

**REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AND
PROPOSED PLAN**

**COLORADO SCHOOL OF MINES RESEARCH INSTITUTE SITE
GOLDEN, CO**

May 2007

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List of Acronyms/Definitions

| | |
|---------------------|---|
| ALARA | As Low As Reasonably Achievable |
| ARAR | Applicable or Relevant and Appropriate Requirements |
| ATSDR | Agency for Toxic Substances and Disease Registry |
| BFI | Browning-Ferris Industries |
| bgs | Below Ground Surface |
| CDC | Centers for Disease Control |
| CEDE | Committed Effective Dose Equivalent |
| CDOT | Colorado Department of Transportation |
| CDPHE | Colorado Department of Public Health and Environment |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | U.S. Code of Federal Regulations |
| COC | Compound of Concern |
| cpm | Counts Per Minute |
| CSMRI | Colorado School Mines Research Institute (the Site) |
| CSWP | Characterization Survey Work Plan (URS Corporation) |
| cy | cubic yard |
| DCGL | Derived Concentration Guideline Level |
| DCGL _{emc} | Decision Control Guide Limit, Elevated Measurement Comparison |
| DCGL _w | Wilcox rank-sum |
| DOE | U.S. Department of Energy |
| dpm | disintegrations per minute |
| EPA | U.S. Environmental Protection Agency |
| FGS | field gamma scintillator |
| GPERS-II | Global Positioning Environmental Radiological Surveyor |
| GPS | Global Positioning System |
| HEAST | Health Effects Assessment Summary Tables |
| HI | Hazard Index (EPA) |
| HQ | Hazard Quotients (EPA) |
| IEUBK | Integrated Exposure Uptake Biokinetic Model for Lead in Children |
| IRIS | Integrated Risk Information System |
| ISOCS | In-Situ Object Counting System |
| LOD | level of detection |
| MARSSIM | Multi-Agency Radiation Survey and Site Investigation Manual |
| MCL | Maximum Contaminant Levels (EPA Drinking Water) |
| MCLG | Maximum Contaminant Level Goal |
| mg/kg | Milligram per Kilogram |
| mg/L | Milligram per Liter |
| mrem | Millirem – small unit of radiation dose (one thousandth of a rem) |
| NCP | National Oil and Hazardous Substances Pollution Contingency Plan |
| NOAA | National Oceanic and Atmospheric Administration |
| NPL | National Priority List |
| NRC | U.S. Nuclear Regulatory Commission |
| NUREG | U.S. Nuclear Regulatory Commission publication |
| PbB | blood lead |
| pCi/g | Pico-Curies per Gram |

| | |
|--------|--|
| pCi/L | Pico-Curies per Liter |
| ppm | parts per million |
| PRG | preliminary remediation goals |
| RA | Remedial Action |
| RAIS | Risk Assessment Information System |
| RAO | Remedial Action Objectives |
| RAOA | Removal Action Options Analysis |
| RCRA | Resource Conservation and Recovery Act |
| RESRAD | Pathway analysis computer code developed for implementing U.S. Department of Energy Residual Radioactive Material Guidelines. |
| RI/FS | Remedial Investigation/Feasibility Study |
| ROD | Record of Decision |
| TEDE | Total Effective Dose Equivalent |
| UAO | Unilateral Administrative Order (from EPA) |
| UCL | Upper Confidence Limit |
| US | United States |
| USACE | U.S. Army Corps of Engineers |
| VSP | Visual Sampling Plan |
| WL | Working Level: Any combination of short-lived radon decay products in one liter of air that will result in the ultimate emission of 1.3×10^5 MeV of potential alpha energy. |
| XRF | x-ray fluorescence |
| yr | year |