		18. Containers		19. Total Quantity	20. Unit Wt/Vol	
					No.	Type	D Drums	0 Gallons	
a. Norm Soil			CO L87 070908 Y511915				Y-Yards	1-Tons	
b.									
c.									
d.									
21. Additional Descriptions for Materials Listed Above									
22. Special Handling Instructions and Additional Information									
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Printed/Typed Name Steve Schirmer				Signature			Month 8	Day 21	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials									
Printed/Typed Name Santiago Vargas				Signature			Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature			Month	Day	Year
26. Discrepancy Indication Space									
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)									
Printed/Typed Name				Signature			Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

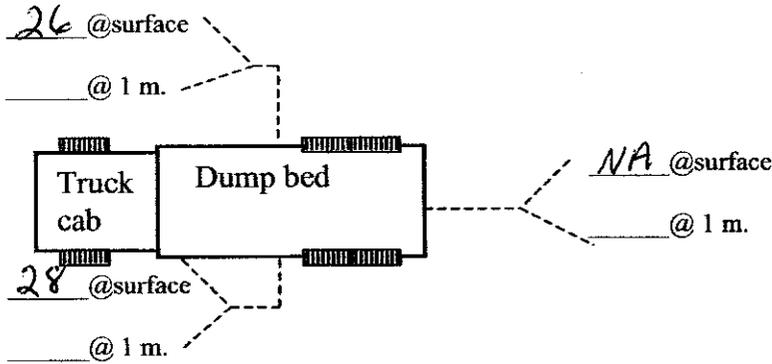
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 1555 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

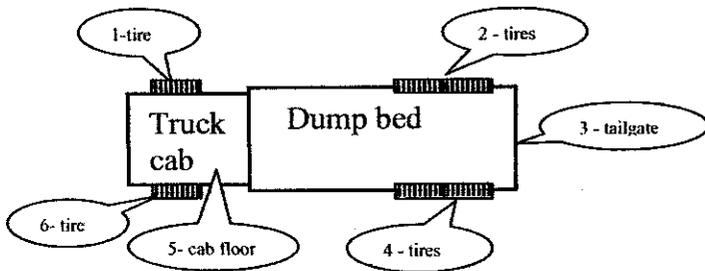
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 202 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	563.4	

80340 26

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
740600

COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	555727	0000
WEIGHMASTER		
000056 Barbara Jo E		
DATE IN	TIME IN	
21 August 2007	4:14 pm	
DATE OUT	TIME OUT	
21 August 2007	4:14 pm	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
643120		

Gross Weight 79,700.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 42,500.00 lb 21.25 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.25	TN	SW-CONT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE Ken S



NON-HAZARDOUS WASTE MANIFEST

24  
0645120

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Joe Grievet Trucking		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 30 Golden, CO ACCOUNT # 99913 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 187 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Joe Blumner		Signature 		Month 8	Day 2
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Ken Stannon		Signature 	
				Month 8	Day 21
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
				Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature 		Month	Day

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

Stockpile B

p. 1

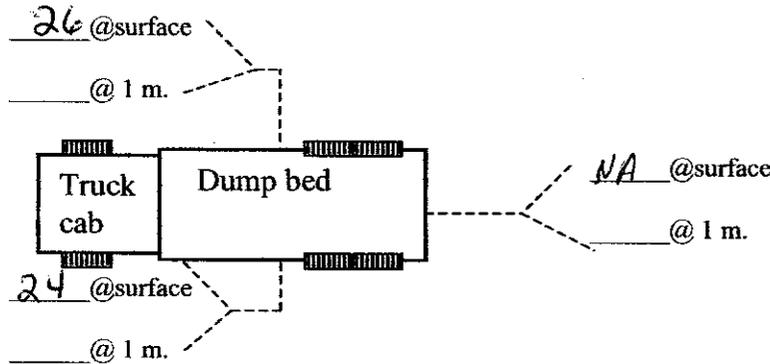
## Truck Departure Record Form

Truck ID	Date	Time In	Time Out	Estimated Quantity (yards)
Grieve 23	8/21/07	0700	0743	18
Grieve 24	8/21/07	0700	0751	18
Grieve 12	8/21/07	0700	0758	18
Grieve 8	8/21/07	0700	0803	18
Collazo 13	8/21/07	0700	0809	18
Murray 461	8/21/07	0700	0814	18
JD 01	8/21/07	0700	0821	18
JD 04	8/21/07	0700	0825	18
Grieve 23	8/21/07	0850	0900	18
Grieve 24	8/21/07	0850	0905	18
Grieve 12	8/21/07	0850	0910	18
Grieve 8	8/21/07	0850	0918	18
Collazo 13	8/21/07	0850	0926	18
Murray 461	8/21/07	0850	0932	18
JD 01	8/21/07	0850	0946	18
JD 04	8/21/07	0850	1012	18
Grieve 23	8/21/07	0950	1020	18
Grieve 24	8/21/07	1027	1029	18
Grieve 12	8/21/07	1027	1035	18
Grieve 8	8/21/07	1030	1042	18

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 0743 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

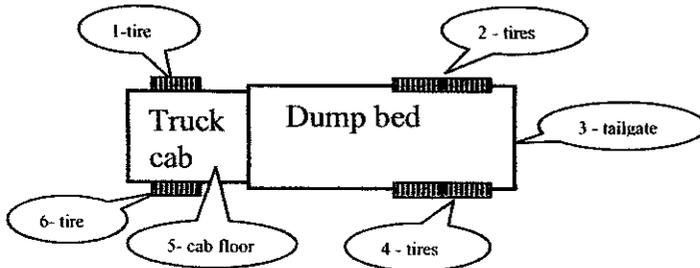
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503205 23

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 800605  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y51191E

SITE	TICKET	GRID
01	555440	0000
WEIGHMASTER		
2500756 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	8:08 am	
DATE OUT	TIME OUT	
21 August 2007	8:20 am	
VEHICLE	ROLL OFF	
Y51191E		
REFERENCE	ORIGIN	
04E147		

00 Gross Weight 70,520.00 lb  
 Tare Weight 39,100.00 lb  
 Net Weight 31,420.00 lb 15.71 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
15.71	TN	SO-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LI	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



NON-HAZARDOUS WASTE MANIFEST

0645149

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8000 Hwy 93 Golden, CO ACCOUNT # BR1603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve L. Hutton			Signature <i>[Signature]</i>		Month Day Year 2 4 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MARK PHELAN			Signature <i>[Signature]</i>		Month Day Year 8 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Steve L. Hutton			Signature <i>[Signature]</i>		Month Day Year 6 21 07

GENERATOR

TRANSPORTER

T/S/D FACILITY

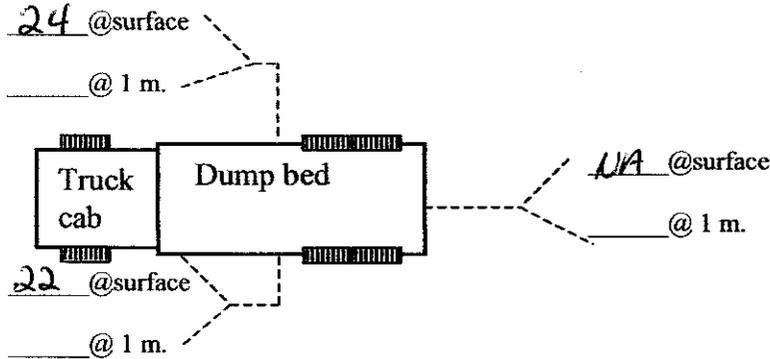
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0751 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 24

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

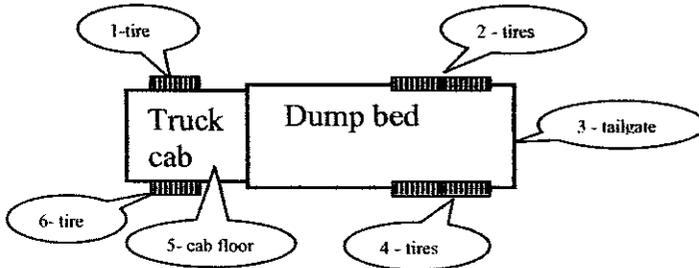
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

24

503207

FOOTHILLS LANDFILL  
 8700 HIGHWAY 93  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401  
 Contract: Y511915

SITE	TICKET	GRID
01	535642	0000
WEIGHMASTER		
5000056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	8:12 am	
DATE OUT	TIME OUT	
21 August 2007	8:24 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
643150		

CO Gross Weight 71,720.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 34,520.00 lb 17.26 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.26	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE

*[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0645150

24

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3698			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3698		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name <i>Joe Grieve Trucking</i>		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address ASKM Hwy 95 Golden, CO ACCOUNT # 90013 Colorado School of Mines		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO167 (7000) 1-511915		7	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name			Signature		Month Day Year
<i>[Signature]</i>			<i>[Signature]</i>		5 2 17
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
<i>KELLY LANNON</i>			<i>[Signature]</i>		8 21 17
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #1

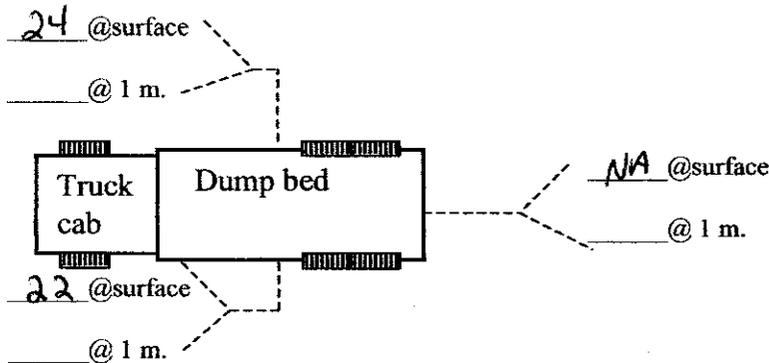
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0758 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 13 12 444

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

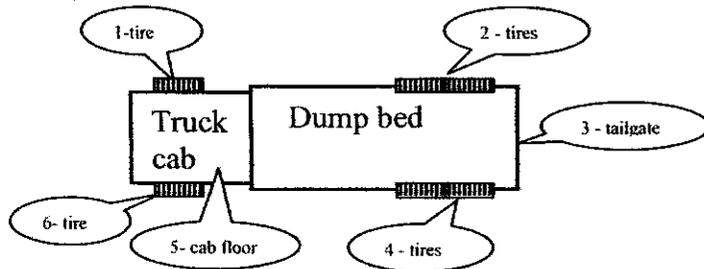
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 µrem/hr	0 cpm	β 202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

12

503208

FOOTHILLS LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 750603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN CO 80401

Contact: Y511915

#12

SITE	TICKET	GRID
01	585643	0000
WEIGHMASTER		
3500036 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	8:15 am	
DATE OUT	TIME OUT	
21 August 2007	8:25 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645131		

00 Gross Weight 73,560.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 35,860.00 lb 17.93 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.93	TN	50-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



NON-HAZARDOUS WASTE MANIFEST

0645151

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name Joe Grieco Trucking - #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 91 Golden, CO ACCOUNT # 990603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO L87 070908 Y611615		18. Containers	
				No.	Type
				18	18 Drums Y-Yards G-Gallons -Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Graham			Signature		Month Day Year 8 21 04
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve J. Oliver			Signature		Month Day Year 8 21 04
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Burt...			Signature		Month Day Year 8 21 04

GENERATOR

TRANSPORTER

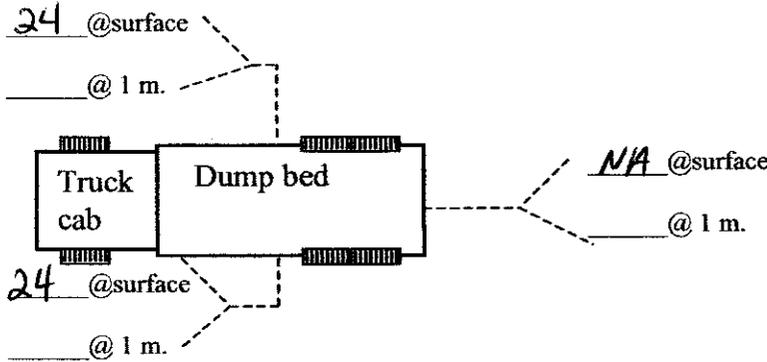
T/S/D FACILITY

TRANSPORTER #2

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0803 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

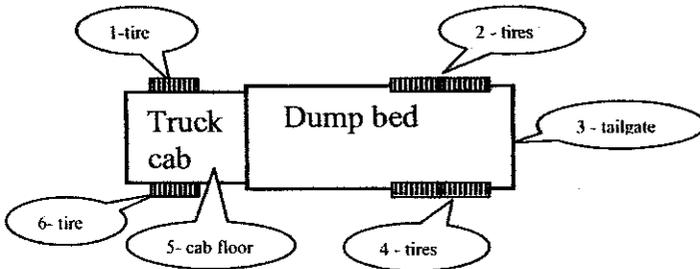
**Outgoing Limits** (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	β 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4



SIGNATURE

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.94	TN	SA-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

CO OTHER WEIGHTS 71,220.00 LB  
 TARE WEIGHT 36,540.00 LB  
 NET WEIGHT 34,680.00 LB 12.94 TN

WEIGHMASTER	0000	GRID
DATE IN	21 August 2007	TIME IN
DATE OUT	21 August 2007	TIME OUT
VEHICLE	21 August 2007	ROLL OFF
REFERENCE	01	TICKET
ORIGIN	0000	GRID

FOOTHILLS LANDFILL  
 8500 KIMBERLY ST  
 GOLDEN  
 CO  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401  
 (303) 440-1919

8-load ~~8~~ 503213



8

# NON-HAZARDOUS WASTE MANIFEST

## 0645152

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		1	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature <i>[Signature]</i>		Month 8	Day Year 27
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

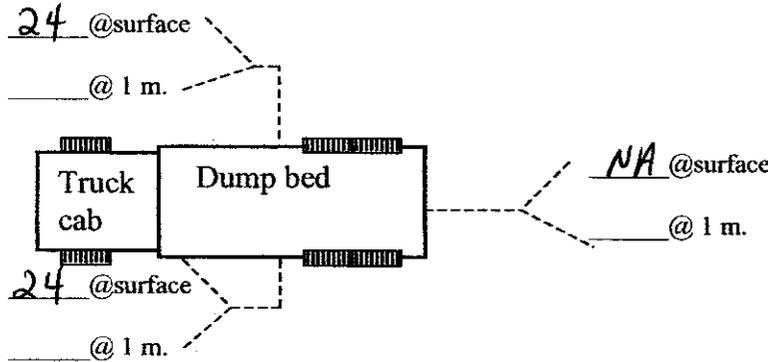
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0809 Surveyed by: Chicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 13

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



Notes:  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

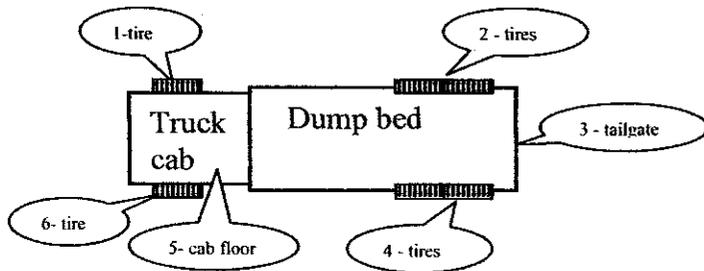
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	0 cpm	262 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

503217 13

FOOTHILLS LANDFILL  
 8500 HIGHWAY 92  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	YE11915	0000
WEIGHMASTER		
#500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	04:25 am	
DATE OUT	TIME OUT	
21 August 2007	04:37 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645153		

OO Gross Weight 70,080.00 lb  
 Tare Weight 33,700.00 lb      Inbound -  
 Net Weight 34,380.00 lb 17.19 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.19	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0645153

13

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 981803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070906 Y511915		18	Y-Yards
b.					T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Greg Beckman</i>			Signature <i>[Signature]</i>		Month Day Year 8 21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Rafael Colorado</i>			Signature <i>[Signature]</i>		Month Day Year 8 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

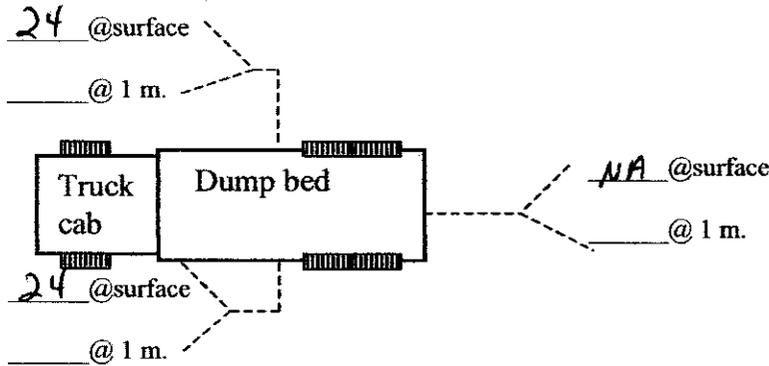
TRANSPORTER

T/S/D FACILITY

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 0814 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 461

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

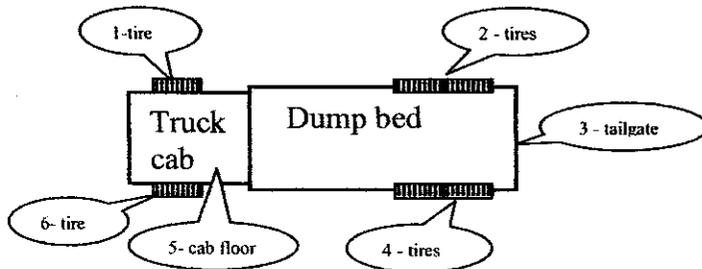
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2206		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	262 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

461

503226

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 80403  
 COLONIAL SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	555555	0000
WEIGHMASTER		
5500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	8:34 am	
DATE OUT	TIME OUT	
21 August 2007	8:43 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645154		

00 Gross Weight 71,900.00 lb  
 Tare Weight 34,260.00 lb Inbound -  
 Net Weight 37,640.00 lb 18.88 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.88	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0645154

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 890603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511315		181	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Buchanan		Signature <i>[Signature]</i>		Month 8	Day Year 31 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray		Signature <i>[Signature]</i>		Month 8	Day Year 31 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

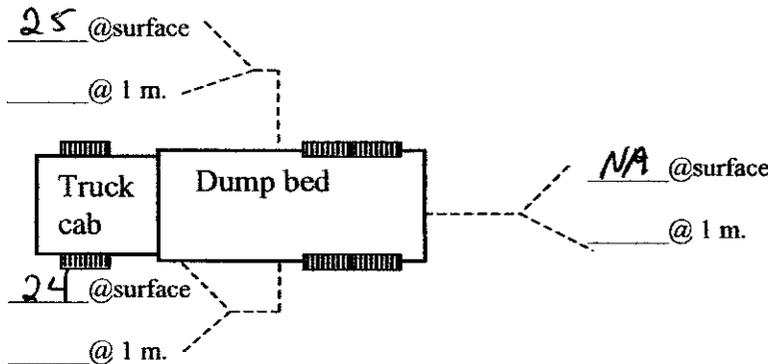
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0821 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: JD 01

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

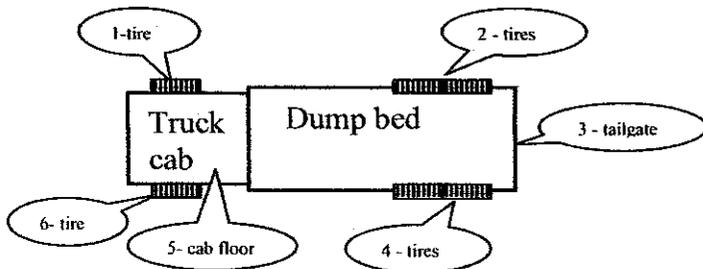
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	262 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

J001 503225

FOOTHILLS LANDFILL  
 8900 HIGHWAY 92  
 GOLDEN  
 CO  
 80602  
 COLORADO SCHOOL OF MINES  
 1300 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# YE11915

SITE	TICKET	GRID
01	5755660	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	8:46 am	
DATE OUT	TIME OUT	
21 August 2007	3:54 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645155		

GC Gross Weight 72,340.00 lb  
 Tare Weight 35,580.00 lb Inbound --  
 net Weight 36,760.00 lb 18.39 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.39	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



JDO1

# NON-HAZARDOUS WASTE MANIFEST

0645155

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998 6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 900903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		15	drums
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Chapman		Signature		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name JOSE W Ruiz		Signature		Month	Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name JOSE W Ruiz		Signature		Month	Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

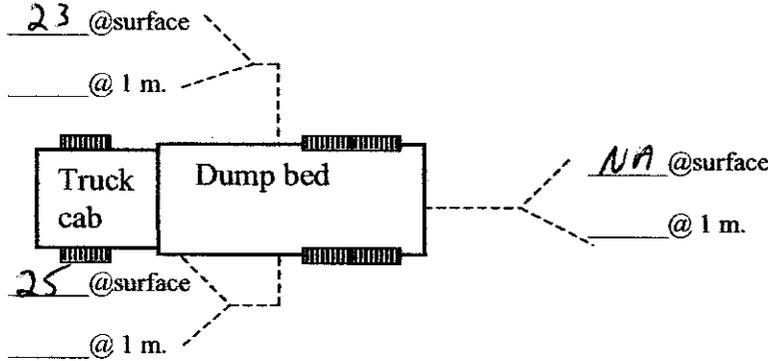
TRANSPORTER #2

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 0825 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: JD04

### Gamma Dose Rate Survey (µrem/hr)



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

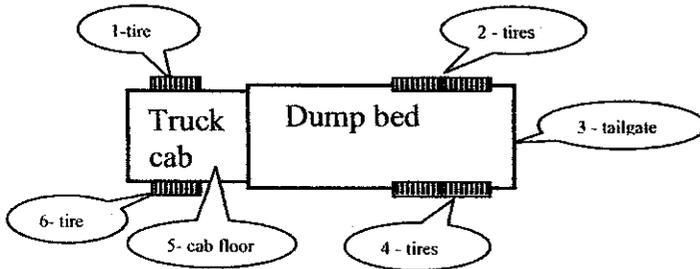
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	β 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

J004

503232

FOOTHILLS LANDFILL  
8700 HIGHWAY 92  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585666	0000
WEIGHMASTER		
5600056 Barbara Jo E		
DATE IN	TIME IN	
21 August 2007	8:57 am	
DATE OUT	TIME OUT	
21 August 2007	9:11 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645156		

GC Gross Weight 71,580.00 lb  
 Tare Weight 35,640.00 lb Inbound -  
 Net Weight 35,940.00 lb 17.92 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
17.92	TN	SW-DONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



J004

# NON-HAZARDOUS WASTE MANIFEST

0645156

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998				5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998	
4. Phone ( ) 303-273-3998		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 6900 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day Year
Steve Berkman				8	21 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
Santano Vargas				8	21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year
C. D. ...				7	...

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

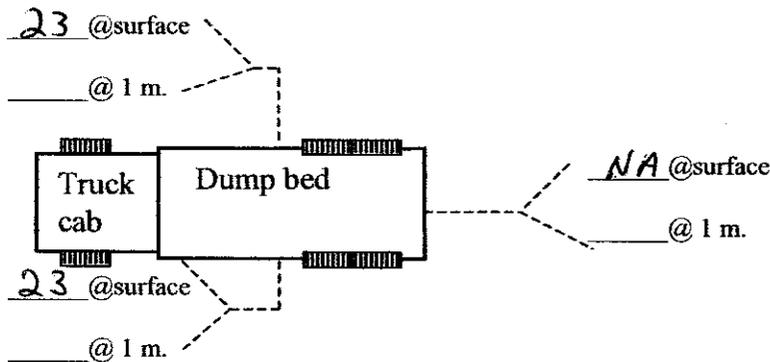
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0900 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 23

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits** (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

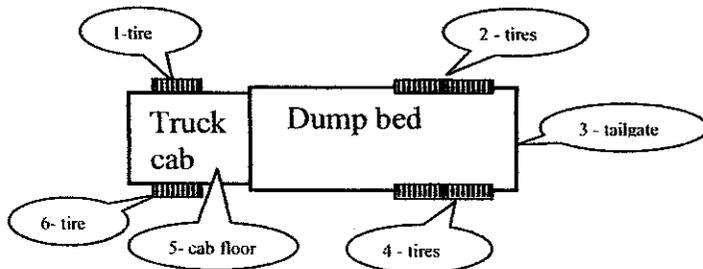
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

509241 23

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE1191E

SITE	TICKET	GRID
01	555275	0000
WEIGHMASTER		
8500056 Barbera Jo S		
DATE IN	TIME IN	
21 August 2007	9:19 am	
DATE OUT	TIME OUT	
21 August 2007	9:19 am	
VEHICLE	ROLL OFF	
YE1191E		
REFERENCE	ORIGIN	
645157		

OO Gross Weight 76,440.00 lb  
 Tare Weight 35,100.00 lb Inbound -  
 Net Weight 41,340.00 lb 20.67 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.67	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

Truck 23  
0645157

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8500 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 07C908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8 24 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark Phelan			Signature <i>[Signature]</i>		Month Day Year 8 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8 21 07

GENERATOR

TRANSPORTER

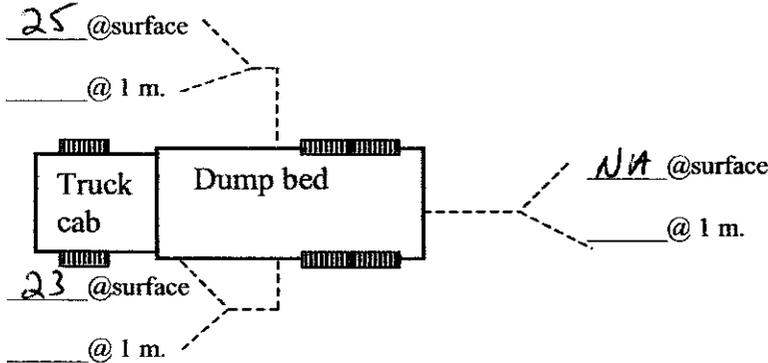
T/S/D FACILITY

TRANSPORTER #2

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0905 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

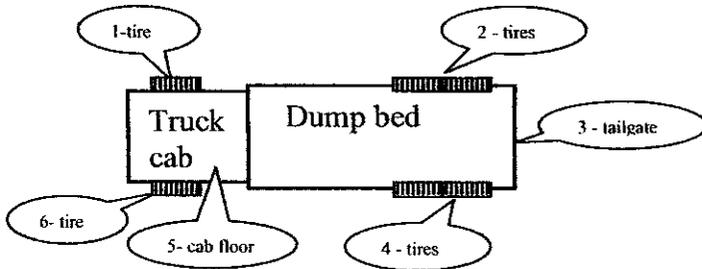
**Outgoing Limits** (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	β 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

24

503246

FOOTHILLS LANDFILL  
 1900 HIGHWAY 93  
 GOLDEN  
 CO  
 80401  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract# Y511915

SITE	TICKET	GRID
01	583680	0000
WEIGHMASTER		
000056 Barbara Jo B		
DATE IN	TIME IN	
21 August 2007	9:24 am	
DATE OUT	TIME OUT	
21 August 2007	9:24 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
18116		

02 Gross Weight 35,520.00 lb  
 Tare Weight 37,200.00 lb  
 Net Weight 38,320.00 lb 19.16 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.16	TN	SL-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE \_\_\_\_\_

*[Handwritten Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

Truck 24  
0645138

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3090			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3090		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Joe Griede		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO ACCOUNT # 80-900 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 167 070908 Y511315		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Joe Griede		Signature <i>[Signature]</i>		Month 8	Day Year 11 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Shannon		Signature <i>[Signature]</i>		Month 8	Day Year 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

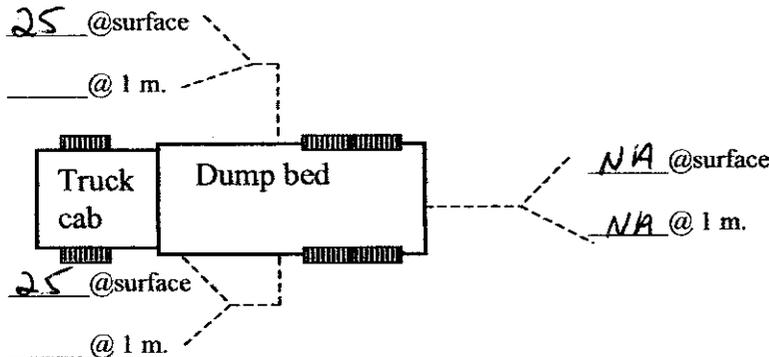
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 0910 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

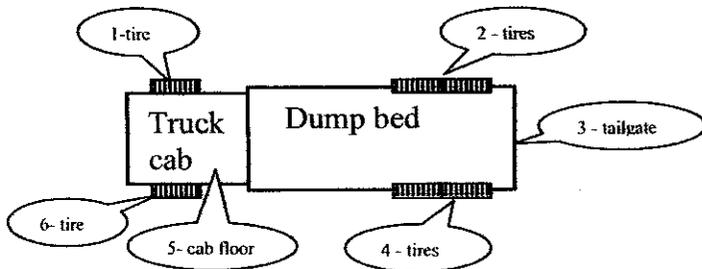
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

12

503251

FOOTHILL LANDFILL  
 2900 HIGHWAY 93  
 GOLDEN  
 CO  
 760603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585485	0000
WEIGHMASTER		
R500006 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	7:25 am	
DATE OUT	TIME OUT	
21 August 2007	7:58 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
Y511915		

Gross weight 76,520.00 lb  
 Tare weight 57,700.00 lb  
 Net weight 18,820.00 lb 19.41 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.41	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

18

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

12  
0645159

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 4. Phone ( ) 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 6. Phone ( ) 303-273-3998		
7. Transporter #1 Company Name Greene Trucking, AID.		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil b. c. d.		17. Allied Waste Approval # and Exp. Date CO L67 070908 Y511915		18. Containers	
				No. Type	
				18	
				19. Total Quantity 0 Drums 0 Gallons Y-Yards Tons	
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benson		Signature		Month 8	Day 21
Year 07					
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month 8	Day 21
Year 07					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Year					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month 6	Day 15
Year					

GENERATOR

TRANSPORTER

T/S/D FACILITY

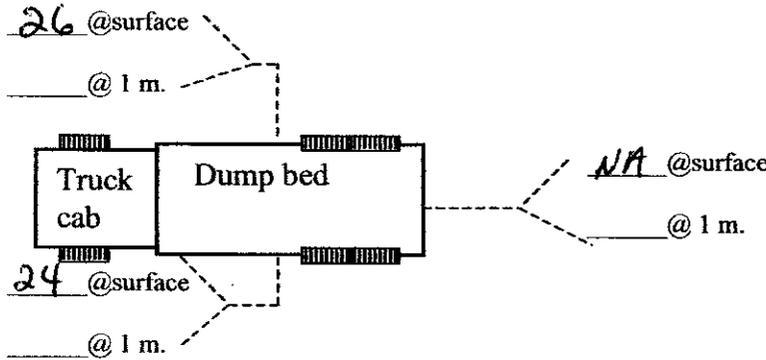
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0918 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



Notes:  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

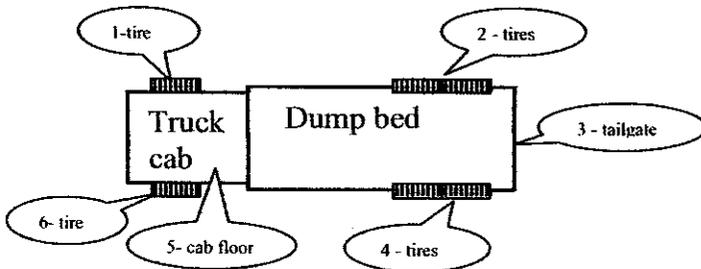
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

503257

8

FOOTHILLS LANDFILL  
 2900 HIGHWAY 52  
 GOLDEN  
 CO  
 804603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	535671	0000
WEIGHMASTER		
0000002 Barbara Jo B		
DATE IN	TIME IN	
21 August 2007	7:37 am	
DATE OUT	TIME OUT	
21 August 2007	7:37 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645150		

00 Gross Weight 75,220.00 lb  
 Tare Weight 36,540.00 lb Inbound -  
 Net Weight 38,680.00 lb 19.34 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.34	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

Truck 8  
0645160

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Benhous				12/21/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				08/21/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

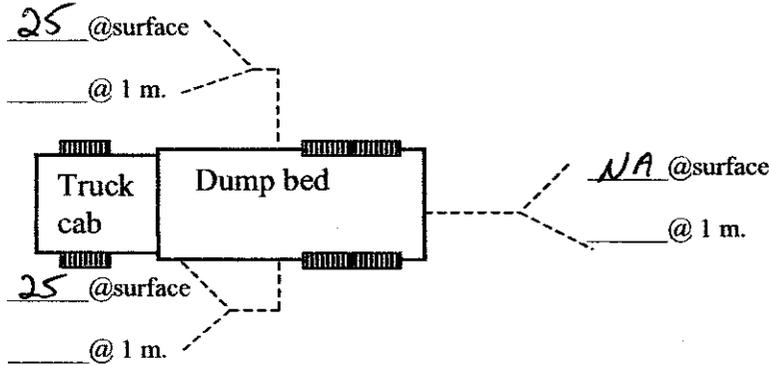
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0926 Surveyed by: Chicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 13

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



Notes:  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

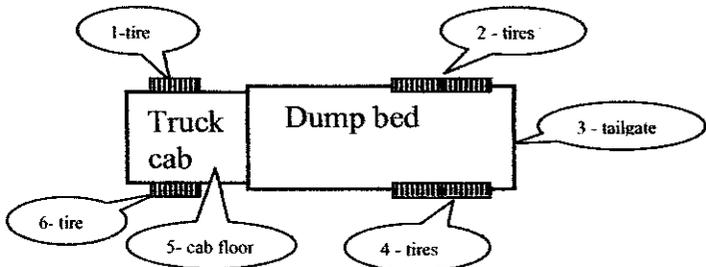
**Outgoing Limits** (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
  
TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 $\mu\text{rem/hr}$	0 cpm	262 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

503261 13

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585674	0000
WEIGHMASTER		
0500058 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	9:46 am	
DATE OUT	TIME OUT	
21 August 2007	9:46 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
245141		

GC Gross Weight 72,660.00 lb  
 Tare Weight 35,700.00 lb      Inbound -  
 Net Weight 36,960.00 lb 18.48 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
18.48	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

13  
0645161

Please print or type.

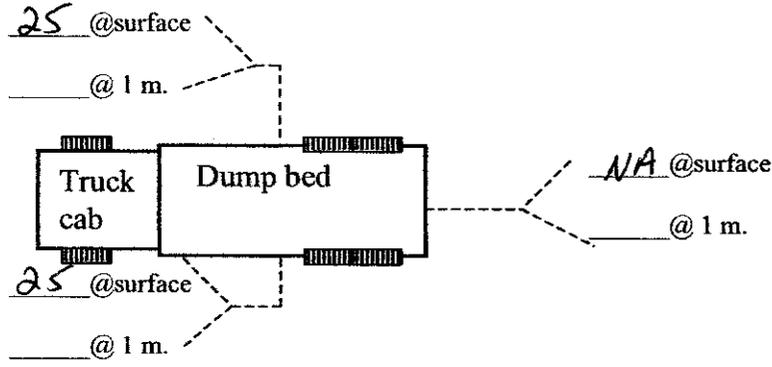
1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3098			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 95 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		18	Y-Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve [Signature]		Signature [Signature]		Month	Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials		Printed/Typed Name Rafael Colares		Signature [Signature]	
25. Transporter #2: Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0932 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no./state: 461

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

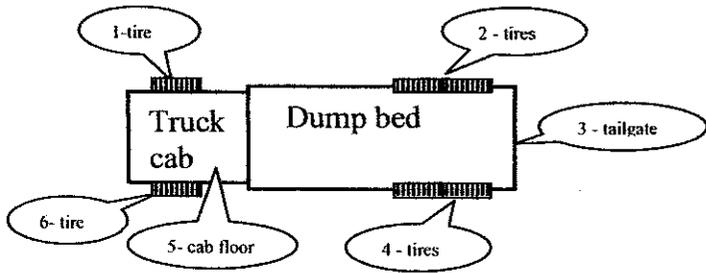
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 202 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17.0	563.4	

303236 461

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 760600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE	TICKET	GRID
01	585277	0000
WEIGHMASTER		
500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	7:51 am	
DATE OUT	TIME OUT	
21 August 2007	9:51 am	
VEHICLE	ROLL OFF	
YE11915		
REFERENCE	ORIGIN	
645142		

00 Gross Weight 74,720.00 lb  
 Tare Weight 34,280.00 lb Inbound -  
 Net Weight 40,440.00 lb 20.23 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.23	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



461

# NON-HAZARDOUS WASTE MANIFEST

## 0645162

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Footprints Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L87 070908 Y511915		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature <i>[Signature]</i>		Month Day Year 8 4 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Mike Murray			Signature <i>[Signature]</i>		Month Day Year 6 2 10
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Dale Papp			Signature <i>[Signature]</i>		Month Day Year 8 2 10

GENERATOR

TRANSPORTER

T/S/D FACILITY

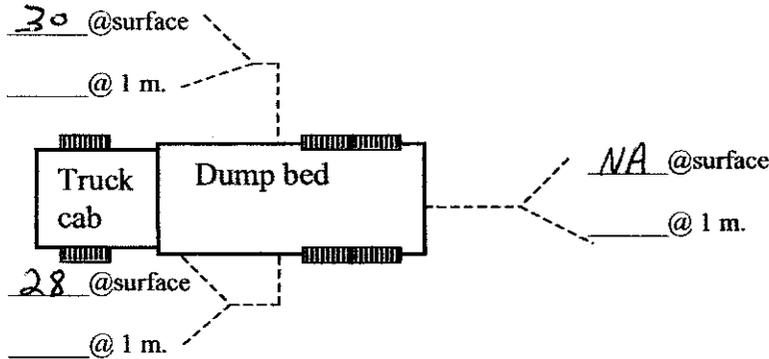
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 0946 Surveyed by: Chicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD 01

**Gamma Dose Rate Survey (µrem/hr)**



Notes:  
Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500 µrem)

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

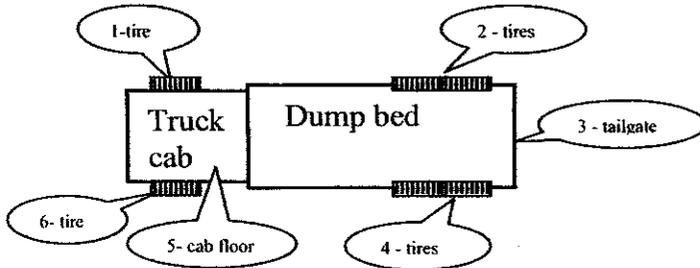
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	0 cpm	β 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503266 (TDO)

Foothills Landfill  
 8700 Highway 70  
 Golden  
 CO  
 80403  
 Colorado School of Mines  
 1500 Illinois St  
 Golden, CO 80401

Contract: 1211915

SITE	TICKET	GRID
01	535701	0000
WEIGHMASTER		
MS00056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	10:03 am	
DATE OUT	TIME OUT	
21 August 2007	10:03 am	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
645183		

Gross Weight 80,300.00 lb  
 Tare Weight 55,580.00 lb Inbound -  
 Net Weight 24,720.00 lb 22.36 Tn

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.36	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

JDO1  
0645163

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401					
4. Phone ( ) 303-273-3998			6. Phone ( ) 303-273-3998					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address Footfalls Landfill 8000 Hwy 93 Golden, CO ACCOUNT # 980603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone				
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers				
				No.	Type	19. Total Quantity	20. Unit Wt/Vol	
a. Norm Soil		CO 1.67 070908 Y511915		5	WV	Y-Yards	T-Tons	
b.								
c.								
d.								
21. Additional Descriptions for Materials Listed Above								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Steve Benjamin				Signature <i>[Signature]</i>		Month 6	Day 27	Year 07
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name JOSE W Ruiz				Signature <i>[Signature]</i>		Month	Day	Year
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month	Day	Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

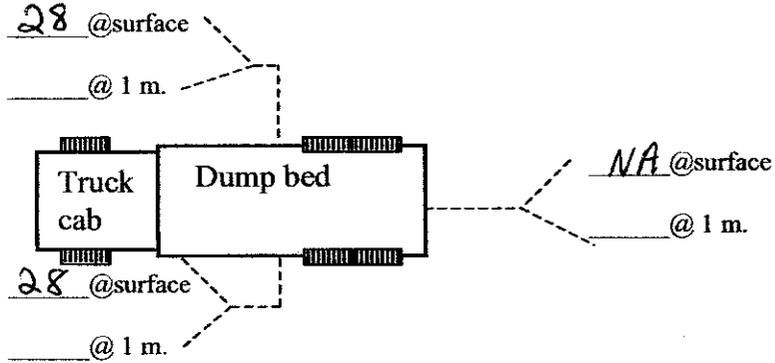
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 1012 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: JD04

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

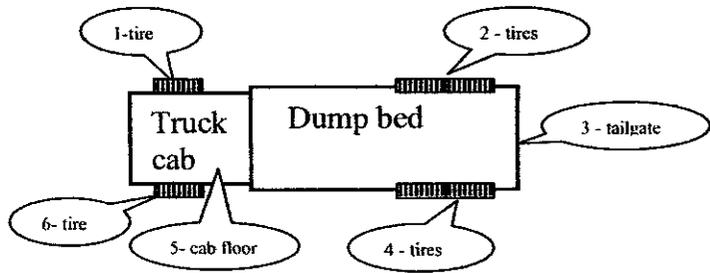
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
<b>Mfg.</b>	Ludlum	Ludlum	Ludlum	
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe	
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111	
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08	
<b>Bkg.</b>	17 µrem/hr	α 0 cpm	β 202 cpm	
<b>Efficiency</b>	NA	17.6 %	13.9 %	
<b>MDA</b>	NA	17.0	563.4	

503288 30

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ALLENCIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	555717	0000
WEIGHMASTER		
6500055 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	10:32 am	
DATE OUT	TIME OUT	
21 August 2007	10:32 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645164		

Gross weight 76,840.00 lb  
Tare weight 35,640.00 lb  
net weight 40,700.00 lb 20.35 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.35	TN	SU-COMY SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

J004  
0645164

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 960003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070908 Y511915		Y-Yards	T-Tons
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Beckman</i>			Signature <i>[Signature]</i>		Month Day Year 8 21 04
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Santiago Vargas</i>			Signature <i>[Signature]</i>		Month Day Year
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

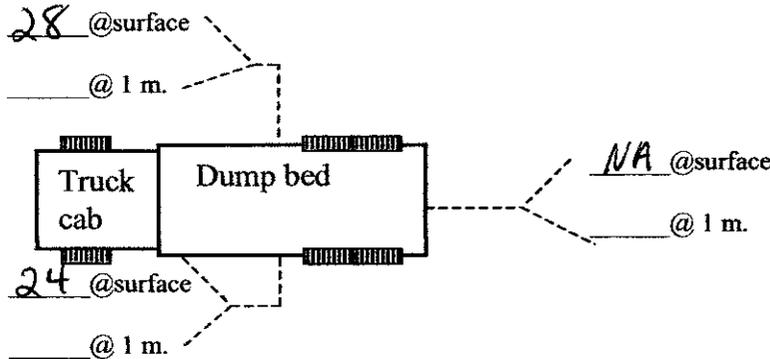
TRANSPORTER #2

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 1020 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 23

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

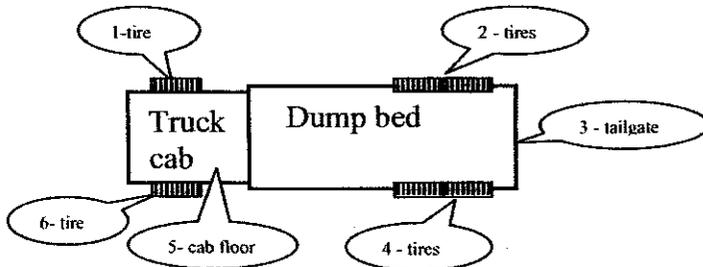
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	0 cpm	202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

503291

23

FOOTHILLS LANDFILL  
2700 HIGHWAY 93  
GOLDEN  
CO  
80603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 585724	GRID 75000
WEIGHMASTER		
3300055 Barbara Jo S		
DATE IN 21 August 2007	TIME IN 10:42 am	
DATE OUT 21 August 2007	TIME OUT 10:42 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 645185	ORIGIN	

OO Gross Weight 84,880.00 lb  
 Tare Weight 35,100.00 lb      Inbound --  
 Net Weight 49,780.00 lb 24.59 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.87	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



23

# NON-HAZARDOUS WASTE MANIFEST

## 0645165

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Fonhills Landfill 8900 Hwy 93 Golden, CO ACCOUNT # 000603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CC 1.07 070908 Y511915		6	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Benham				8	3
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
MARK PHELON				8	2
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day
B. J. ...				8	2

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #2

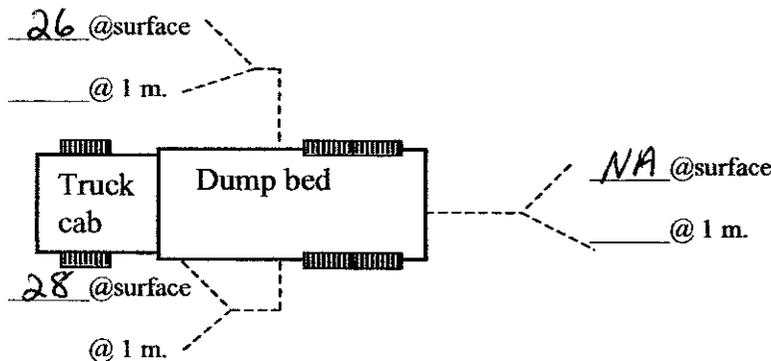
COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/21/07 1029 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no. /state: 24

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

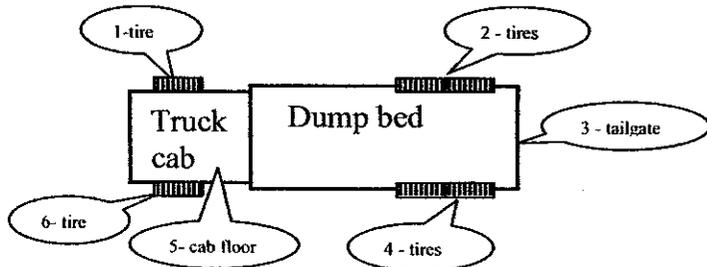
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	17 µrem/hr	0 cpm	β 202 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	17.0	563.4

503298-24

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN CO  
 80503  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE1191E

SITE	TICKET	GRID
01	528731	0000
WEIGHMASTER		
1500056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	10:50 am	
DATE OUT	TIME OUT	
21 August 2007	10:50 am	
VEHICLE	ROLL OFF	
YE1191E		
REFERENCE	ORIGIN	
845156		

Gross Weight 35,480.00 lb  
 Tare Weight 37,200.00 lb Inbound -  
 Net Weight 48,250.00 lb 24.14 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.14	TN	80-COFT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *Kear*



# NON-HAZARDOUS WASTE MANIFEST

24  
0645166

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name Soebried Trucking		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 8000 Hwy 93 Golden, CO ACCOUNT # 983903 (Colorado School of Mines)		14. US EPA ID Number		16. Waste Shipping Name and Description	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO 167 070908 - 611315		19. Total Quantity 18 Yards	
b.				20. Unit Wt/Vol Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Gardner			Signature <i>[Signature]</i>		Month Day Year /  /
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Ken Shannon			Signature <i>[Signature]</i>		Month Day Year 05/21/07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #1

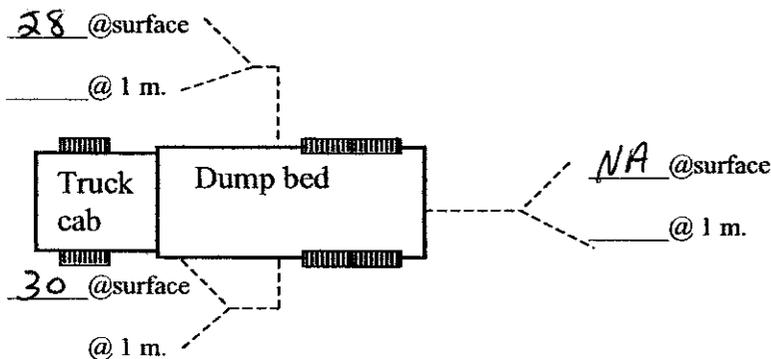
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1035 Surveyed by: CHicks / J Mattson

Trucking Company: Grieve Truck license plate no./state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

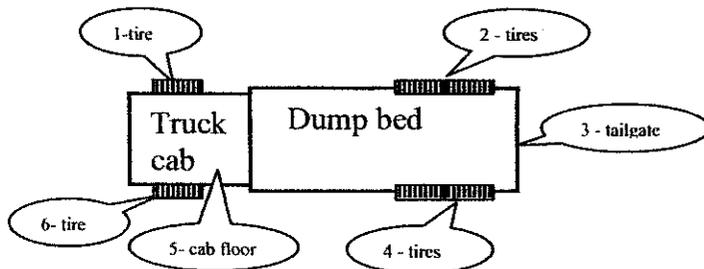
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$

Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<u>&lt; 220</u>				<u>&lt; 2200</u>		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	<u>8-15-08</u>	<u>8-15-08</u>
Bkg.	<u>17 <math>\mu\text{rem/hr}</math></u>	<u>0 cpm</u>	<u><math>\beta</math> 202 cpm</u>
Efficiency	<u>NA</u>	<u>17.6 %</u>	<u>13.9 %</u>
MDA	<u>NA</u>	<u>17.0</u>	<u>563.4</u>

503301 12

FOOTMILLS LANDFILL  
 8900 HIGHWAY 50  
 GOLDEN  
 CO  
 760600  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	505734	0000
WEIGHMASTER		
S0005e Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	10:55 am	
DATE OUT	TIME OUT	
21 August 2007	10:55 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645167		

00 Gross Weight 84,620.00 lb  
 Tare Weight 37,700.00 lb Inbound --  
 Net Weight 46,920.00 lb 23.46 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.46	TN	SU-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



NON-HAZARDOUS WASTE MANIFEST

0645167

12

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3000			6. Phone ( ) 303-273-3000		
7. Transporter #1 Company Name Civic Trucking Inc. #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8300 Hwy 93 Golden, CO ACCOUNT # 060603 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 167 070908 Y511915		D Drums	G Gallons
b.				Y-Yards	T-Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature <i>[Signature]</i>		Month Day Year
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Sean O'Leary			Signature <i>[Signature]</i>		Month Day Year 8 21 02
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature <i>[Signature]</i>		Month Day Year 8 21 02

GENERATOR

TRANSPORTER

T/S/D FACILITY

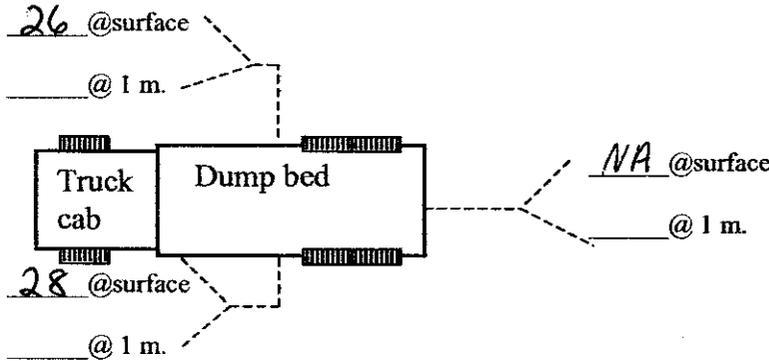
TRANSPORTER #2

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/21/07 1042 Surveyed by: CHicks / J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

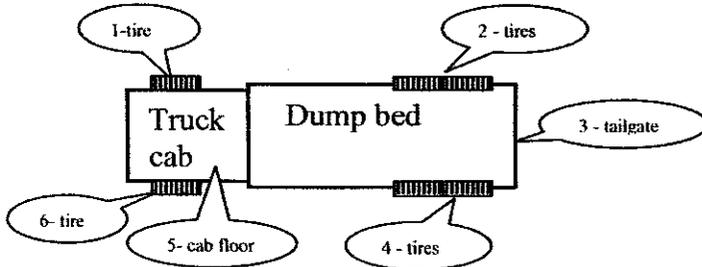
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 202 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17.0	563.4

502395

8

FOOTHILLS LANDFILL  
 8900 HIGHWAY 95  
 GOLDEN  
 CO  
 800603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	585738	0000
WEIGHMASTER		
PSC0056 Barbara Jo S		
DATE IN	TIME IN	
21 August 2007	11:01 am	
DATE OUT	TIME OUT	
21 August 2007	11:01 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
645168		

Gross Weight 63,580.00 lb  
 Tare Weight 36,540.00 lb  
 net Weight 47,040.00 lb 23.52 TN

Inbound

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
23.52	TN	SW-COFT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



8

SIGNATURE



# NON-HAZARDOUS WASTE MANIFEST

0645188

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 3970 Hwy 30 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Iron Sulfide		17. Allied Waste Approval # and Exp. Date C01017-70000 12/11/15		18. Containers No. Type 18 Y	19. Total Quantity 0.00 tons Yards
b.					20. Unit Wt/Vol Tons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Johnson			Signature 		Month Day Year 12 11 15
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature 		Month Day Year 08 21 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

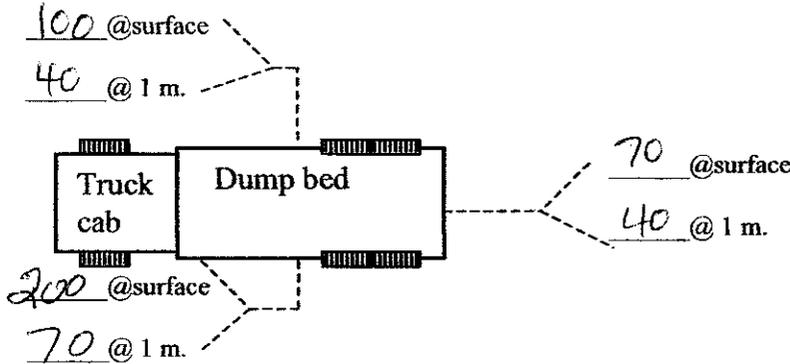
COM000033



**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/20/07 0845 Surveyed by: J Mattson  
 Trucking Company: Bellio Trucking Truck license plate no. /state: 35 COA070031

**Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )**



Notes:  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

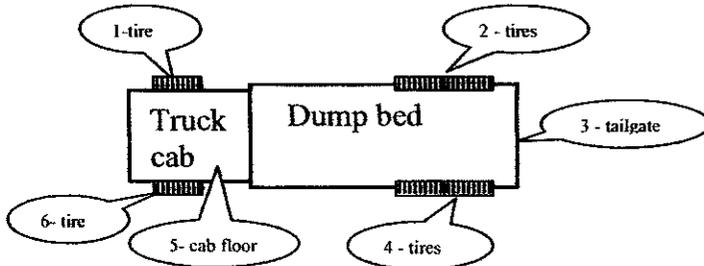
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = 0.1

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220		<220		<2200		<2200

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	553.0

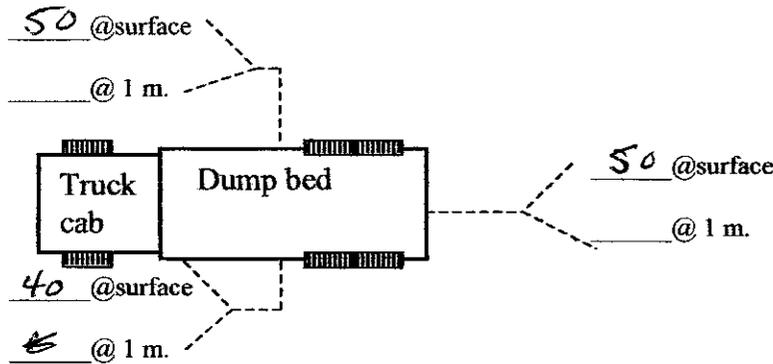


## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 0900 Surveyed by: J Mattson

Trucking Company: Bellco Trucking Truck license plate no./state: 19 CO A110812

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

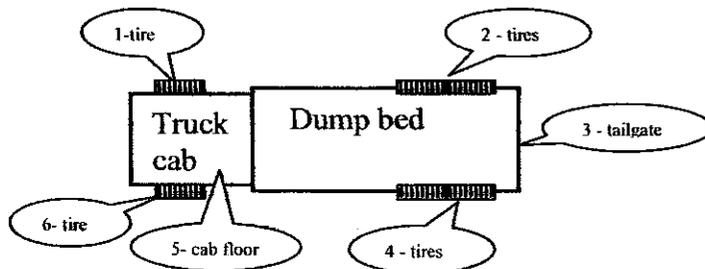
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = 0

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	553.0

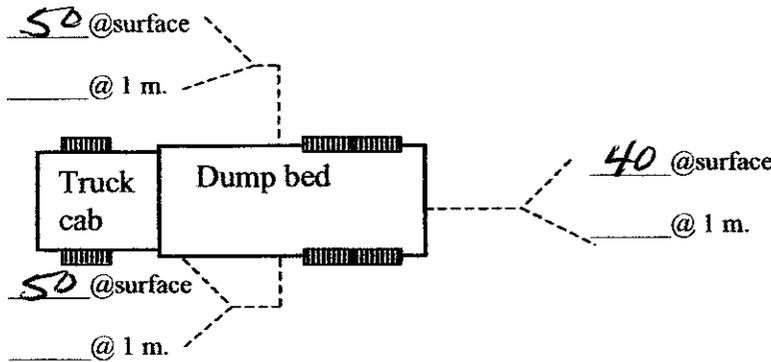


## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 0900 Surveyed by: J Mattson

Trucking Company: Bellio Trucking Truck license plate no./state: 14 CO A100898

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

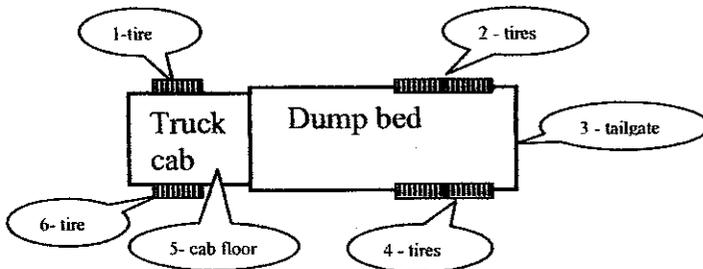
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = 0

### Alpha/Beta Total and Removable Contamination Survey



Removable Contamination limits:

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	553.0

Truck 14

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

10/17/93

ENVIRONMENTAL

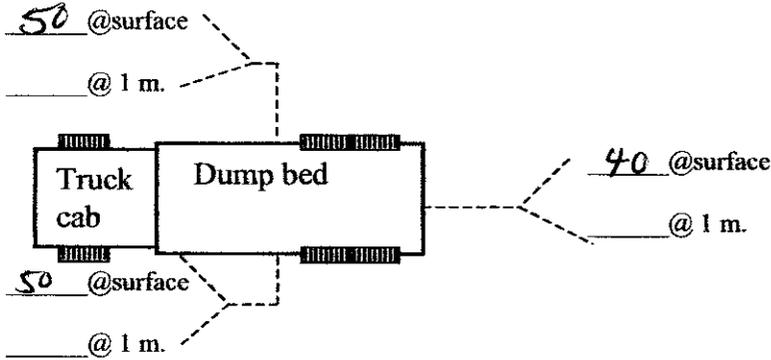
Form Approved. OMB No. 2050-0039

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 000010628170	2. Page 1 of 1	3. Emergency Response Phone (800) 489-3718	4. Manifest Tracking Number <b>000927143 FLE</b>			
5. Generator's Name and Mailing Address Colorado School of Mines 1600 Illinois Avenue Golden, CO 80402 Generator's Phone: (303) 239-3998				Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name Peter Trucking Inc				U.S. EPA ID Number 0000983718200				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Green Industries Paper Trade LLC 10250 East Highway 20 Green Trade Center, CO Facility's Phone: (303) 384-2792				U.S. EPA ID Number 00005130044				
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
		No.	Type					
	1. HAZARDOUS WASTE REGULATED, N/A, NONE	1	FD	100	Y			
	2.							
	3.							
	4.							
14. Special Handling Instructions and Additional Information								
15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offeror's Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>		Month 08	Day 20	Year 2009
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>		Month 08	Day 20	Year 2009
Transporter 2 Printed/Typed Name				Signature		Month	Day	Year
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
18b. Alternate Facility (or Generator)				Manifest Reference Number: _____ U.S. EPA ID Number _____				
Facility's Phone: _____								
18c. Signature of Alternate Facility (or Generator)						Month	Day	Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name				Signature		Month	Day	Year

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 0930 Surveyed by: J. Mattson  
 Trucking Company: Bellio Truck license plate no./state: 21 CO 197KGV

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



Notes:  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits** (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits** (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

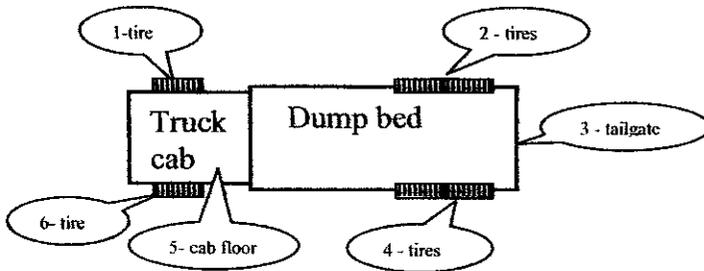
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = 0

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
Efficiency	NA	17.6%	13.9%
MDA	NA	43.5	553.0

Truck 21

EPA 1575933

EPA 05-27-1807

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

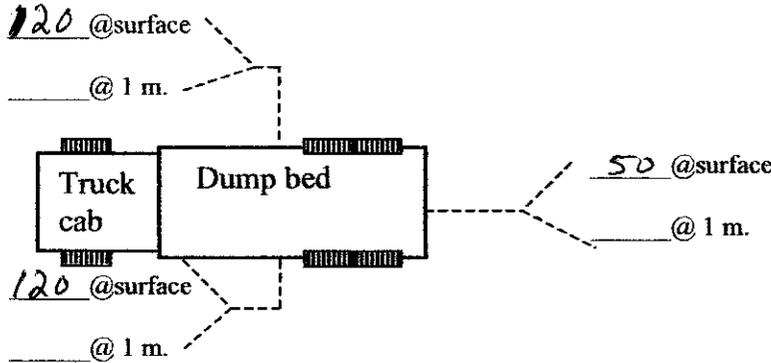
<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 1001052070	2. Page 1 of 1	3. Emergency Response Phone 800 424 9315	4. Manifest Tracking Number <b>000927144 FLE</b>			
5. Generator's Name and Mailing Address 1500 Adams Avenue Carter, MO 64611 Generator's Phone: 816 273 1844				Generator's Site Address (if different than mailing address)				
6. Transporter 1 Company Name D&B Trucking Inc.				U.S. EPA ID Number 000904728206				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Waste Transfer Station 10025 East Highway 09 New Trent, MO 64605 Facility's Phone: (816) 388 2191				U.S. EPA ID Number 0009040404				
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
				No.	Type			
	1. HAZARDOUS WASTE, LIQUID, UNREACTED, AQUEOUS			1	46	10	Y	RD01
	2.							
	3.							
4.								
14. Special Handling Instructions and Additional Information 1 01052070								
15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.								
Generator's/Offoror's Printed/Typed Name Steve Beckman for Lisa Howell				Signature <i>[Signature]</i>		Month Day Year 08 10 2007		
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
17. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name D&B Trucking				Signature <i>[Signature]</i>		Month Day Year 08 10 2007		
Transporter 2 Printed/Typed Name				Signature		Month Day Year		
18. Discrepancy								
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
Manifest Reference Number:								
18b. Alternate Facility (or Generator)				U.S. EPA ID Number				
Facility's Phone:								
18c. Signature of Alternate Facility (or Generator)						Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)								
1.		2.		3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a								
Printed/Typed Name				Signature		Month Day Year		

Generator must retain this manifest for one year after the date the generator is required to clean up the site.

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/20/07 1020 Surveyed by: CHicks/J Mattson  
 Trucking Company: Beluro Truck license plate no./state: 16 CO A114674

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500 µrem)

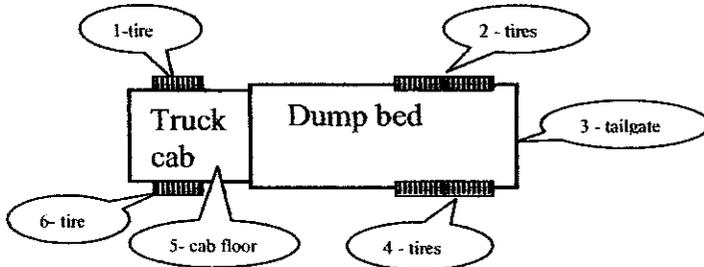
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



Removable Contamination limits:  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	18 µrem	α 1.0 cpm	β 252 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	43.5	553.0

Truck 16

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>	1. Generator ID Number 000010628170	2. Page 1 of 1	3. Emergency Response Phone (800) 452-3118	4. Manifest Tracking Number <b>000927141 FLE</b>
-----------------------------------------	----------------------------------------	-------------------	-----------------------------------------------	-----------------------------------------------------

5. Generator's Name and Mailing Address  
Colorado School of Mines  
1500 Illinois Avenue  
Golden, CO 80401  
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name  
Mellor Trucking Inc.  
U.S. EPA ID Number  
0000183770200

7. Transporter 2 Company Name  
U.S. EPA ID Number

8. Designated Facility Name and Site Address  
Columbian Hazardous Waste Treatment  
15000 East Highway, 90  
Superior, CO 80087  
Facility's Phone: (303) 466-2299  
U.S. EPA ID Number  
0000091500404

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
		No.	Type			
	1. 100 LBS HAZARDOUS WASTE, UNIDENTIFIED, FLAMMABLE LIQ. SOLID	1	EP	13	100 LBS	NONE
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information  
1. (800) 452-3118

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offor's Printed/Typed Name  
Sara Sorenson, in charge of waste site  
Signature  
Month Day Year  
08 20 07

16. International Shipments  
 Import to U.S.  Export from U.S. Port of entry/exit:  
Transporter signature (for exports only):  
Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials  
Transporter 1 Printed/Typed Name  
Crawford Barber  
Signature  
Month Day Year  
08 20 07  
Transporter 2 Printed/Typed Name  
Signature  
Month Day Year

18. Discrepancy  
18a. Discrepancy Indication Space  
 Quantity  Type  Residue  Partial Rejection  Full Rejection  
Manifest Reference Number:

18b. Alternate Facility (or Generator)  
U.S. EPA ID Number  
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)  
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)  
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a  
Printed/Typed Name  
Signature  
Month Day Year

GENERATOR

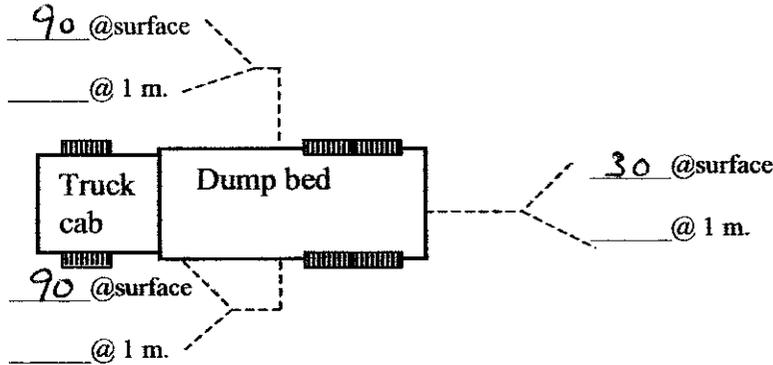
TRANSPORTER INT'L

DESIGNATED FACILITY

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 8/20/07 1034 Surveyed by: CHicks/J Mattson  
 Trucking Company: Bellro Truck license plate no./state: 13 COA 094300

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

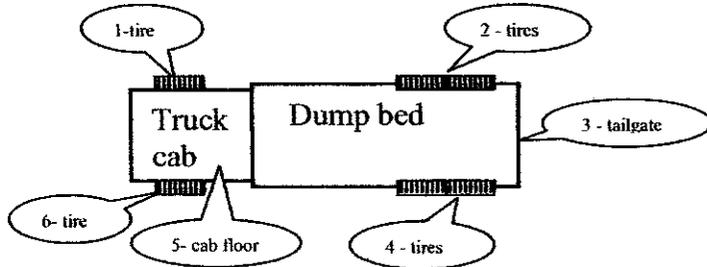
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	18 µrem	α 1.0 cpm	β 252 cpm
<b>Efficiency</b>	NA	17.6 %	13.8 cpm
<b>MDA</b>	NA	43.5	553.0

Truck 13

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 1001001002010101	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number <b>000927150 FLE</b>	
5. Generator's Name and Mailing Address 1501 Harris Avenue Borden, MO 64601 307-773-0000			Generator's Site Address (if different than mailing address)			
6. Transporter 1 Company Name Clean Harbors, Inc.			U.S. EPA ID Number 1001001002010101			
7. Transporter 2 Company Name			U.S. EPA ID Number			
8. Designated Facility Name and Site Address 10050 East Highway 30 Deer Trail, CO 80109 303-456-1234			U.S. EPA ID Number 1001001002010101			
9a. HM			9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers	11. Total Quantity
					No.	Type
1. 1.000 LITERS OF 100% METHANOL, N/A, H001					1	200
2.						
3.						
4.						
14. Special Handling Instructions and Additional Information						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offoror's Printed/Typed Name Steve Brubaker				Signature		Month Day Year 02 10 07
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name				Signature		Month Day Year
Transporter 2 Printed/Typed Name				Signature		Month Day Year
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name				Signature		Month Day Year

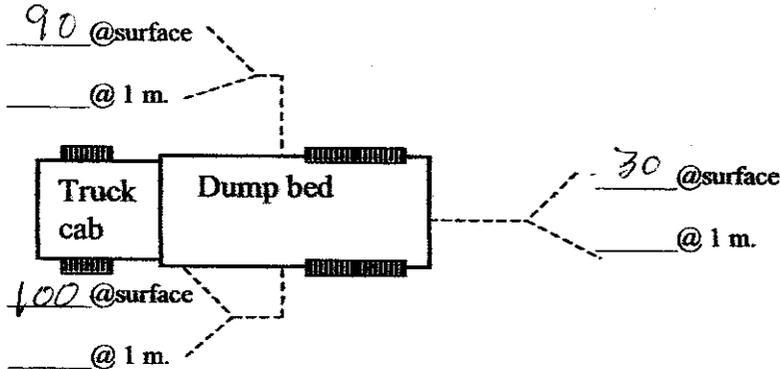
# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 1410 Surveyed by: Chicks/J Mathson

Trucking Company: Bellio Truck license plate no./state: 35 Trailer 10

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )

CO A070031



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

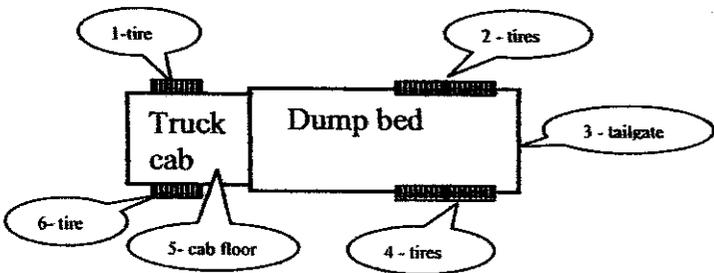
Outgoing Limits (49CFR 173.441)  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	43.5	553.0	

Truck 35

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>	1. Generator ID Number C O L O R A D O 2 0 1 7 0	2. Page 1 of 1	3. Emergency Response Phone (800) 424-9718	4. Manifest Tracking Number <b>000927151 FLE</b>
-----------------------------------------	-----------------------------------------------------	-------------------	-----------------------------------------------	-----------------------------------------------------

5. Generator's Name and Mailing Address  
Colorado School of Mines  
1500 Illinois Avenue  
Golden, CO 80401  
Generator's Phone: 303-273-3928

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name  
Riddo Trucking Inc  
U.S. EPA ID Number  
0 0 0 9 9 0 7 7 8 2 0 0

7. Transporter 2 Company Name  
U.S. EPA ID Number

8. Designated Facility Name and Site Address  
Clean Materials East, Inc  
10000 East Highways, 30  
New Nat. CO 80405  
Facility's Phone: 303-273-2293  
U.S. EPA ID Number  
0 0 0 9 9 1 3 0 0 4 8 4

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
	1. HAZARDOUS WASTE, LIQUID, UNREACTED, UNSTABILIZED, UNCLE	1	IBC	17	19	U001	
	2.						
	3.						
	4.						

14. Special Handling Instructions and Additional Information  
1 - UNCLE

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offoror's Printed/Typed Name  
Steve Decker, President  
Signature  
Month Day Year  
10 20 08

16. International Shipments  
 Import to U.S.  Export from U.S. Port of entry/exit: \_\_\_\_\_  
Transporter signature (for exports only): \_\_\_\_\_ Date leaving U.S.: \_\_\_\_\_

17. Transporter Acknowledgment of Receipt of Materials  
Transporter 1 Printed/Typed Name  
Terry J. Cary  
Signature  
Month Day Year  
07 20 08  
Transporter 2 Printed/Typed Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Month Day Year: \_\_\_\_\_

18. Discrepancy  
18a. Discrepancy Indication Space  
 Quantity  Type  Residue  Partial Rejection  Full Rejection  
Manifest Reference Number: \_\_\_\_\_

18b. Alternate Facility (or Generator)  
U.S. EPA ID Number  
Facility's Phone: \_\_\_\_\_

18c. Signature of Alternate Facility (or Generator)  
Month Day Year

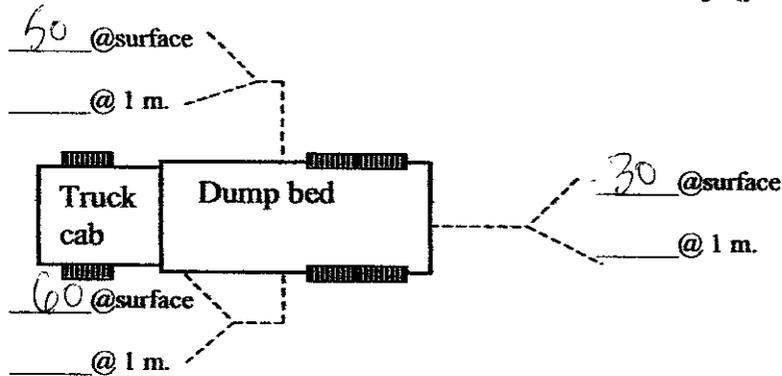
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)  
1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a  
Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month Day Year \_\_\_\_\_

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 1430 Surveyed by: Chris/J Mattson  
 Trucking Company: Bellio Truck license plate no./state: 19 CO A110812

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

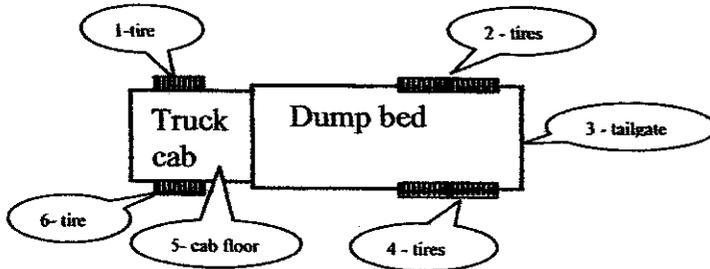
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	553.0

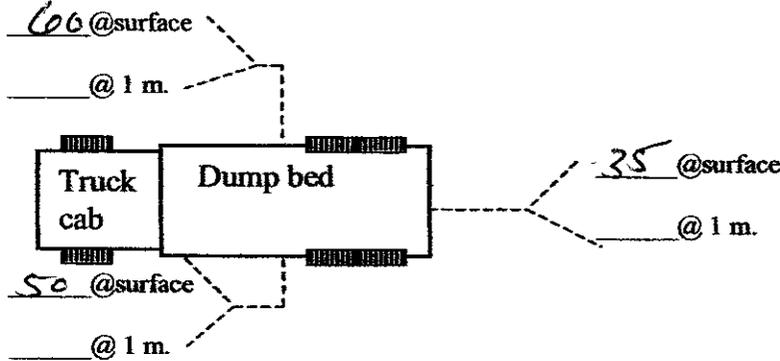
*Thule 19*

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <i>0001493-3710</i>	2. Page 1 of <i>1</i>	3. Emergency Response Phone <i>(800) 493-3710</i>	4. Manifest Tracking Number <b>000327149 FLE</b>						
5. Generator's Name and Mailing Address <i>Colorado School of Mines 1500 Illinois Avenue Golden, CO 80401</i>				Generator's Site Address (if different than mailing address)							
Generator's Phone: <i>303 273 4000</i>				U.S. EPA ID Number <i>00090376200</i>							
6. Transporter 1 Company Name <i>Waste Transfer Inc.</i>				U.S. EPA ID Number							
7. Transporter 2 Company Name				U.S. EPA ID Number							
8. Designated Facility Name and Site Address <i>WASTE STORAGE 1500 ILLINOIS AVENUE GOLDEN, CO 80401</i>				U.S. EPA ID Number <i>000901000184</i>							
Facility's Phone: <i>(303) 230 7000</i>											
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes			
		1. <i>HAZARDOUS WASTE REGULATED BY RCRA, RCRA</i>		No.	Type						
		2.									
		3.									
		4.									
14. Special Handling Instructions and Additional Information											
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.											
Generator's/Offeror's Printed/Typed Name <i>Steve Bergman for Waste Transfer Inc.</i>							Signature <i>[Signature]</i>		Month <i>07</i>	Day <i>10</i>	Year <i>2007</i>
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____										
	17. Transporter Acknowledgment of Receipt of Materials										
	Transporter 1 Printed/Typed Name <i>[Signature]</i>							Signature <i>[Signature]</i>		Month <i>[ ]</i>	Day <i>[ ]</i>
Transporter 2 Printed/Typed Name							Signature		Month	Day	Year
DESIGNATED FACILITY	18. Discrepancy										
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection										
	18b. Alternate Facility (or Generator) U.S. EPA ID Number										
	Facility's Phone:										
	18c. Signature of Alternate Facility (or Generator)							Month	Day	Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)											
1.		2.		3.		4.					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a											
Printed/Typed Name							Signature		Month	Day	Year

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 1437 Surveyed by: CHicks/J Mathson  
 Trucking Company: Bellio Truck license plate no./state: 14

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

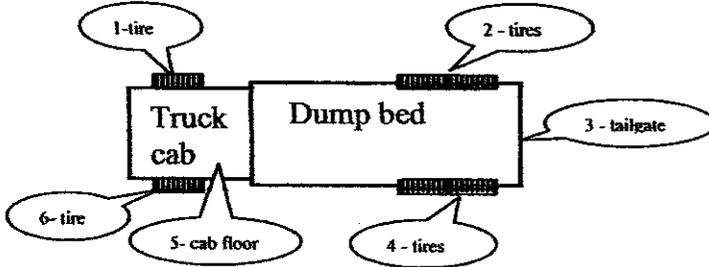
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08
<b>Bkg.</b>	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
<b>Efficiency</b>	NA	17.6 %	13.9 %
<b>MDA</b>	NA	43.5	553.0

Truck 14

000578433

EPA Form 8700-22 (Rev. 3-05)

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

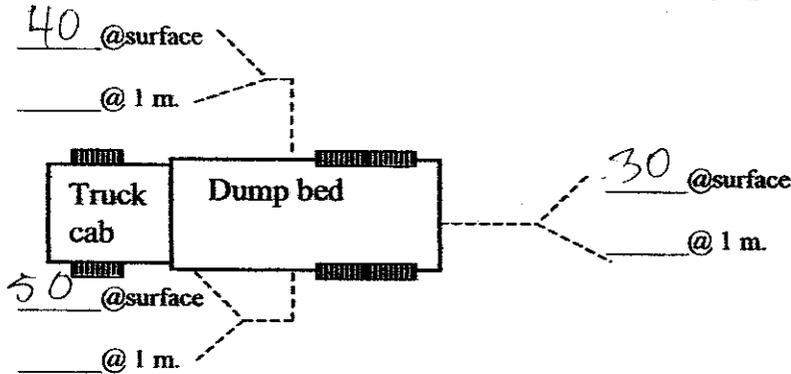
<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 000578433	2. Page 1 of 1	3. Emergency Response Phone 800-424-2700	4. Manifest Tracking Number <b>000927142 FLE</b>		
5. Generator's Name and Mailing Address 10055 East Highway, #6 Crown Point, IN 46032 Generator's Phone: 303-222-2940				Generator's Site Address (if different than mailing address)			
6. Transporter 1 Company Name Baker Transport				U.S. EPA ID Number 000000000000000000			
7. Transporter 2 Company Name				U.S. EPA ID Number			
8. Designated Facility Name and Site Address 10055 East Highway, #6 Crown Point, IN 46032 Facility's Phone: 303-222-2940				U.S. EPA ID Number 000000000000000000			
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes	
		No.	Type				
	1. HAZARDOUS WASTE, LIQUID, REGULATED, NON-FLAMMABLE	1	5/D	10	1	RD001	
	2.						
	3.						
	4.						
14. Special Handling Instructions and Additional Information 10055-418							
15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.							
Generator's/Offoror's Printed/Typed Name Steve Simpson				Signature <i>[Signature]</i>		Month Day Year 08 21 07	
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____							
17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name: Steve Simpson Signature: <i>[Signature]</i> Month Day Year: _____ Transporter 2 Printed/Typed Name: _____ Signature: _____ Month Day Year: _____							
18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____							
18b. Alternate Facility (or Generator) Facility's Phone: _____				U.S. EPA ID Number			
18c. Signature of Alternate Facility (or Generator)						Month Day Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)							
1.		2.		3.		4.	
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a							
Printed/Typed Name				Signature		Month Day Year	

Claim Disposal Fee: The responsible parties for and will accept the cost of the generator is shipping

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 1450 Surveyed by: CHicks/J Mattson  
 Trucking Company: Bellio Truck license plate no. /state: 21

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

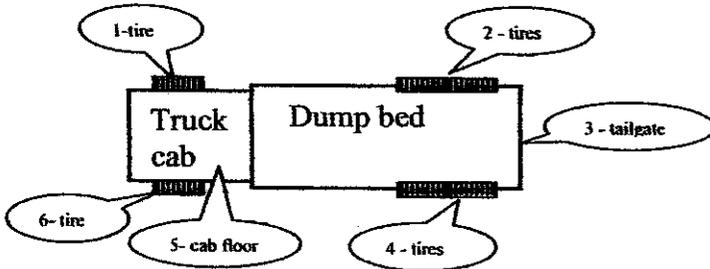
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25 mrem)	0.2

**For Stockpile A only:**

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	43.5	553.0

Truck 21

10157693

EPA 8700-22 (REV. 3-05)

Form Approved. OMB No. 2050-0039

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 000000000000000000	2. Page 1 of 1	3. Emergency Response Phone (800) 424-9316	4. Manifest Tracking Number <b>000927146 FLE</b>					
5. Generator's Name and Mailing Address 1500 Orange Avenue Spartanburg, SC 29303 Generator's Phone: 803 273 0000				Generator's Site Address (if different than mailing address)						
6. Transporter 1 Company Name Medco Transportation				U.S. EPA ID Number 000000000000000000						
7. Transporter 2 Company Name				U.S. EPA ID Number						
8. Designated Facility Name and Site Address MORRIS Enterprises, Inc. 10000 E. Highway 70 Spartanburg, SC 29303 Facility's Phone: (803) 295 2200				U.S. EPA ID Number 000000000000000000						
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
				No.	Type					
	1. POLYETHYLENE TEREPHTHALATE, RECYCLED, HAZARDOUS			1	3/3	10	✓	1992		
	2.									
	3.									
4.										
14. Special Handling Instructions and Additional Information										
15. <b>GENERATOR'S/OFFEROR'S CERTIFICATION:</b> I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.										
Generator's/Offoror's Printed/Typed Name Steve Beckman				Signature <i>[Signature]</i>				Month 05	Day 20	Year 04
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____										
17. Transporter Acknowledgment of Receipt of Materials										
Transporter 1 Printed/Typed Name				Signature				Month	Day	Year
Transporter 2 Printed/Typed Name				Signature				Month	Day	Year
18. Discrepancy										
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection										
Manifest Reference Number: _____										
18b. Alternate Facility (or Generator)							U.S. EPA ID Number			
Facility's Phone: _____										
18c. Signature of Alternate Facility (or Generator)							Month	Day	Year	
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)										
1.			2.			3.		4.		
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a										
Printed/Typed Name				Signature				Month	Day	Year

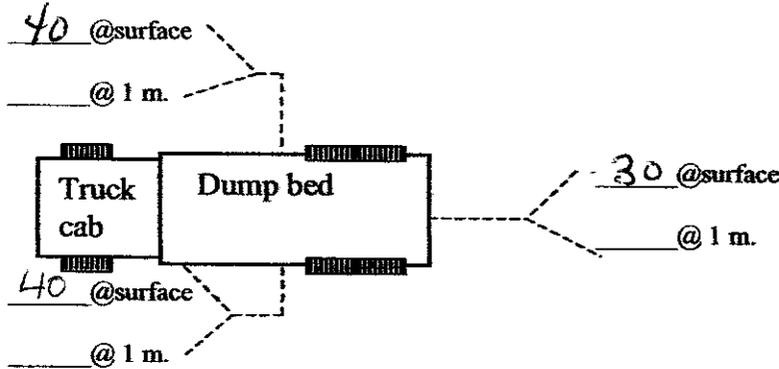
GENERATOR  
INT'L  
TRANSPORTER  
DESIGNATED FACILITY

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 8/20/07 1530 Surveyed by: Chicks/J Mathson  
 Trucking Company: Bellio Truck license plate no./state: 16

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

Incoming Limits (49CFR 173.443)  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

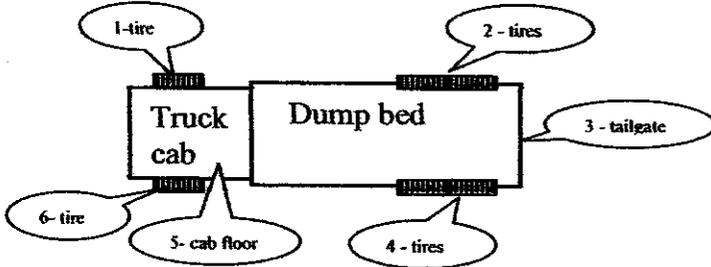
Outgoing Limits (49CFR 173.441)  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_  
 \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
<b>Model</b>	19	2360 / 43-89 probe	2360 / 43-89 probe	
<b>Serial #</b>	144043	233249 / PR-227111	233249 / PR-227111	
<b>Cal Due</b>	8-14-08	8-15-08	8-15-08	
<b>Bkg.</b>	18 $\mu\text{rem}$	$\alpha$ 1.0 cpm	$\beta$ 252 cpm	
<b>Efficiency</b>	NA	17.6 %	13.9 %	
<b>MDA</b>	NA	43.5	553.0	

Truck 16

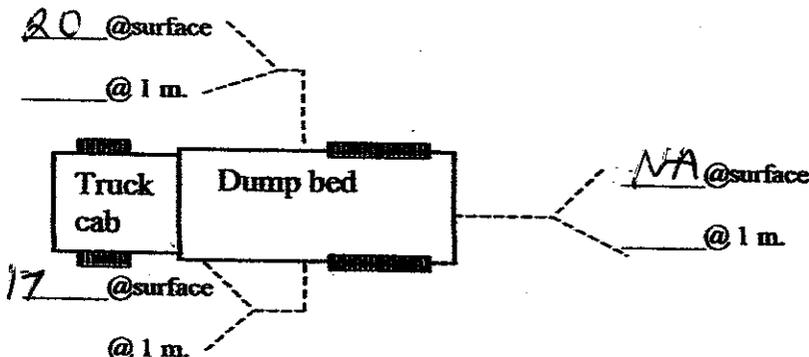
<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number 000010625170	2. Page 1 of 1	3. Emergency Response Phone (800) 483-3715	4. Manifest Tracking Number <b>000927145 FLE</b>	
5. Generator's Name and Mailing Address Colorado School of Mines 1500 Illinois Avenue Golden, CO 80401 Generator's Phone: 303 272-5000				Generator's Site Address (if different than mailing address)		
6. Transporter 1 Company Name Helle Trucking Inc				U.S. EPA ID Number 000093770200		
7. Transporter 2 Company Name				U.S. EPA ID Number		
8. Designated Facility Name and Site Address Clean Hazardous Waste Treatment 112755 East Highway, W Deer Trail, CO 80108 Facility's Phone: (303) 528-2292				U.S. EPA ID Number 000001300404		
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			10. Containers		11. Total Quantity
				No.	Type	12. Unit Wt./Vol.
	1. HAZARDOUS WASTE, LIQUID, UNIDENTIFIED, ORGANIC			1	IBC	1700 L
	2.					
	3.					
4.						
13. Waste Codes NONE						
14. Special Handling Instructions and Additional Information UNCLASIFIED						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator's/Offeor's Printed/Typed Name Steve Stramer				Signature <i>[Signature]</i>		Month Day Year 08 20 07
16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
17. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Lynn B. ...				Signature <i>[Signature]</i>		Month Day Year 08 20 07
Transporter 2 Printed/Typed Name				Signature		Month Day Year
18. Discrepancy						
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
18b. Alternate Facility (or Generator)				Manifest Reference Number: _____ U.S. EPA ID Number _____		
Facility's Phone: _____				18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)						
1.		2.		3.		4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a						
Printed/Typed Name _____				Signature _____		Month Day Year _____



## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0718 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

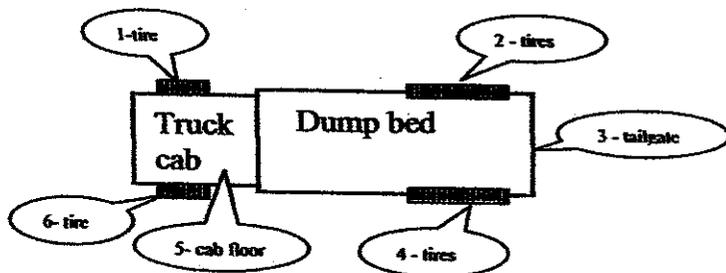
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	558 dpm



# NON-HAZARDOUS WASTE MANIFEST

0558920

8

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1600 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1600 Illinois St Golden, CO ACCOUNT # 160000 (Colorado Bureau of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers			
				No.	Type	19. Total Quantity	20. Unit Wt/Vol
a. Iron Soil		CO 187 000006 5/1/95		18	Y	Y-Yards	Tons
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name <i>Steve Beckman</i>				Signature <i>[Signature]</i>		Month Day Year <i>1 7 97</i>	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>Chuck Foy</i>				Signature <i>[Signature]</i>		Month Day Year <i>09/07/07</i>	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

521993

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
806603  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 27057E	GRID 0000
WEIGHMASTER 2300056 Barbara Jo B		
DATE IN 7 September 2007	TIME IN 7:57 am	
DATE OUT 7 September 2007	TIME OUT 7:37 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 2E0920	ORIGIN	

OO Gross Weight 65,100.00 lb  
 Tare Weight 36,540.00 lb      Inbound --  
 Net Weight 28,560.00 lb 14.25 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.25	TN	SW-COINT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



8

# NON-HAZARDOUS WASTE MANIFEST

0550620

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-275-3100			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-0098		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		10. Transporter #2 Company Name		11. US EPA ID Number	
10. Transporter #2 Company Name		12. Transporter #2's Phone		13. Designated T/S/D Facility Name and Site Address Foothills Landfill 8500 Hwy 90 Golden, CO ACCOUNT # 000000 (Colorado School of Mines)	
13. Designated T/S/D Facility Name and Site Address		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit	
				21. Additional Descriptions for Materials Listed Above	
				22. Special Handling Instructions and Additional Information	
				23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.	
Printed/Typed Name		Signature		Month Day Year	
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month Day Year	
26. Discrepancy Indication Space		Signature		Month Day Year	
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

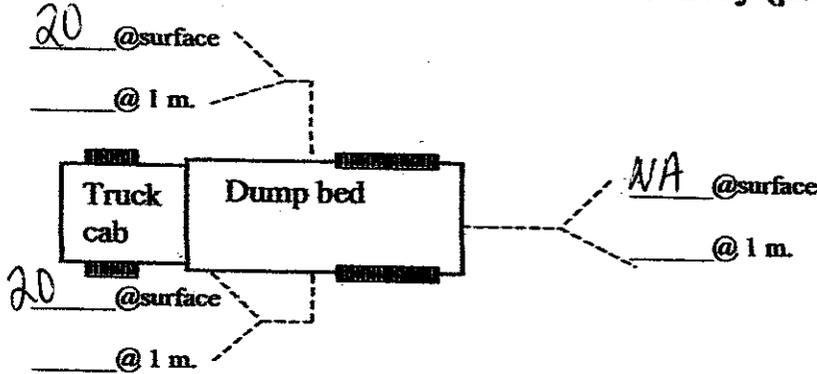
COM00033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0729 Surveyed by: Chicks J Mattson

Trucking Company: Grieve Truck license plate no. /state: 96

## Gamma Dose Rate Survey (µrem/hr)



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500 µrem)

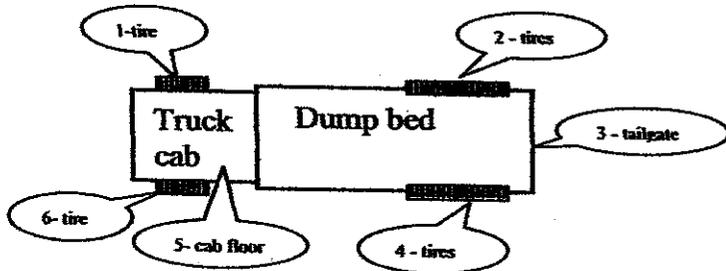
**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000 µrem)  
10 mrem/hr at 1 m (10,000 µrem)  
(If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

For Stockpile A only:  
  
TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	220				2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 257 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	658 dpm	



96

# NON-HAZARDOUS WASTE MANIFEST

## 0550921

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3000			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3000		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Footfalls Center 8570 Hwy 30 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Normal Soil		CO 107 070978 10311915		19. Total Quantity 0 Gallons	
b.				20. Unit Gallons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Bergman		Signature: [Signature]		Month: 7 Day: 17 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: Fernando [Signature]		Signature: [Signature]		Month: 9 Day: 20 Year: 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month: Day: Year:	

GENERATOR

TRANSPORTER

T/S/D FACILITY

521811

FOOTHILLS LANDFILL  
2900 HIGHWAY 93  
GOLDEN  
CO  
80403  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 550530	GRID 0000
WEIGHMASTER 2800026 Barbara Jo S		
DATE IN 7 September 2007	TIME IN 7:48 am	
DATE OUT 7 September 2007	TIME OUT 7:48 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 350921	ORIGIN	

GC Gross Weight 59,660.00 lb  
 Tare Weight 36,580.00 lb      Inbound -  
 Net Weight 23,080.00 lb 11.54 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
11.54	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

*Janet Linn*

SIGNATURE





96

# NON-HAZARDOUS WASTE MANIFEST

## 0550921

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3996			6. Phone ( ) 303-273-3996		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Tooths Landfill 8900 Hwy 80 Golden, CO ACCOUNT # 082523 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 167 070006 1511915		1	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Berkman</i>			Signature <i>[Signature]</i>		Month Day Year 1 7 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>Edward [unclear]</i>			Signature <i>[Signature]</i>		Month Day Year 9 23 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

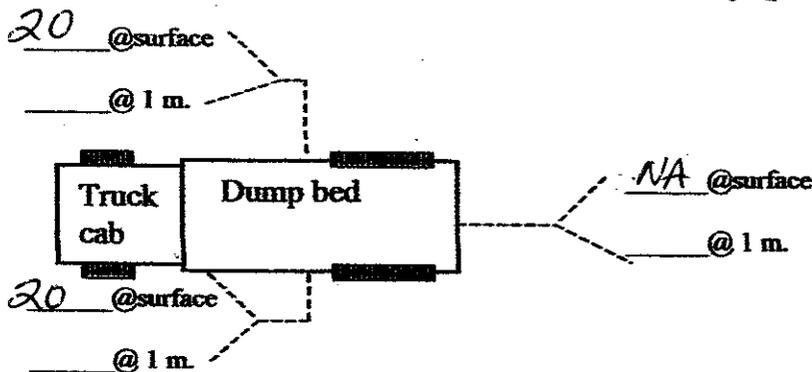
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9-7-07 0743 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

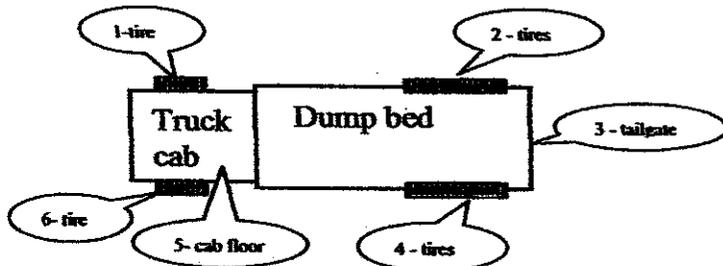
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**  
 Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	<220				<2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 µrem/hr	α 0 cpm	β 257 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	658 dpm	



# NON-HAZARDOUS WASTE MANIFEST

12  
0550822

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Greene A12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date CO 187 070306 Y511015		18. Containers	
				No.	Type
a. Metal Sol				B	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature		Month Day Year 9 7 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Alan Johnson		Signature		Month Day Year 9 7 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

521314 *ll*

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806003  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: 7511915

SITE	TICKET	GRID
01	890533	0000
WEIGHMASTER		
800053 Barbara Jo S		
DATE IN	TIME IN	
7 September 2007	7:58 am	
DATE OUT	TIME OUT	
7 September 2007	7:55 am	
VEHICLE	ROLL OFF	
7511915		
REFERENCE	ORIGIN	
880922		

Gross Weight 55,800.00 lb  
 Tare Weight 37,700.00 lb Inbound -  
 Net Weight 28,100.00 lb 14.05 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
14.05	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



NON-HAZARDOUS WASTE MANIFEST

0550822

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3696			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3696		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name Greiner #12		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Sol		17. Allied Waste Approval # and Exp. Date 07-067-07000-7541915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month Day Year 12 7 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Blair J. Grier		Signature 		Month Day Year 9 7 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

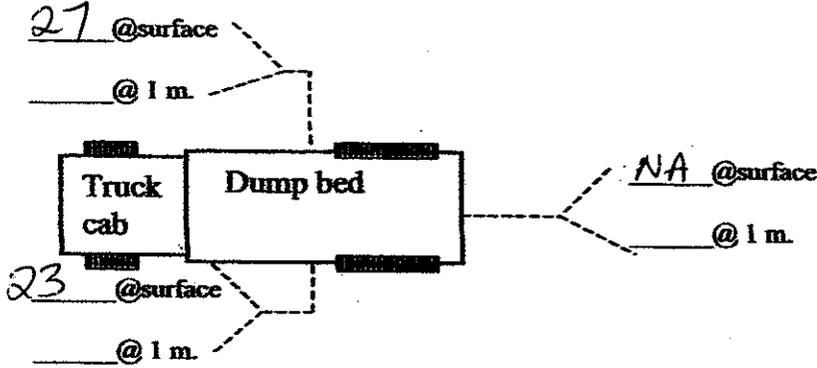
T/S/D FACILITY

TRANSPORTER #1

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0755 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

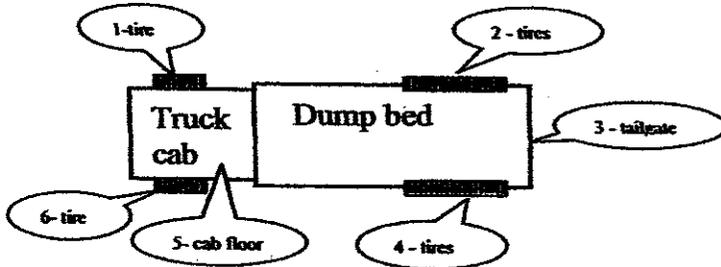
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile  
 A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



NON-HAZARDOUS WASTE MANIFEST

0550923

961

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3668			6. Phone ( ) 303-273-3668		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontalis Landfill 6000 Hwy 90 Golden, CO - ACCOUNT # 0011915 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Non-Sol		17. Allied Waste Approval # and Exp. Date CO 107 070001 Y511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman		Signature 		Month 7	Day 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Michael Gomez		Signature 		Month 7	Day 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM00033





# NON-HAZARDOUS WASTE MANIFEST

961  
0550923

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2090 Hwy 98 Golden, CO ACCOUNT # 801903 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CO 107 070908 Y011015		0 Drums 0 Gallons	
b.				Y-Yards Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Beckman		Signature:		Month: 7 Day: 07 Year: 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month: Day: Year:	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:		Signature:		Month: Day: Year:	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:		Signature:		Month: Day: Year:	

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

TRANSPORTER #1

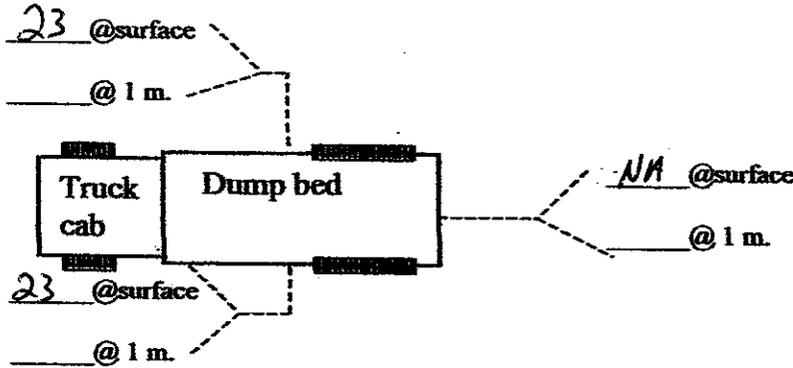
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0802 Surveyed by: Chicks J Mattson

Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

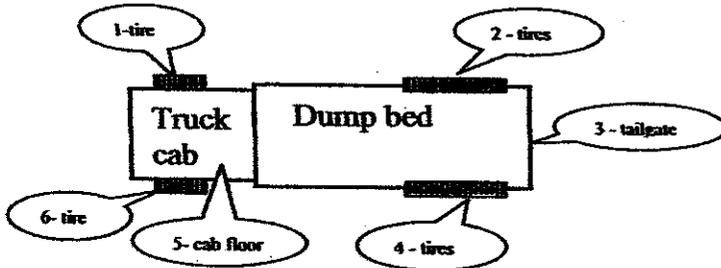
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



NON-HAZARDOUS WASTE MANIFEST

0550924

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address School of Mines Research Institute 1600 Blake St Golden, CO 80401 303-273-3906			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3906		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address 8800 Hwy 10 Golden, CO ACCOUNT # 468803 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date CO 157 070908 1511915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month 9	Day 7
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month 6	Day 14
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

521328

FOOTHILLS LANDFILL  
 2900 HIGHWAY 50  
 GOLDEN  
 CO  
 806603  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590577	GRID 0000
WEIGHMASTER 800055 Barbara Jo B		
DATE IN 7 September 2007	TIME IN 2:31 am	
DATE OUT 7 September 2007	TIME OUT 8:21 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 550924	ORIGIN	

Gross Weight 75,400.00 lb  
 Tare Weight 34,980.00 lb Inbound --  
 Net Weight 39,500.00 lb 19.25 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
19.25	TN	SW-COHT SOIL				
1.00	LB	ENVIRONMENTAL FEE				
1.00	LB	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE \_\_\_\_\_



# NON-HAZARDOUS WASTE MANIFEST

0550324

95

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1500 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez, Colorado 2000 Hwy 63 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		CC 187 070908 / 511315		Y-Yards	
b.				Tons	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature <i>[Signature]</i>		Month Day Year 9 7 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Month Day Year 8 7 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

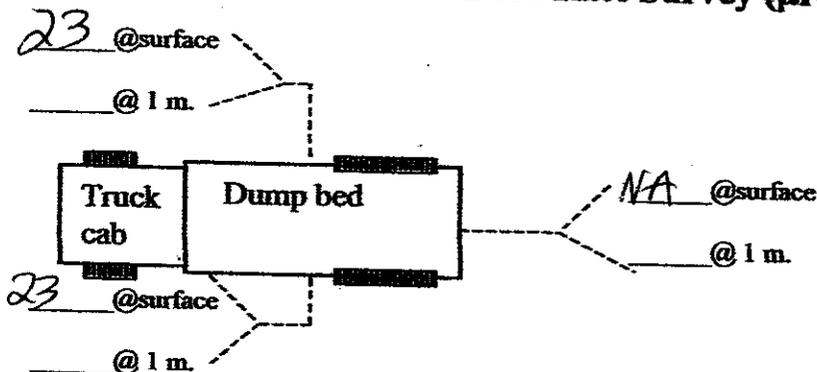
COM000033

# S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date: 9-7-07 0830 Surveyed by: Chicks J Mattson

Company: Grieve Truck license plate no. /state: 8

## Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

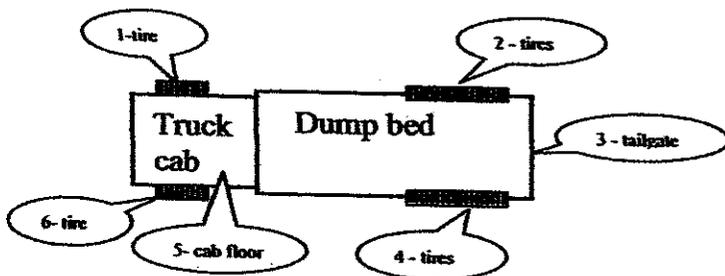
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (0.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

## Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550925

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1700 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontline Landfill 1670 Hwy 33 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Sol		00167670601Y011915		19. Total Quantity 18 Yards	
b.				20. Unit Yards	
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Beckman			Signature		Month Day Year 7 1 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Chuck Foy			Signature		Month Day Year 09 07 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

521345

FOOTHILLS LANDFILL  
 8900 HIGHWAY 78  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET 590614	GRID 0000
WEIGHMASTER 0800056 Barbara Jo S		
DATE IN 7 September 2007	TIME IN 8:47 am	
DATE OUT 7 September 2007	TIME OUT 3:47 am	
VEHICLE YE11915	ROLL OFF	
REFERENCE E50925	ORIGIN	

00 Gross Weight 79.720.00 lb  
 Tare Weight 36.540.00 lb Inbound -  
 net Weight 43.180.00 lb 21.59 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.59	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LY	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



8

# NON-HAZARDOUS WASTE MANIFEST

## 0550925

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1000 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2007 Hwy 93 Golden, CO ACCOUNT # 000003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				19. Total Quantity	
				20. Unit Wt/Vol	
a. Norm Soil		201107070800 1511315		184 Yards	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month Day Year	
Steve Brinkman				9 1 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
Chuck Foy				09 07 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

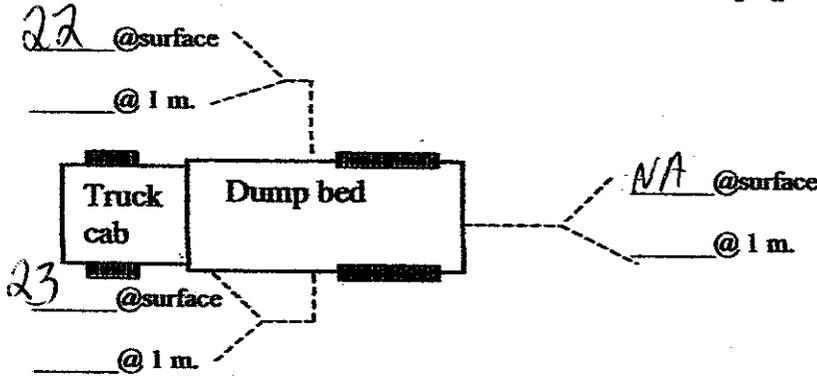
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0849 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

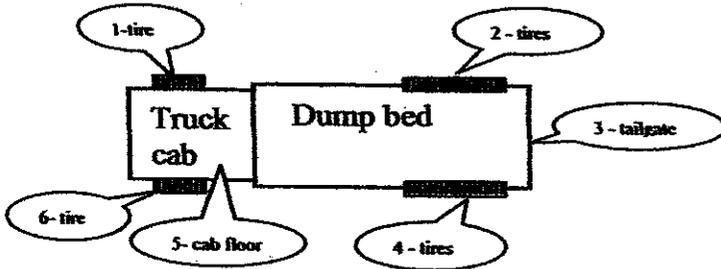
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	220				2200		

Comments: \_\_\_\_\_

INSTRUMENT DATA				
Mfg.	Ludlum	Ludlum	Ludlum	
Model	19	2360 / 43-89 probe	2360 / 43-89 probe	
Serial #	144043	233249 / PR-227111	233249 / PR-227111	
Cal Due	8-14-08	8-15-08	8-15-08	
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm	
Efficiency	NA	17.6 %	13.9 %	
MDA	NA	17 dpm	658 dpm	



# NON-HAZARDOUS WASTE MANIFEST

12  
0550828

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3898			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3898				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name Green Truck, ID		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Rocky Mountain 8800 E. 25 Golden, CO ACCOUNT # 99999 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Normal Soil		17. Allied Waste Approval # and Exp. Date CO 167 070908 1511915		18. Containers			
				No.	Type	19. Total Quantity 0 Drums	20. Unit Wt/Vol 0 Drums
						Y-Yards	T-Tons
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve B. [Signature]		Signature [Signature]		Month	Day Year		
24. Transporter #1: Acknowledgement of Receipt of Materials		Signature [Signature]		Month	Day Year		
25. Transporter #2: Acknowledgement of Receipt of Materials		Signature		Month	Day Year		
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day Year		

GENERATOR

TRANSPORTER

T/S/D FACILITY

521354 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80660  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE	TICKET	GRID
01	590623	0000
WEIGHMASTER		
800056 Barbara Jo S		
DATE IN	TIME IN	
7 September 2007	9:05 am	
DATE OUT	TIME OUT	
7 September 2007	9:05 am	
VEHICLE	ROLL OFF	
Y511915		
REFERENCE	ORIGIN	
550926		

00 Gross Weight 52,300.00 lb  
 Tare weight 37,700.00 lb Inbound --  
 Net Weight 14,600.00 lb 22.30 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.30	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550928

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401		
4. Phone ( ) 303-273-3668		6. Phone ( ) 303-273-3668			
7. Transporter #1 Company Name Celine Trucking, LTD		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Cortez, CO 81301		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Term Soil		CC 167 070600 Y511916		19. Total Quantity 0 Drums 0 Gallons Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve B. Wilson		Signature <i>[Signature]</i>		Month Day Year 1 7 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Don Tolson		Signature <i>[Signature]</i>		Month Day Year 1 7 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

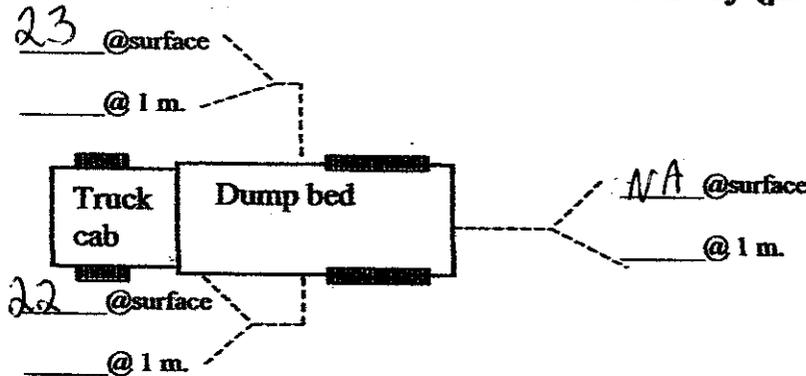
TRANSPORTER #1

COM000633

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0856 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 96

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

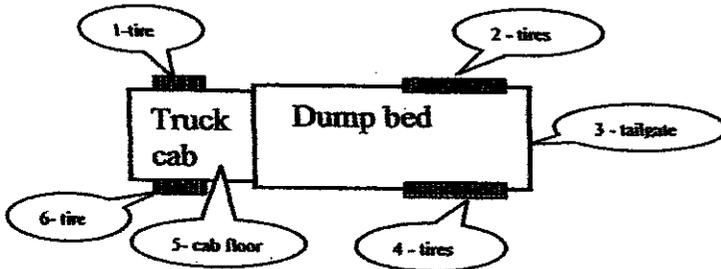
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	4220				42200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



96

# NON-HAZARDOUS WASTE MANIFEST

## 0550929

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3968			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3968		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 4471 Hwy 80 Golden, CO ACCOUNT # 988635 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Mgmt Soil		CO167 070908 7511915			
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
Steve Beckman				7	57
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
Fernando Luna				9	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

321330

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 806602  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 870427	GRID 0000
WEIGHMASTER 8500056 Barbara Jo S		
DATE IN 7 September 2007	TIME IN 7:16 am	
DATE OUT 7 September 2007	TIME OUT 9:16 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 850929	ORIGIN	

CO Gross Weight 81,820.00 lb  
 Tare Weight 34,580.00 lb Inbound --  
 Net Weight 47,240.00 lb 22.68 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.68	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



*[Handwritten Signature]*

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



# NON-HAZARDOUS WASTE MANIFEST

96  
0550929

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3966			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3966				
4. Phone ( ) 303-273-3966		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Schulte Landfill 4500 Hwy 90 Golden, CO ACCOUNT # 983923 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Iron Sulf		17. Allied Waste Approval # and Exp. Date CO L07 070008 / 511915		18. Containers		19. Total Quantity	20. Unit Wt/Vol
				No.	Type	0 Drums	0 Gallons
b.						7 Yards	Tons
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name		Signature		Month	Day	Year	
Steve Brakman				9	27	07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day	Year	
K. S. ...				9	27	07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name		Signature		Month	Day	Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name		Signature		Month	Day	Year	

TRANSPORTER #1

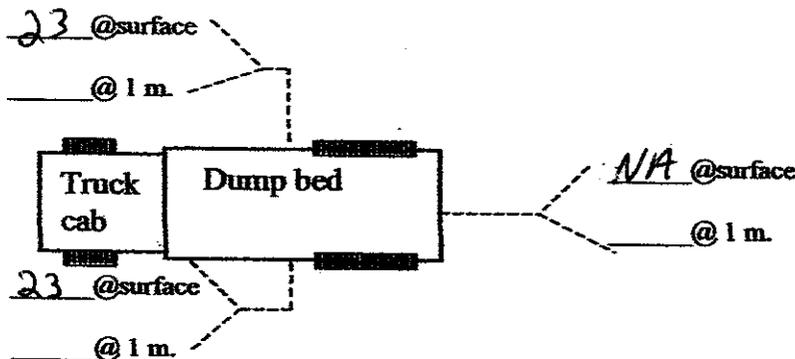
COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0940 Surveyed by: Chicks J Mattson

Trucking Company: Grieve Truck license plate no. /state: 961

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
(If surface is <10mrem/hr, survey is complete.)

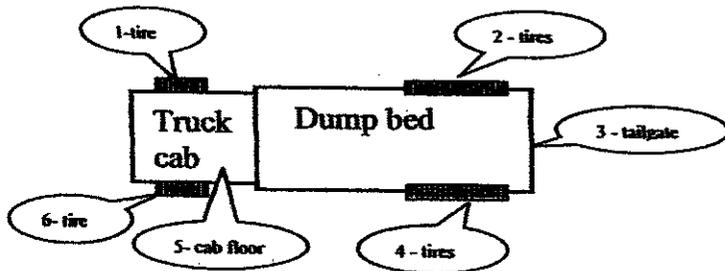
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	<220				<2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	558 dpm



# NON-HAZARDOUS WASTE MANIFEST

961  
0550028

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St. Golden, CO 80401 303-273-3993			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401 303-273-3993		
4. Phone ( )			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Tribble Landfill 9500 Hwy 93 Golden, CO 80401 (Allied Waste Contracts School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO L67 070900 1-51-1015		Y-Yards T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brakner		Signature 		Month 7	Day 7
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Miguel Gomez		Signature 		Month 7	Day 7
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR  
TRANSPORTER  
T/S/D FACILITY

521378

FOOTHILLS LANDFILL  
 2900 HIGHWAY 70  
 GOLDEN  
 CO  
 760602  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: YE11915

SITE 01	TICKET E70645	GRID 0000
WEIGHMASTER BOONES Barbara Jo S		
DATE IN 7 September 2007	TIME IN 10:01 am	
DATE OUT 7 September 2007	TIME OUT 10:01 am	
VEHICLE YE11915	ROLL OFF	
REFERENCE E50928	ORIGIN	

GG Gross Weight 89,180.00 lb  
 Tare Weight 34,400.00 lb Inbound -  
 Net Weight 48,780.00 lb 84.89 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
24.89	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Signature]*



# NON-HAZARDOUS WASTE MANIFEST

961  
0550928

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1601 Illinois St Golden, CO 80401 303-273-3998			5. Generating Location (if different) School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		6. Phone ( )			
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 6900 Hwy 90 Golden, CO 80401 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 197 070009 YS1 1015		Y	Yards
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name <i>Steve Brokaw</i>			Signature <i>[Signature]</i>		Month Day Year 7 7 97
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 7 7 97
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

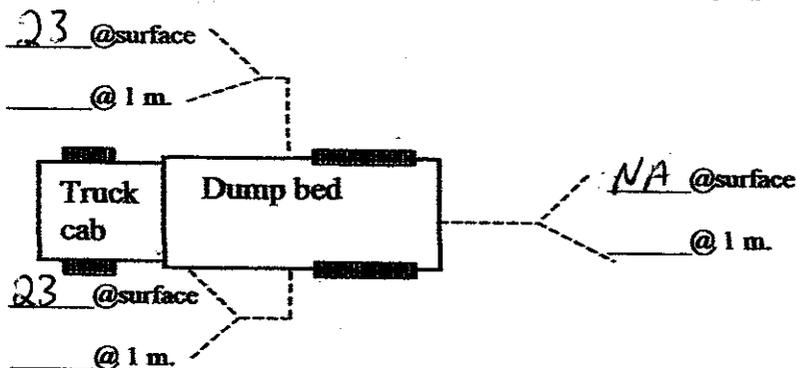
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 0947 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 95

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**  
 Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

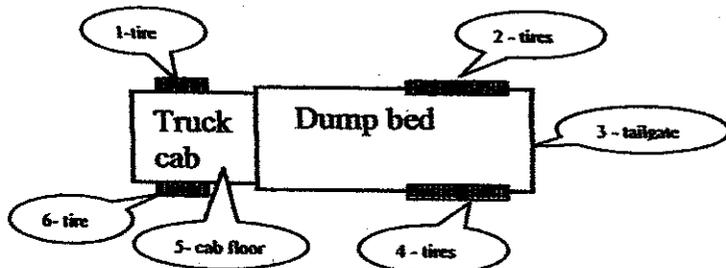
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**  
 Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



NON-HAZARDOUS WASTE MANIFEST

0550927

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1900 Illinois St. Golden, CO 80401 303-273-3998			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 17th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( )		8. US EPA ID Number		9. Transporter #1's Phone	
7. Transporter #1 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		14. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address Facility Name: 1900 Illinois St. Golden, CO		17. Allied Waste Approval # and Exp. Date		18. Containers	
16. Waste Shipping Name and Description		19. Total Quantity		20. Unit	
a. Name: Soil		CO 187 070008 Y611915		D. Drums G. Gallons Y. Yards T. Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name: Steve Benjamin			Signature: [Signature]		Month: 7 Day: 7 Year: 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name: [Name]			Signature: [Signature]		Month: 7 Day: 7 Year: 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name:			Signature:		Month: Day: Year:
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name:			Signature:		Month: Day: Year:

GENERATOR

TRANSPORTER

T/S/D FACILITY

521378

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590648	GRID 0000
WEIGHMASTER 6500036 Barbara Jo S		
DATE IN 7 September 2007	TIME IN 10:05 am	
DATE OUT 7 September 2007	TIME OUT 10:05 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 550927	ORIGIN	

GC Gross Weight 60,120.00 lb  
 Tare Weight 36,980.00 lb      Inbound -  
 Net Weight 23,140.00 lb 21.57 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
21.57	TN	SW-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



NON-HAZARDOUS WASTE MANIFEST

0550927

95

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3998		
4. Phone ( ) 303-273-3998			6. Phone ( )		
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Foothills Landfill 2500 Hwy 93 Golden, CO ACCOUNT # 001119 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Non Sol		CO 167 0709/0 1511915		7 Drums	0 Gallons
b.				7 Drums	0 Gallons
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman			Signature <i>[Signature]</i>		Month Day Year 9 7 07
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name <i>[Signature]</i>			Signature <i>[Signature]</i>		Month Day Year 1 7 07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name			Signature		Month Day Year

GENERATOR

TRANSPORTER

T/S/D FACILITY

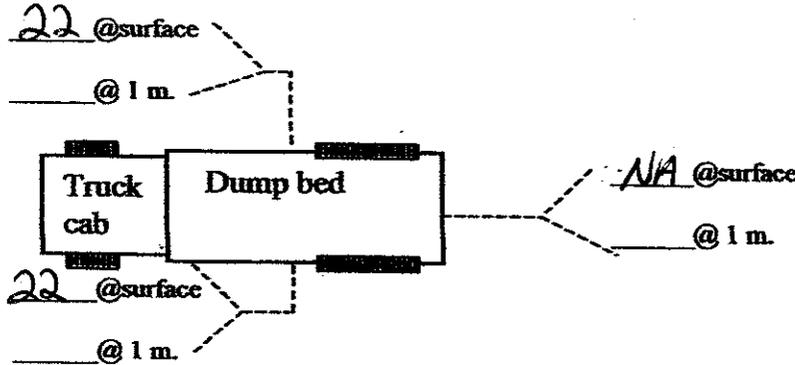
TRANSPORTER #1

COM000033

## S.M. STOLLER TRUCK RADIATION SURVEY FORM

Date/Time: 9-7-07 1007 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 8

### Gamma Dose Rate Survey ( $\mu\text{rem/hr}$ )



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500  $\mu\text{rem}$ )

**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000  $\mu\text{rem}$ )  
 10 mrem/hr at 1 m (10,000  $\mu\text{rem}$ )  
 (If surface is <10mrem/hr, survey is complete.)

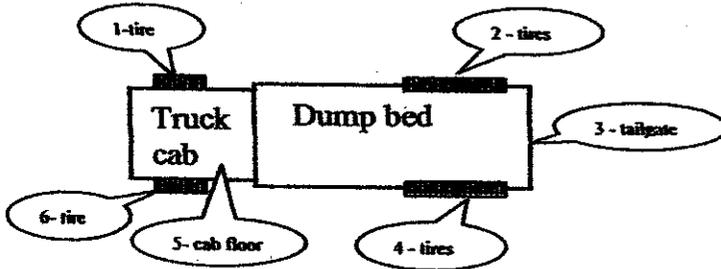
**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 $\mu\text{rem}$ (<0.05 mrem)	0
50-149 $\mu\text{rem}$ (.05-0.15 mrem)	0.1
150-249 $\mu\text{rem}$ (0.15-0.25)	0.2

For Stockpile A only:

TI = \_\_\_\_\_

### Alpha/Beta Total and Removable Contamination Survey



**Removable Contamination limits:**

Alpha: 220 dpm/100  $\text{cm}^2$   
 Beta: 2200 dpm/100  $\text{cm}^2$

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 $\text{cm}^2$	dpm/100 $\text{cm}^2$						
	< 220				< 2200		

Comments: \_\_\_\_\_

#### INSTRUMENT DATA

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 $\mu\text{rem/hr}$	$\alpha$ 0 cpm	$\beta$ 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



# NON-HAZARDOUS WASTE MANIFEST

8  
0550930

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address 1507 Birch St Golden, CO 80401 303-273-3858			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3858		
4. Phone ( )		6. Phone ( )		9. Transporter #1's Phone	
7. Transporter #1 Company Name		8. US EPA ID Number		12. Transporter #2's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		15. Facility's Phone	
13. Designated T/S/D Facility Name and Site Address 1500 Hwy 26 Golden, CO ACCOUNT # 201571 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
				No.	Type
a. Norm Soil		CO 187 0709N Y511815		18	Y
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name		Signature		Month	Day
STEVE BRADSHAW				7	37
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
CHUCK FOY				07	07
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month	Day
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month	Day

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

591300

FOOTHILLS LANDFILL  
8900 HIGHWAY 93  
GOLDEN  
CO  
960602  
COLORADO SCHOOL OF MINES  
1500 ILLINOIS ST  
GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET E90660	GRID 0000
WEIGHMASTER S00056 Barbara Jo S		
DATE IN 7 September 2007	TIME IN 10:24 am	
DATE OUT 7 September 2007	TIME OUT 10:24 am	
VEHICLE Y511915	ROLL OFF	
REFERENCE 830930	ORIGIN	

Gross Weight 82,300.00 lb  
Tare Weight 36,540.00 lb Inbound -  
Net Weight 45,760.00 lb 22.68 TN

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
22.68	TN	SW-COMT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



SIGNATURE *[Handwritten Signature]*



# NON-HAZARDOUS WASTE MANIFEST

0550930

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3098			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St Golden, CO 80401 303-273-3098				
4. Phone ( )		6. Phone ( )					
7. Transporter #1 Company Name		8. US EPA ID Number		9. Transporter #1's Phone			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 1500 Illinois St Golden, CO ACCOUNT # 000003 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone			
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 187 070304 1511915		18. Containers		19. Total Quantity 0 Drums 0 Gallons	20. Unit Wt/Vol Tons
				No.	Type		
b.							
c.							
d.							
21. Additional Descriptions for Materials Listed Above							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Steve Brakner				Signature 		Month Day Year 7 7 07	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Chuck Foy				Signature 		Month Day Year 9 07 07	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER #1

T/S/D FACILITY

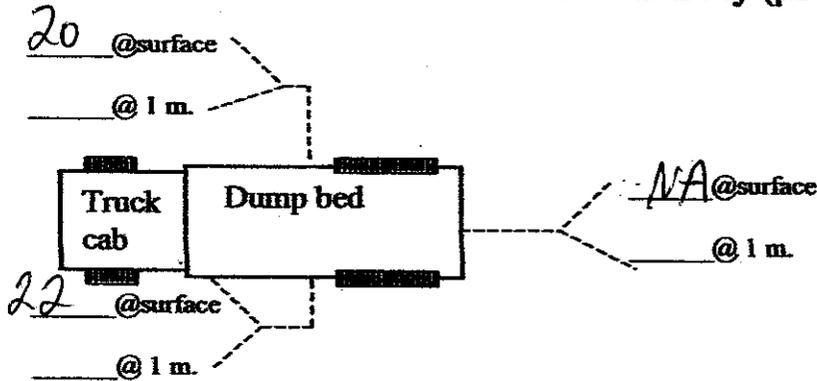
TRANSPORTER #1

COM000033

**S.M. STOLLER TRUCK RADIATION SURVEY FORM**

Date/Time: 9-7-07 1035 Surveyed by: Chicks J Mattson  
 Trucking Company: Grieve Truck license plate no. /state: 12

**Gamma Dose Rate Survey (µrem/hr)**



**Notes:**

Dose rates should be recorded at highest reading for each side.

**Incoming Limits (49CFR 173.443)**  
 0.5 mrem/hr at surface (500 µrem)

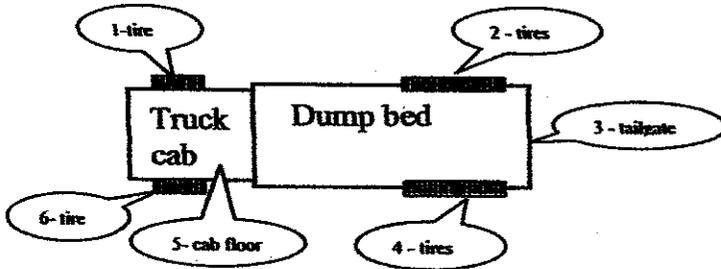
**Outgoing Limits (49CFR 173.441)**  
 200 mrem/hr at surface (200,000 µrem)  
 10 mrem/hr at 1 m (10,000 µrem)  
 (If surface is <10mrem/hr, survey is complete.)

**Transport Index (TI):** Maximum radiation level at 1 meter from the external surface of the truck in millirem per hour, rounded up to next tenth.

Dose Rate at 1 meter	TI
< 50 µrem (<0.05 mrem)	0
50-149 µrem (.05-0.15 mrem)	0.1
150-249 µrem (0.15-0.25)	0.2

**For Stockpile A only:**  
 TI = \_\_\_\_\_

**Alpha/Beta Total and Removable Contamination Survey**



**Removable Contamination limits:**

Alpha: 220 dpm/100 cm<sup>2</sup>  
 Beta: 2200 dpm/100 cm<sup>2</sup>

\*If total reading is less than limit, survey is complete. If total reading is greater than limit, collect smear and count for removable.

Total alpha		Removable alpha*		Total beta		Removable beta*	
cpm/100 cm <sup>2</sup>	dpm/100 cm <sup>2</sup>						
	< 220				< 2200		

Comments: \_\_\_\_\_

**INSTRUMENT DATA**

Mfg.	Ludlum	Ludlum	Ludlum
Model	19	2360 / 43-89 probe	2360 / 43-89 probe
Serial #	144043	233249 / PR-227111	233249 / PR-227111
Cal Due	8-14-08	8-15-08	8-15-08
Bkg.	17 µrem/hr	α 0 cpm	β 257 cpm
Efficiency	NA	17.6 %	13.9 %
MDA	NA	17 dpm	658 dpm



# NON-HAZARDOUS WASTE MANIFEST

12  
0550931

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Birch St. Golden, CO 80401		
4. Phone ( ) 303-273-3996			6. Phone ( ) 303-273-3066		
7. Transporter #1 Company Name Green Trucking (M)		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Colorado School of Mines 6000 Hwy 97 Golden, CO		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description		17. Allied Waste Approval # and Exp. Date		18. Containers	
a. Norm Soil		CO LCT 070908 Y511915		19. Total Quantity D-Drums Y-Yards 20. Unit Wt/Vol G-Gallons T-Tons	
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Benham		Signature <i>[Signature]</i>		Month Day Year 7 7 07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Steve Benham		Signature <i>[Signature]</i>		Month Day Year 7 7 07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

GENERATOR'S COPY

COM000033

521405 12

FOOTHILLS LANDFILL  
 8900 HIGHWAY 93  
 GOLDEN  
 CO  
 80403  
 COLORADO SCHOOL OF MINES  
 1500 ILLINOIS ST  
 GOLDEN, CO 80401

Contract: Y511915

SITE 01	TICKET 590676	GRID 0000
WEIGHMASTER 800056 Barbara Jo S		
DATE IN 7 September 2007		TIME IN 10:52 am
DATE OUT 7 September 2007		TIME OUT 10:52 am
VEHICLE Y511915		ROLL OFF
REFERENCE 550931	ORIGIN	

Gross Weight 69,980.00 lb  
 Tare Weight 37,700.00 lb  
 Net Weight 32,280.00 lb 16.14 TN

Inbound -

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
16.14	TN	SM-CONT SOIL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				



SIGNATURE *[Signature]*

NET AMOUNT
TENDERED
CHANGE
CHECK NO.



NON-HAZARDOUS WASTE MANIFEST

0550931

12

Please print or type

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Colorado School of Mines Research Institute 1500 Illinois St Golden, CO 80401 303-273-3908			5. Generating Location (if different) Colorado School of Mines Research Institute North West of 12th and Dicks St Golden, CO 80401 303-273-3908		
4. Phone ( ) 303-273-3908		6. Phone ( )			
7. Transporter #1 Company Name Green Trucking, Inc.		8. US EPA ID Number		9. Transporter #1's Phone	
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone	
13. Designated T/S/D Facility Name and Site Address Frontalis Landfill 2800 Hwy 90 Golden, CO ACCOUNT # 90013 (Colorado School of Mines)		14. US EPA ID Number		15. Facility's Phone	
16. Waste Shipping Name and Description a. Norm Soil		17. Allied Waste Approval # and Exp. Date CO 167 0709/0 1611915		18. Containers	
				No.	Type
b.					
c.					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Steve Brinkman		Signature 		Month Day Year 9/7/07	
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name Green Trucking		Signature 		Month Day Year 9/7/07	
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Month Day Year	
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name		Signature		Month Day Year	

GENERATOR

TRANSPORTER

T/S/D FACILITY

TRANSPORTER #1

## **Appendix I**

### **Final Radiological Surveys of Trucks and Equipment**

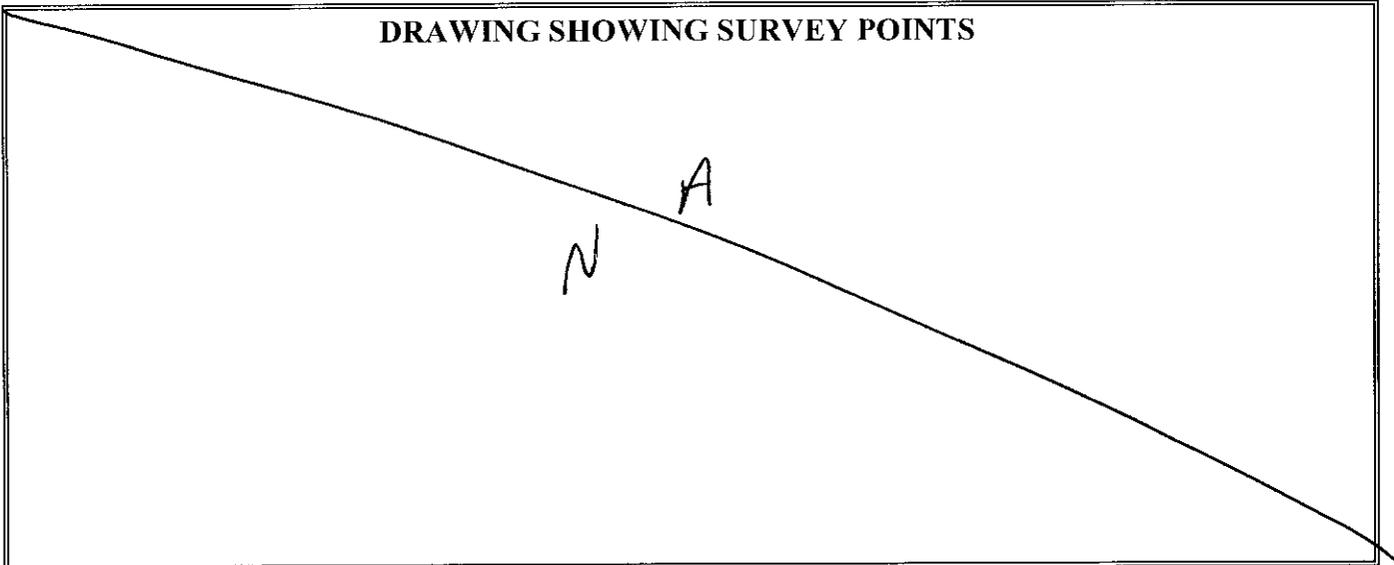
## S.M.STOLLER RADIOLOGICAL SURVEY FORM

Survey Type: Contamination	INSTRUMENT DATA					
Location: CSMRI	Mfg.	Ludlum	Ludlum	Ludlum	Ludlum	
Purpose: Job coverage	Model	2360	2360	2929	2929	
Date: 8/17/07-9/7/07	Serial #	223249	223249	176089	176089	
Time: Various	Cal Due	8/15/08	8/15/08	8/14/08	8/14/08	
Surveyed by: J. Mattson <i>Jm</i>	Bkg.	0-5	237-316	0.4-1.2	83.2-98.4	
Comments:	Efficiency	17.6 alpha	13.9 beta	35 alpha	27 beta	
	MDA	17.0-76.2	536.9-616.6	15.2-20.8	168.3-182.1	

### SURVEY RESULTS

Contamination surveys were performed at various times as necessary on trucks, heavy equipment, sample containers, hand tools and personnel. Results were all within limits for non-fixed and total alpha and beta contamination.

### DRAWING SHOWING SURVEY POINTS



## **Appendix J**

### **Daily GPS Coordinates of Disposal Location at BFI Foothills Landfill**

WayPoint	y_Coordi	x_Coordi	Easting	Northing
95	39.8509	-105.2286	3076205	1734938
96	39.85117	-105.2288	3076143	1735035
98	39.85301	-105.2301	3075774	1735704
99	39.85106	-105.2282	3076312	1734994
100	39.85105	-105.2282	3076312	1734992
101	39.8513	-105.2288	3076143	1735082
102	39.85096	-105.2287	3076188	1734959
103	39.85153	-105.2291	3076065	1735165
104	39.85079	-105.2291	3076068	1734896
105	39.85105	-105.2289	3076106	1734990
106	39.85105	-105.2289	3076106	1734990
107	39.85153	-105.2289	3076110	1735167
108	39.85112	-105.229	3076100	1735018

Original Data WGS 84 Decimal Degrees

Converted to NAD 83 State Plane Colorado Central, Easting and Northing

Way Points 095 - 108 were roughly 35K feet north of the CSM site. Which relatively closely matches what I expected for the Allied Waste Services Foothills Landfill at 8900 HWY 93, Golden, CO

## **Appendix K**

### **Ambient Air Monitor Results**

**CSMRI Air Monitoring**

Date(s) of air monitoring: August 20-27, 2007  
 Date air filters were counted: August 30, 2007

$$MDA (dpm) = \frac{\frac{2.71}{T_S} + 3.29 \sqrt{\frac{C_B}{T_S} + \frac{C_B}{T_B}}}{Eff}$$

Where:

T <sub>S</sub> =	Count time for sample filter (minutes) =	10	
T <sub>B</sub> =	Count time for background (minutes) =	2	
C <sub>B</sub> =	Background count rate (cpm) =	0.4	alpha
Eff =	Efficiency of detector =	0.2962	

Calculated MDA = 6.36 dpm

Air Monitor No.	Start date	Start time	Start flowrate (lpm)	End date	End time	Total elapsed time (min)	End flowrate (lpm)	Avg Flow rate (l/min)	gross sample count rate (cpm)	net count rate (sample - bkgd in cpm)	Airborne activity concentration (uCi/ml)
AS East	8/20/07	7:22	58	8/27/07	6:45	10043	58	58	1.3	0.9	2.35E-15
AS West	8/20/07	7:30	66	8/27/07	6:50	10040	63	64.5	1.6	1.2	2.82E-15

Airborne activity concentration (uCi/ml) =  $\frac{\text{net count rate (cpm)} \times 4.5 \times 10^{-7} \text{ (uCi/dpm)}}{\text{sample volume (ml)} \times \text{efficiency (cpm/dpm)}} = 2.35E-15 \text{ uCi/ml}$

Effluent limit for Creekside mixture = 4.72 E-14 uCi/ml

### CSMRI Air Monitoring

Date(s) of air monitoring: August 27- Sept 4, 2007

Date air filters were counted: September 7, 2007

$$MDA (dpm) = \frac{\frac{2.71}{T_S} + 3.29 \sqrt{\frac{C_B}{T_S} + \frac{C_B}{T_B}}}{Eff}$$

Where:

T<sub>S</sub> = Count time for sample filter (minutes) =

T<sub>B</sub> = Count time for background (minutes) =

C<sub>B</sub> = Background count rate (cpm) =

Eff = Efficiency of detector =

10
2
0.6 alpha
0.2962

Calculated MDA = 7.58 dpm

Air Monitor No.	Start date	Start time	Start flowrate (lpm)	End date	End time	Total elapsed time (min)	End flowrate (lpm)	Avg Flow rate (l/min)	gross sample count rate (cpm)	net count rate (sample - bkgd in cpm)	Airborne activity concentration (uCi/ml)
AS East	8/27/07	6:46	58	9/4/07	7:40	11574	55	56.5	2.2	1.6	3.72E-15
AS West	8/27/07	6:51	65	9/4/07	7:50	11579	60	62.5	1.7	1.1	2.31E-15

Airborne activity concentration (uCi/ml) =

$$\frac{\text{net count rate (cpm)} \times 4.5 \times 10^{-7} \text{ (uCi/dpm)}}{\text{sample volume (ml)} \times \text{efficiency (cpm/dpm)}} = 3.72\text{E-15 uCi/ml}$$

Effluent limit for Creekside mixture =

4.72 E-14 uCi/ml

### CSMRI Air Monitoring

Date(s) of air monitoring: September 4-7, 2007

Date air filters were counted: September 13, 2007

$$MDA (dpm) = \frac{\frac{2.71}{T_S} + 3.29 \sqrt{\frac{C_B}{T_S} + \frac{C_B}{T_B}}}{Eff}$$

Where:

T<sub>S</sub> = Count time for sample filter (minutes) =

T<sub>B</sub> = Count time for background (minutes) =

C<sub>B</sub> = Background count rate (cpm) =

Eff = Efficiency of detector =

10
2
0.4 alpha
0.2962

Calculated MDA = 6.36 dpm

Air Monitor No.	Start date	Start time	Start flowrate (lpm)	End date	End time	Total elapsed time (min)	End flowrate (lpm)	Avg Flow rate (l/min)	gross sample count rate (cpm)	net count rate (sample - bkgd in cpm)	Airborne activity concentration (uCi/ml)
AS East	9/4/07	7:40	57	9/7/07	12:35	4615	58	57.5	0.6	0.2	1.15E-15
AS West	9/4/07	7:50	65	9/7/07	12:40	4610	65	65	1.3	0.9	4.56E-15

Airborne activity concentration (uCi/ml) =

$$\frac{\text{net count rate (cpm)} \times 4.5 \times 10^{-7} \text{ (uCi/dpm)}}{\text{sample volume (ml)} \times \text{efficiency (cpm/dpm)}} = 1.15E-15 \text{ uCi/ml}$$

Effluent limit for Creekside mixture = 4.72 E-14 uCi/ml

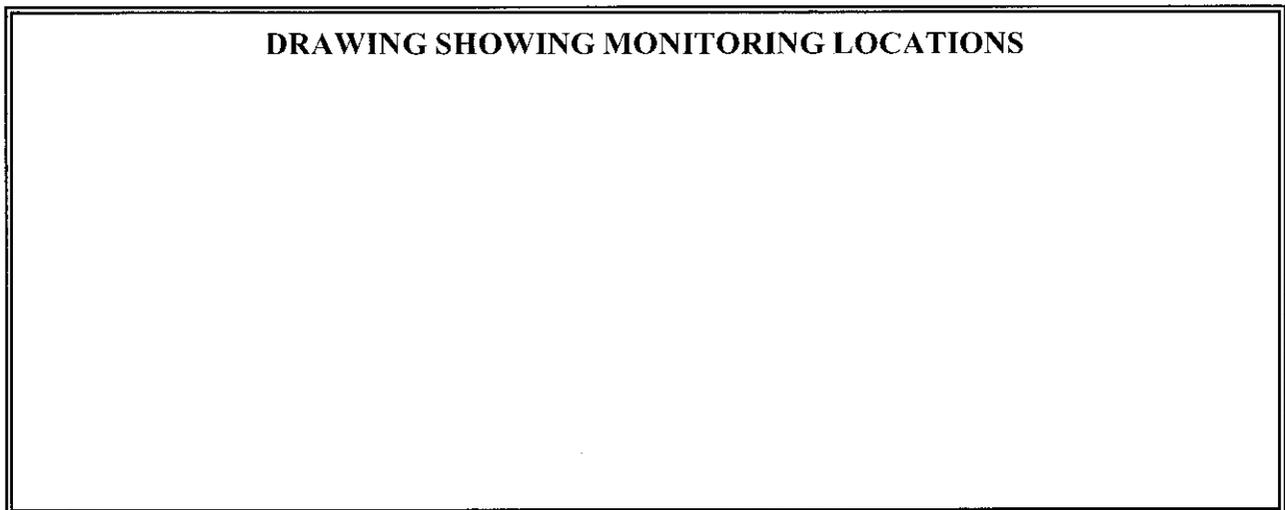
## **Appendix L**

### **Dose Rate Surveys of Work Area**

### Dose Rate Monitoring Form SOP-RAD-033.1

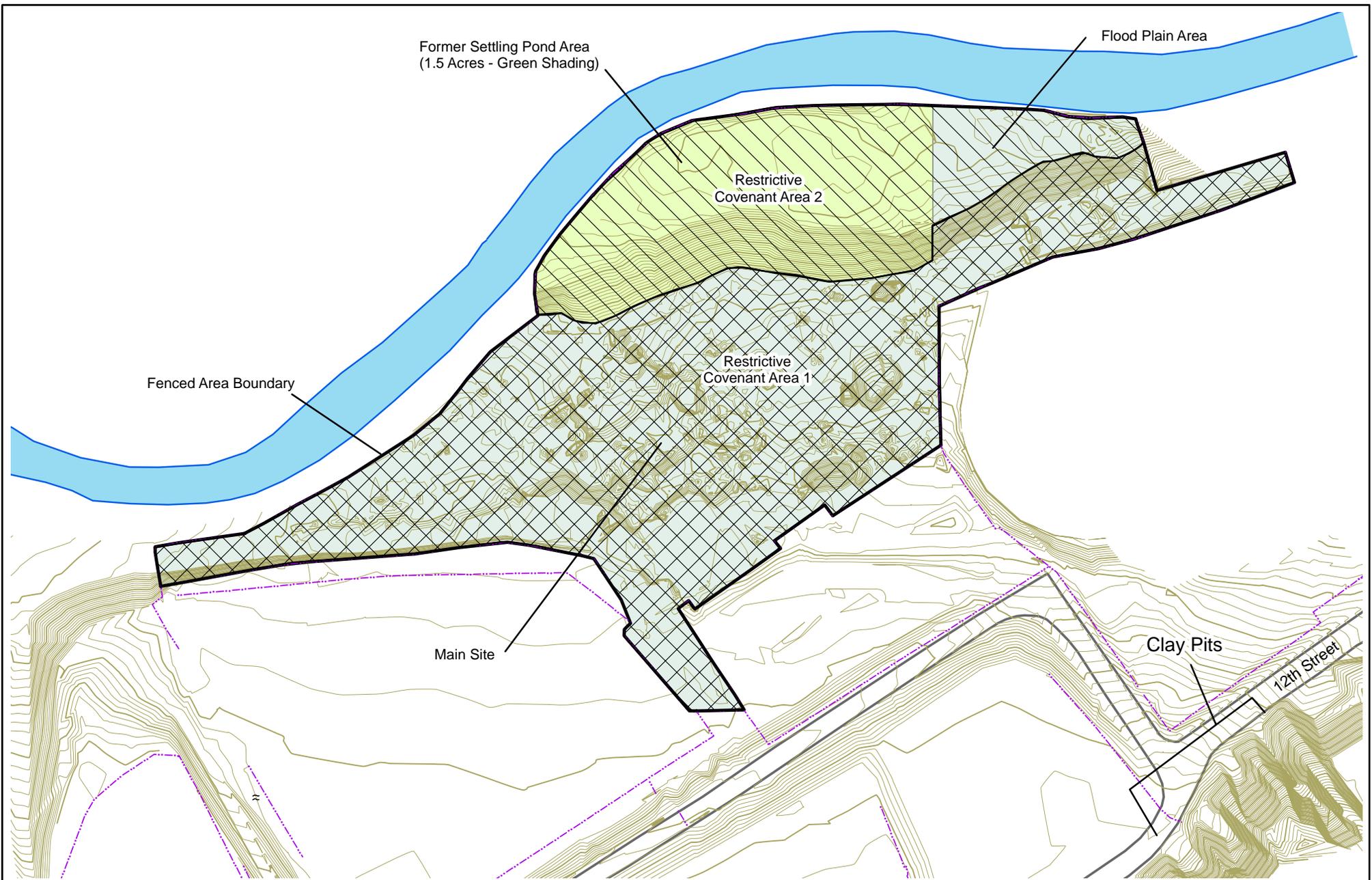
Location/Client: <b>CSMRI</b>	Instrument Mfg./Model: <b>Ludlum Model 19</b>
Date: <b>8/16/07 - 9/7/07</b>	Serial #: <b>144043</b>
Surveyed by: <b>J. Mattson</b>	Calibration due: <b>8/14/08</b>
Background ( $\mu\text{R/hr}$ ): <b>17-18</b>	Performance check satisfactory? <input checked="" type="radio"/> Y <input type="radio"/> N

Time	Monitoring Location		Dose rate ( $\mu\text{R/hr}$ )
	Description	Drawing Ref.	
	<p>Dose rate surveys were performed in the work areas at various times throughout the course of the stockpiled soil disposal project.</p> <p>Dose rates ranged from 0-40 <math>\mu\text{R/hr}</math> above background levels.</p> <p>Average dose rate was less than 10 <math>\mu\text{R/hr}</math> above background.</p>		



Note: Submit completed form to project file and H&S Manager with Site Access Control Personnel Rosters

**Appendix M**  
**Copies of Covenants**



**Figure X**  
**CSMRI Site Map**  
**Showing Areas &**  
**Convenants**

- Explanation**
-  CSMRI Creekside Site
  -  Fences
  -  Topography (1 ft Intervals)
  -  Topography (5 ft Intervals)
  -  Roads



**Scale: 1" = 150'**

0      75      150      300 Feet

CSMRI  
 Dec 2007  
 Remedial Implementation Report



**This property is subject to an Environmental Covenant held by  
the Colorado Department of Public Health and Environment  
pursuant to 25-15-321, C.R.S.**

**ENVIRONMENTAL COVENANT – RESIDENTIAL RADON  
MITIGATION**

By this deed, the State of Colorado acting by and through the Board of Trustees of the Colorado School of Mines (the “**State**”) grants an Environmental Covenant (“**Covenant**”) this \_\_\_\_ day of \_\_\_\_\_, 2007 (the “**Effective Date**”), to the Colorado Department of Public Health and Environment (the “**Department**”) pursuant to C.R.S. § 25-15-321 of the Colorado Hazardous Waste Act, C.R.S. §§ 25-15-101, *et seq.* The Department’s address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, the State is the owner of a certain parcel of property which is more particularly described in Exhibit A attached hereto (the “**State Parcel**”);

WHEREAS, the City of Golden, Colorado (the “**City**”) is the owner of a certain parcel of property more particularly described in Exhibit B attached hereto (the “**Golden Parcel**”);

WHEREAS, a parcel of property located partially on the State Parcel and partially on the Golden Parcel which is more particularly described in Exhibit C attached hereto (the “**CSMRI Site**”), was used for, among other things, mining and metallurgical research for approximately 70 years, and as a result, the soil at the CSMRI Site has an elevated concentration of radium 226 (Ra-226), and some geologic formations at the CSMRI Site have unusually high background concentrations of Ra-226;

WHEREAS, the relative locations of the State Parcel, the Golden Parcel, and the CSMRI Site are indicated in Exhibit D;

WHEREAS, pursuant to the 2007 Revised Remedial Investigation and Feasibility Study for the CSMRI Site (the “**2007 Revised RI/FS**”) and the 2007 Record of Decision for the CSMRI Site, the CSMRI Site was the subject of remedial action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601, *et seq.* (“**CERCLA**”) and the Applicable or Relevant and Appropriate Requirements (the “**ARARs**”) as identified in the 2007 Revised RI/FS, including the radiation control regulations;

WHEREAS, that portion of the CSMRI Site, which is more particularly described in Exhibit E attached hereto and which is owned by the State as of the Effective Date as indicated by the documents recorded as of the Effective Date in the office of the clerk and recorder of Jefferson County, Colorado, shall be referred to herein as the “**Property**”;

WHEREAS, the State, to ensure protection of human health and the environment, desires to subject the Property to the restrictions described in this Covenant;

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by (1) requiring that any residential structures on the Property be equipped with a radon mitigation system in order to protect future site residents from radon emanation resulting from Ra-226 soil concentrations, and (2) prohibiting any beneficial uses of the ground water under the Property; and

WHEREAS, the State desires to subject the Property to certain covenants and restrictions as provided in Article 15 of Title 25 of Colorado Revised Statutes, which covenants and restrictions shall burden the Property and bind the State, its heirs, successors, assigns, and any grantees of the Property, their heirs, successors, assigns and grantees, and any users of the Property, for the benefit of the Department.

NOW, THEREFORE, the State hereby grants this Environmental Covenant to the Department and declares that the Property shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraph 1 below, which shall run with the Property in perpetuity and be binding on the State and all parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns, and any persons using the land, as described herein. The State, its successors, and all parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns shall hereinafter be referred to in this covenant as **“OWNER”**.

1) Use restrictions.

- A. No residential structure, or similar structure requiring similar restrictions, such as medical facilities or child day care centers, may be constructed on the Property without a properly designed radon mitigation system as approved by the Department.
- B. No beneficial uses of the ground water under the Property.
- C. A Soils Management Plan shall be required for soils that may be disturbed in the future by construction activities or similar soil disturbing activities.

2) Purpose of this Covenant. The purpose of this Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to radon from radium 226 that remains in the soil on the Property and to any uranium that remains in the ground water under the Property. The Covenant will accomplish this by requiring any new residential structure on the Property to be equipped with an appropriate radon mitigation system that provides for radon venting, and by creating a review and approval process to ensure that any such

radon mitigation system is designed with appropriate precautions to avoid or eliminate potential exposures to radon. This Covenant will also accomplish this by prohibiting any beneficial use of the ground water under the Property.

3) Modifications. This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. OWNER or its successors and assigns may request that the Department approve a modification or termination of the Covenant. The request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and environment. The Department shall review any submitted information, and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification may include one or more of the following:

- a) a proposal to perform additional remedial work;
- b) new information regarding the risks posed by the residual contamination;
- c) information demonstrating that residual contamination has diminished;
- d) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and
- e) other appropriate supporting information.

4) Conveyances. This Covenant is intended to run with the land and shall be binding upon all subsequent owners of all or any part of the Property. OWNER shall notify the Department at least fifteen (15) days in advance of any proposed grant, transfer or conveyance of any interest in any or all of the Property.

5) Notice to Transferees. OWNER agrees to incorporate either in full or by reference the restrictions in this Covenant in any leases, licenses, transfers of any interest in the Property, or other instruments granting a right to use the Property.

6) Notification for proposed construction and land use. OWNER shall notify the Department simultaneously when submitting any application to a local government for building permit or change in land use.

7) Inspection. The Department shall have the right of entry to the Property at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant. Nothing in this Covenant shall impair any other authority the Department may otherwise have to enter and inspect on the Property.

8) No Liability. The Department does not acquire any liability under State law by virtue of accepting this Covenant.

9) Enforcement. The Department may enforce the terms of this Covenant pursuant to C.R.S. § 25-15-322. The Department may file suit in district court to enjoin actual or threatened violations of this Covenant.

10) Owner's Compliance Certification. OWNER shall submit an annual form, detailing OWNER's compliance, and any lack of compliance, with the terms of this Covenant. Such form will be due to the Department forty-five (45) days after OWNER's receipt of such form from the Department.

11) Acknowledgment. The State acknowledges that an additional portion of the State Parcel is subject to another environmental covenant restricting the uses of such parcel to uses other than for residential purposes and prohibiting the beneficial use of ground water. Such covenant, entitled ENVIRONMENTAL COVENANT – NO RESIDENTIAL USE (the “**Additional Covenant**”) and entered into as of \_\_\_\_\_, 2007 between the State and the Department is recorded in the office of the clerk and recorder of Jefferson County, Colorado. The State acknowledges that the Golden Parcel is subject to environmental covenants with terms and conditions similar to those contained in the Additional Covenant. Such covenants, entitled ENVIRONMENTAL COVENANT – NO RESIDENTIAL USE and entered into as of \_\_\_\_\_, 2007 between the City of Golden and the Department are recorded in the office of the clerk and recorder of Jefferson County, Colorado. Nothing contained herein shall subject any real property other than that owned by the State as of the Effective Date to the restrictions described in this Covenant.

12) Notices. Any document or communications required under this Covenant shall be sent or directed to:

[Name \_\_\_\_\_]

[Title \_\_\_\_\_]

Hazardous Materials and Waste Management Division  
Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

President  
Colorado School of Mines  
1500 Illinois Street  
Golden, Colorado 80401

***[SIGNATURES APPEAR ON FOLLOWING PAGES.]***

The State of Colorado has caused this instrument to be executed this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_.

State of Colorado

By: \_\_\_\_\_

Title: \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ by \_\_\_\_\_ as \_\_\_\_\_ on behalf of the State.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Address

\_\_\_\_\_

My commission expires: \_\_\_\_\_



**This property is subject to an Environmental Covenant held by  
the Colorado Department of Public Health and Environment  
pursuant to 25-15-321, C.R.S.**

**ENVIRONMENTAL COVENANT- NO RESIDENTIAL USE**

By this deed, the City of Golden (the “**City**”) grants an Environmental Covenant (“**Covenant**”) this \_\_\_\_ day of \_\_\_\_\_, 2008 (the “**Effective Date**”), to the Colorado Department of Public Health and Environment (the “**Department**”) pursuant to C.R.S. § 25-15-321 of the Colorado Hazardous Waste Act, C.R.S. §§ 25-15-101, *et seq.* The Department’s address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, the City is the owner of a certain parcel of property which is more particularly described in Exhibit A attached hereto (the “**Golden Parcel**”);

WHEREAS, the State of Colorado acting by and through the Board of Trustees of the Colorado School of Mines (the “**State**”) is the owner of a certain parcel of property more particularly described in Exhibit B attached hereto (the “**State Parcel**”);

WHEREAS, a parcel of property located partially on the State Parcel and partially on the Golden Parcel which is more particularly described in Exhibit C attached hereto (the “**CSMRI Site**”), was used for, among other things, mining and metallurgical research for approximately 70 years, and as a result, the soil at the CSMRI Site has an elevated concentration of radium 226 (Ra-226), and some geologic formations at the CSMRI Site have unusually high background concentrations of Ra-226;

WHEREAS, the relative locations of the State Parcel, the Golden Parcel, and the CSMRI Site are indicated in Exhibit D;

WHEREAS, pursuant to the 2007 Revised Remedial Investigation and Feasibility Study for the CSMRI Site (the “**2007 Revised RI/FS**”) and the 2007 Record of Decision for the CSMRI Site, the CSMRI Site was the subject of remedial action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601, *et seq.* (“**CERCLA**”) and the Applicable or Relevant and Appropriate Requirements (the “**ARARs**”) as identified in the 2007 Revised RI/FS, including the radiation control regulations;

WHEREAS, the City, to ensure protection of human health and the environment, desires to subject the Golden Parcel to the restrictions described in this Covenant;

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by (1) requiring that no residential structures be located on the Golden Parcel in order to protect persons from radon emanation resulting from Ra-226 soil concentrations, (2) requiring that no commercial or industrial structure may be located on the Golden Parcel without a proper radon mitigation system, and (3) prohibiting any beneficial uses of the ground water under the Golden Parcel; and

WHEREAS, the City desires to subject the Golden Parcel to certain covenants and restrictions as provided in Article 15 of Title 25 of Colorado Revised Statutes, which covenants and restrictions shall burden the Golden Parcel and bind the City, its heirs, successors, assigns, and any grantees of the Golden Parcel, their heirs, successors, assigns and grantees, and any users of the Golden Parcel, for the benefit of the Department.

NOW, THEREFORE, the City hereby grants this Environmental Covenant to the Department and declares that the Golden Parcel shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraph 1 below, which shall run with the Golden Parcel in perpetuity and be binding on the City and all parties having any right, title or interest in the Golden Parcel, or any part thereof, their heirs, successors and assigns, and any persons using the land, as described herein. The City, its successors, and all parties having any right, title or interest in the Golden Parcel, or any part thereof, their heirs, successors and assigns shall hereinafter be referred to in this covenant as “**OWNER**”.

- 1) Use restrictions.
  - A. No residential structure, or similar structure requiring similar restrictions, such as medical facilities or child day care centers, may be located on the Golden Parcel.
  - B. No commercial structure or industrial structure may be constructed on the Golden Parcel without a properly designed radon mitigation system as approved by the Department.
  - C. No beneficial uses of the ground water under the Golden Parcel.
  - D. A Soils Management Plan shall be required for soils that may be disturbed in the future by construction activities or similar soil disturbing activities.

2) Purpose of this Covenant. The purpose of this Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to radon from radium 226 that remains in the soil on the Golden Parcel and to any uranium that remains in the ground water under the Golden Parcel. The Covenant will accomplish this by prohibiting any residential structure be located on the Golden Parcel and by prohibiting any beneficial use of the ground water under the Golden Parcel. The Covenant will also accomplish this by

requiring any new commercial or industrial structure on the Golden Parcel to be equipped with an appropriate radon mitigation system that provides for radon venting, and by creating a review and approval process to ensure that such radon mitigation system is designed with appropriate precautions to avoid or eliminate potential exposures to radon.

3) Modifications. This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. OWNER or its successors and assigns may request that the Department approve a modification or termination of the Covenant. The request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and environment. The Department shall review any submitted information, and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification may include one or more of the following:

- a) a proposal to perform additional remedial work;
- b) new information regarding the risks posed by the residual contamination;
- c) information demonstrating that residual contamination has diminished;
- d) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and
- e) other appropriate supporting information.

4) Conveyances. This Covenant is intended to run with the land and shall be binding upon all subsequent owners of all or any part of the Golden Parcel. OWNER shall notify the Department at least fifteen (15) days in advance of any proposed grant, transfer or conveyance of any interest in any or all of the Golden Parcel.

5) Notice to Transferees. OWNER agrees to incorporate either in full or by reference the restrictions in this Covenant in any leases, licenses, transfers of any interest in the Golden Parcel, or other instruments granting a right to use the Golden Parcel.

6) Notification for proposed construction and land use. OWNER shall notify the Department simultaneously when submitting any application to a local government for building permit or change in land use.

- 7) Inspection. The Department shall have the right of entry to the Golden Parcel at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant. Nothing in this Covenant shall impair any other authority the Department may otherwise have to enter and inspect on the Golden Parcel.
- 8) No Liability. The Department does not acquire any liability under State law by virtue of accepting this Covenant.
- 9) Enforcement. The Department may enforce the terms of this Covenant pursuant to C.R.S. § 25-15-322. The Department may file suit in district court to enjoin actual or threatened violations of this Covenant.
- 10) Owner's Compliance Certification. OWNER shall submit an annual form, detailing OWNER's compliance, and any lack of compliance, with the terms of this Covenant. Such form will be due to the Department forty-five (45) days after OWNER's receipt of such form from the Department.
- 11) Acknowledgment. The City acknowledges that a portion of the State Parcel is subject to environmental covenants with terms and conditions similar to those contained in this Covenant. Such covenants, entitled ENVIRONMENTAL COVENANT – NO RESIDENTIAL USE and entered into as of \_\_\_\_\_, 2008 between the State and the Department are recorded in the office of the clerk and recorder of Jefferson County, Colorado. The City acknowledges that an additional portion of the State Parcel is subject to additional environmental covenants requiring a radon mitigation system in residential structures located on such parcel and prohibiting the beneficial use of ground water. Such covenants, entitled ENVIRONMENTAL COVENANT – RESIDENTIAL RADON MITIGATION and entered into as of \_\_\_\_\_, 2008 between the State and the Department is recorded in the office of the clerk and recorder of Jefferson County, Colorado. Nothing contained herein shall subject any real property other than the Golden Parcel to the restrictions described in this Covenant.
- 12) Notices. Any document or communications required under this Covenant shall be sent or directed to:

[Name\_\_\_\_\_]

[Title \_\_\_\_\_]

Hazardous Materials and Waste Management Division  
Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

Mayor  
City of Golden  
City Hall

10<sup>th</sup> and Washington  
Golden, Colorado [\_\_\_\_\_]

***[SIGNATURES APPEAR ON FOLLOWING PAGES.]***

The City of Golden has caused this instrument to be executed this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_.

City of Golden

By: \_\_\_\_\_

Title: \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by \_\_\_\_\_ as \_\_\_\_\_ on behalf of the City of Golden.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Address

\_\_\_\_\_

My commission expires: \_\_\_\_\_



**This property is subject to an Environmental Covenant held by the Colorado Department of Public Health and Environment pursuant to 25-15-321, C.R.S.**

**ENVIRONMENTAL COVENANT – NO RESIDENTIAL USE**

By this deed, the State of Colorado acting by and through the Board of Trustees of the Colorado School of Mines (the “**State**”) grants an Environmental Covenant (“**Covenant**”) this \_\_\_\_ day of \_\_\_\_\_, 2008 (the “**Effective Date**”), to the Colorado Department of Public Health and Environment (the “**Department**”) pursuant to C.R.S. § 25-15-321 of the Colorado Hazardous Waste Act, C.R.S. §§ 25-15-101, *et seq.* The Department’s address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, the State is the owner of a certain parcel of property which is more particularly described in Exhibit A attached hereto (the “**State Parcel**”);

WHEREAS, the City of Golden, Colorado (the “**City**”) is the owner of a certain parcel of property more particularly described in Exhibit B attached hereto (the “**Golden Parcel**”);

WHEREAS, a parcel of property located partially on the State Parcel and partially on the Golden Parcel which is more particularly described in Exhibit C attached hereto (the “**CSMRI Site**”), was used for, among other things, mining and metallurgical research for approximately 70 years, and as a result, the soil at the CSMRI Site has an elevated concentration of radium 226 (Ra-226), and some geologic formations at the CSMRI Site have unusually high background concentrations of Ra-226;

WHEREAS, the relative locations of the State Parcel, the Golden Parcel, and the CSMRI Site are indicated in Exhibit D;

WHEREAS, pursuant to the 2007 Revised Remedial Investigation and Feasibility Study for the CSMRI Site (the “**2007 Revised RI/FS**”) and the 2007 Record of Decision for the CSMRI Site, the CSMRI Site was the subject of remedial action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601, *et seq.* (“**CERCLA**”) and the Applicable or Relevant and Appropriate Requirements (the “**ARARs**”) as identified in the 2007 Revised RI/FS, including the radiation control regulations;

WHEREAS, that portion of the CSMRI Site, which is more particularly described in Exhibit E attached hereto and which is owned by the State as of the Effective Date as indicated by the documents recorded as of the Effective Date in the office of the clerk and recorder of Jefferson County, Colorado, shall be referred to herein as the “**Property**”;

WHEREAS, the State, to ensure protection of human health and the environment, desires to subject the Property to the restrictions described in this Covenant;

WHEREAS, the purpose of this Covenant is to ensure protection of human health and the environment by (1) requiring that no residential structures be located on the Property in order to protect persons from radon emanation resulting from Ra-226 soil concentrations, (2) requiring that no commercial or industrial structure may be located on the Property without a proper radon mitigation system, and (3) prohibiting any beneficial uses of the ground water under the Property; and

WHEREAS, the State desires to subject the Property to certain covenants and restrictions as provided in Article 15 of Title 25 of Colorado Revised Statutes, which covenants and restrictions shall burden the Property and bind the State, its heirs, successors, assigns, and any grantees of the Property, their heirs, successors, assigns and grantees, and any users of the Property, for the benefit of the Department.

NOW, THEREFORE, the State hereby grants this Environmental Covenant to the Department and declares that the Property shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraph 1 below, which shall run with the Property in perpetuity and be binding on the State and all parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns, and any persons using the land, as described herein. The State, its successors, and all parties having any right, title or interest in the Property, or any part thereof, their heirs, successors and assigns shall hereinafter be referred to in this covenant as “**OWNER**”.

- 1) Use restrictions.
  - A. No residential structure, or similar structure requiring similar restrictions, such as medical facilities or child day care centers, may be located on the Property.
  - B. No commercial structure or industrial structure may be constructed on the Property without a properly designed radon mitigation system as approved by the Department.
  - C. No beneficial uses of the ground water under the Property.
  - D. A Soils Management Plan shall be required for soils that may be disturbed in the future by construction activities or similar soil disturbing activities.
  
- 2) Purpose of this Covenant. The purpose of this Covenant is to ensure protection of human health and the environment by minimizing the potential for exposure to radon from radium 226 that remains in the soil on the Property and to

any uranium that remains in the ground water under the Property. The Covenant will accomplish this by prohibiting any residential structure be located on the Property and by prohibiting any beneficial use of the ground water under the Property. The Covenant will also accomplish this by requiring any new commercial or industrial structure on the Property to be equipped with an appropriate radon mitigation system that provides for radon venting, and by creating a review and approval process to ensure that any such radon mitigation system is designed with appropriate precautions to avoid or eliminate potential exposures to radon.

3) Modifications. This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. OWNER or its successors and assigns may request that the Department approve a modification or termination of the Covenant. The request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and environment. The Department shall review any submitted information, and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification may include one or more of the following:

- a) a proposal to perform additional remedial work;
- b) new information regarding the risks posed by the residual contamination;
- c) information demonstrating that residual contamination has diminished;
- d) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and
- e) other appropriate supporting information.

4) Conveyances. This Covenant is intended to run with the land and shall be binding upon all subsequent owners of all or any part of the Property. OWNER shall notify the Department at least fifteen (15) days in advance of any proposed grant, transfer or conveyance of any interest in any or all of the Property.

5) Notice to Transferees. OWNER agrees to incorporate either in full or by reference the restrictions in this Covenant in any leases, licenses, transfers of any interest in the Property, or other instruments granting a right to use the Property.

6) Notification for proposed construction and land use. OWNER shall notify the Department simultaneously when submitting any application to a local government for building permit or change in land use.

- 7) Inspection. The Department shall have the right of entry to the Property at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant. Nothing in this Covenant shall impair any other authority the Department may otherwise have to enter and inspect on the Property.
- 8) No Liability. The Department does not acquire any liability under State law by virtue of accepting this Covenant.
- 9) Enforcement. The Department may enforce the terms of this Covenant pursuant to C.R.S. § 25-15-322. The Department may file suit in district court to enjoin actual or threatened violations of this Covenant.
- 10) Owner's Compliance Certification. OWNER shall submit an annual form, detailing OWNER's compliance, and any lack of compliance, with the terms of this Covenant. Such form will be due to the Department forty-five (45) days after OWNER's receipt of such form from the Department.
- 11) Acknowledgment. The State acknowledges that an additional portion of the State Parcel is subject to another environmental covenant requiring residential structures to be equipped with radon mitigation systems and prohibiting the beneficial use of ground water. Such covenant, entitled ENVIRONMENTAL COVENANT – RESIDENTIAL RADON MITIGATION (the “**Additional Covenant**”) and entered into as of \_\_\_\_\_, 2008 between the State and the Department is recorded in the office of the clerk and recorder of Jefferson County, Colorado. The State acknowledges that the Golden Parcel is subject to environmental covenants with terms and conditions similar to those contained in the Additional Covenant. Such covenants, entitled ENVIRONMENTAL COVENANT – NO RESIDENTIAL USE and entered into as of \_\_\_\_\_, 2008 between the City of Golden and the Department are recorded in the office of the clerk and recorder of Jefferson County, Colorado. Nothing contained herein shall subject any real property other than that owned by the State as of the Effective Date to the restrictions described in this Covenant.
- 12) Notices. Any document or communications required under this Covenant shall be sent or directed to:

[Name \_\_\_\_\_]

[Title \_\_\_\_\_]

Hazardous Materials and Waste Management Division  
Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

and

President  
Colorado School of Mines  
1500 Illinois Street  
Golden, Colorado 80401

*[SIGNATURES APPEAR ON FOLLOWING PAGES.]*

The State of Colorado has caused this instrument to be executed this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_.

State of Colorado

By: \_\_\_\_\_

Title: \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ by \_\_\_\_\_ as \_\_\_\_\_ on behalf of the State.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Address

\_\_\_\_\_

My commission expires: \_\_\_\_\_



## **Appendix N**

### **MicroShield 7.0 Evaluation**

# **Evaluation of Doses for Recreational Use of a Walking/Bike Path Along Clear Creek on the Lower Terrace (Flood Plain and Former Pond Areas), Colorado School of Mines Remedial Investigation Site, Golden, Colorado**

## **Introduction**

The dose to recreationists (bikers, walkers, sightseers) exposed to Ra-226 contamination at the Colorado School of Mines Research Institution (CSMRI) remedial investigation site was evaluated using MicroShield 7.0 computer code (Grove Software 2005). MicroShield is a comprehensive photon/gamma ray shielding and dose assessment program that is widely used for designing shields, estimating source strength from radiation measurements, minimizing exposure to people, and teaching shielding principles. MicroShield is useful to health physicists, waste managers, design engineers, and radiological engineers and only requires a basic knowledge of radiation and shielding principles. MicroShield is fully interactive and incorporates extensive input error checking.

MicroShield was used for external gamma dose calculations because it more accurately models the geometry of the source, shields, and location of the receptor and uses an extensive library of data (radionuclides, attenuation, buildup, and dose conversion) which reflect standard data from the Radiation Safety Information Computational Center (RSICC), American Nuclear Society (ANS), and International Commission on Radiological Protection (ICRP).

## **Assumptions**

The following conservative assumptions were used:

- The recreationist spends 1 hour/day for 365 days or 365 hours/yr at the site.
- Doses at each location are calculated assuming that the entire hour is spent on that contamination point.
- The area exposed to Ra-226 contamination is 2 ft by 450 ft. This is a path through the zones of highest contamination.
- The specified radionuclide concentration (Table 1) occurs in a 1 meter radius and a 1.2 meter depth (geometry is cylindrical) at each sampling point within this area.
- The maximum exposure occurs 1 m (3 ft) above the surface.
- There is no shielding.
- Buildup is included in the calculations.
- External exposure is the only pathway considered. There is no dose from ingestion or inhalation.
- Ra-226 is in equilibrium with its daughters. Bi-214 is the major dose contributor under this assumption. If the assumption is made that Ra-226 is not in equilibrium, then doses would be reduced by more than 99%.

Figure 1 shows the Sample ID point distribution for non-excavated confirmation samples and non-excavated surface and subsurface samples. The measured concentrations of Ra-226 (pCi/g) were entered into MicroShield to calculate the dose at each sampling location. Each sample location was buffered by a 1 m (3 ft) radius to represent the area assumption selected for the

MicroShield dose calculations. The buffered points are color-coded to match the dose categories displayed in the Figure 2 map legend.

Each sampling point dose (mrem/yr) was used to interpolate a continuous surface through this site. The Inverse Distance Weighted (IDW) function was used within the ArcGIS 9.2 Spatial Analyst extension to perform the interpolation, and color-coded (Shepard 1968; Watson and Philip 1985). The result is a grayscale image where brighter regions represent higher doses and darker regions represent lower doses. The interpolated surface provides a visualization tool to understand how the dose varies spatially across the entire site.

A two-foot wide path through this site was manually digitized attempting to represent a worst-case scenario where the path is intentionally routed through regions of greatest dose (Figure 2, Table 1). The total length of the potential path is 450 ft. Assuming a slow travel speed of 2 mph (i.e., comparable to someone walking the trail), an individual would realistically be exposed to these doses for a total of 2.5 minutes (versus the one hour assumed for these calculations) to complete the trail.

**Table 1**  
**Doses corresponding to each sample at the**  
**CSMRI Site along Clear Creek**

Sample #	Ra-226 pCi/g	MicroShield Dose (mrem/yr)
1207	3.81	1.78E-03
1208	4.00	1.86E-03
1209	4.19	1.95E-03
1215	2.93	1.37E-03
1219	3.23	1.50E-03
1221	3.73	1.74E-03
1224	2.36	1.10E-03
1225	3.68	1.71E-03
1236	5.34	2.49E-03
1239	3.82	1.78E-03
1241	3.14	1.46E-03
1244	2.89	1.35E-03
1255	5.63	2.62E-03
1258	5.63	2.62E-03
1259	4.19	1.95E-03
1261	10.91	5.08E-03
1262	3.03	1.41E-03
1263	3.74	1.74E-03
1268	3.70	1.72E-03
1269	3.36	1.57E-03
1272	3.49	1.63E-03
1275	4.42	2.06E-03
1276	7.61	3.55E-03
1277	6.90	3.22E-03
1278	4.33	2.02E-03
1314	5.55	2.59E-03
1315	6.62	3.09E-03
1316	6.27	2.92E-03
1317	4.17	1.94E-03
1318	4.58	2.14E-03

**Table 1**  
**Doses corresponding to each sample at the**  
**CSMRI Site along Clear Creek**

Sample #	Ra-226 pCi/g	MicroShield Dose (mrem/yr)
1319	4.79	2.23E-03
1320	24.25	1.13E-02
1321	6.75	3.14E-03
1322	8.22	3.83E-03
1323	5.79	2.70E-03
1324	4.71	2.19E-03
1325	3.99	1.86E-03
1326	4.57	2.13E-03
1327	6.06	2.82E-03
1328	6.22	2.90E-03
1329	8.63	4.02E-03
1330	7.32	3.41E-03
1331	2.64	1.23E-03
Mean	5.38	2.51E-03
Median	4.42	2.06E-03
Maximum	24.25	1.13E-02
Minimum	2.36	1.10E-03

**Conclusions**

It is reasonable to conclude that the actual doses are below those calculated with MicroShield due to shielding from soil and vegetation as well as any improvements or covering on the path; distance from the contaminated points; and actual time spent in the area.

Based on these calculations and the conservative nature of the assumptions, it can reasonably be concluded that recreationists using the CSMRI recreational path are not subjected to radiological dose above the regulatory limits of 25 mrem/yr. It can also be reasonably concluded that a realistic dose scenario would produce doses much lower (by as much as 96%) than those determined through the conservative calculations. The maximum dose to which a recreationist would be subjected (1.13E-2 mrem/yr) is 0.05 percent of the 25 mrem/yr regulatory limit (Table 1). The doses from Old Pond area (Table 2) (using the same assumptions) are well below the regulatory limits as well.

**Table 2**  
**Doses from Ra-226 left in Old Pond area**

Soils Ra-226 Concentrations (pCi/g)	Soil Depth (inches)	Dose (mrem/yr)
5	6	1.52E-03
15	6-60	7.85E-03
	TOTAL	9.37E-03

**References**

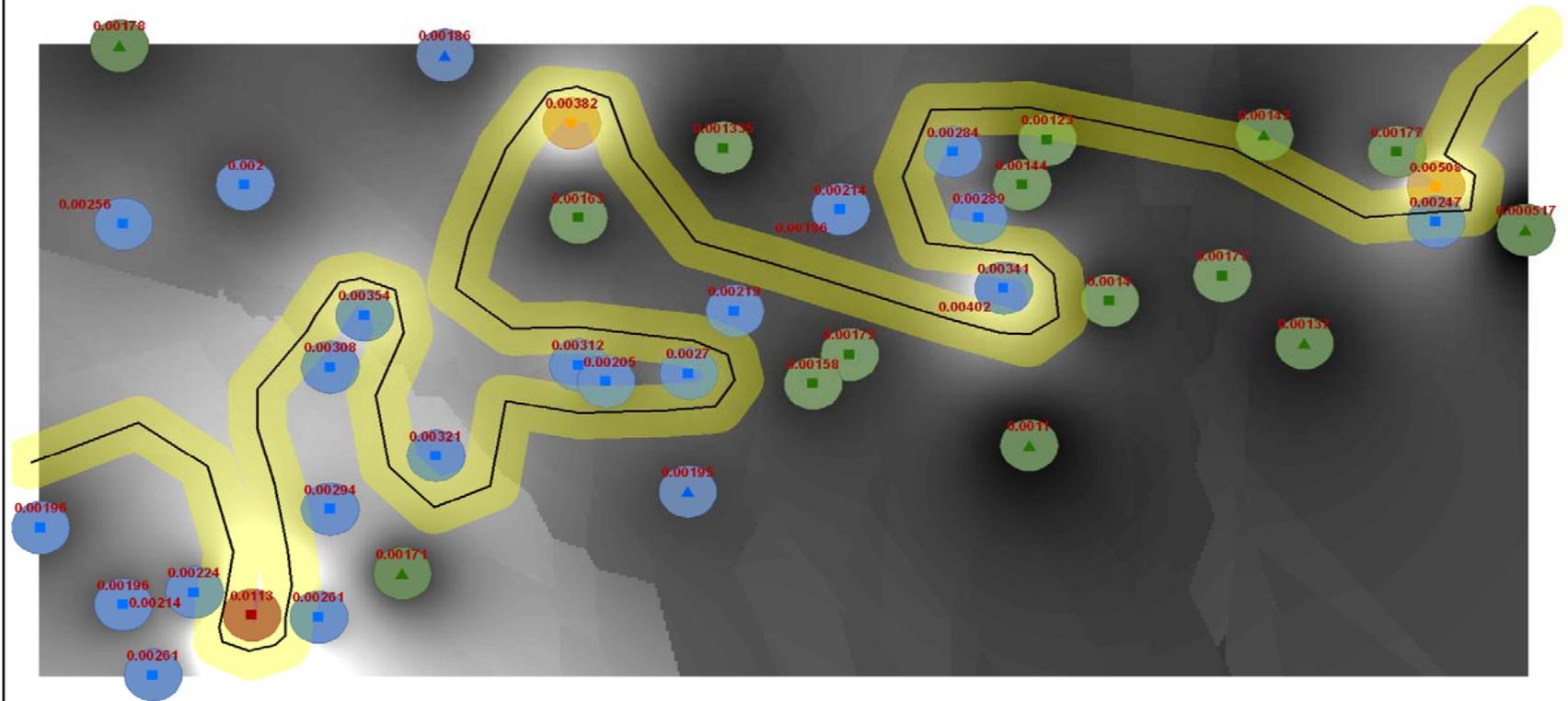
Grove Software. 2005. Micro Shield 7.0 Dose Assessment Program. Grove Software, Inc., Lynchburg, Virginia.

Shepard, D. 1968. A two-dimensional interpolation function for irregularly-spaced data. Proc. 23rd ACM National Conference, 517-524.

Watson, D.F., and G.M. Philip. 1985. A Refinement of Inverse Distance Weighted Interpolation. *Geoprocessing*, 2:315-327. 1985.



## CSMRI Creekside Site



### Non-Excavated Confirmation Samples

- mrem/yr < 1.8E-03
- mrem/yr < 3.6E-03
- mrem/yr < 5.1E-03
- mrem/yr < 1.2E-02

### Non-Excavated Surface and Subsurface Samples

- ▲ mrem/yr < 1.8E-03
- ▲ mrem/yr < 3.6E-03

— Potential Bike Path

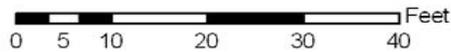


Figure 2.  
Wetlands Gamma Investigation  
Final Confirmation Sample Locations  
Non-Excavated Doses (mrem/yr)

*Stoller*