

## ***Mining Services***



### **Capabilities**

- CERCLA Investigations, Design and Remediation
- Mine Waste Repository Design
- Development of Alternative Water Handling Approaches
- Mine Closure and Post-Closure
- Petroleum Storage Tanks
- Aquatic Habitat Assessment
- Potentially Responsible Party Searches
- Public Relations Support
- Hazardous Material Characterization and Removal
- Acid Rock Drainage Assessment
- NPDES Permitting
- Stream Restoration

## Key Projects

### Colorado Hill Mining Area, California

- Performed three EE/CAs covering 13 abandoned gold mines
- Inspected two miles of underground workings
- Analyzed underground and surface water management options
- Assessed acid mine drainage impacts to surface water

### Livingston Mill, Idaho

- Performed Site Inspection (SI) of historic lead–zinc–silver mill site with two mills, five tailings piles, failed tailings dams and complex hydrology
- Collected and assessed stream macroinvertebrate, water, tailings, soil, agronomic and geotechnical samples
- Evaluated surface water–ground water interactions
- Developed preliminary remedial recommendations

### Buckskin & McCormick Mines, Nevada (four projects)

- Prepared Engineering Evaluation/Cost Analysis (EE/CA) for abandoned gold and mercury mines with tailings and Acid Mine Drainage (AMD) impacting threatened trout habitat
- Designed CERCLA Removal Action, including terracing and capping tailings, controlling effluent and surface water, and protecting historic structures
- Tested, recovered and disposed of cyanide–laden drums
- Repaired conveyance, installed flume, monitored stream

### Stibnite Mining Area, Idaho (five projects)

- Performed EE/CA at large inactive open pit gold/tungsten mine on public lands
- Prepared Remedial Investigation/Feasibility Study (RI/FS) for portion of large mining complex on private lands
- Removed wooden smelter stack and contaminated contents
- Excavated tailings and placed in constructed cell

### Apex Uranium Mine, Nevada

- Performed EE/CA at inactive uranium mine
- Radiological survey and exposure/risk evaluation

### Open–Pit Copper Mine, Irian Jaya

- Reviewed environmental assessment for international lender
- Evaluated solids load, stream chemistry and estuary effects
- Assessed potential for acid rock drainage

### Selected Smaller Projects

- Closure/demolition of Minnesota Ridge gold mill, Deadwood, SD
- EE/CA of Bog lead/zinc mines, American Fork, Utah
- Tested and replaced failed tailings vault liner, Atlanta, Idaho
- Dewatered mine tailings pond, Missouri Mine, Idaho
- Potentially Responsible Party (PRP) searches, Antimony Ridge, Idaho and LaSal Creek Watershed, Utah/Colorado
- Collected river sediments below failed log crib dam using boat–mounted drill rig, Kirby Dam, Atlanta, Idaho
- Groundwater investigation and tailings instrumentation, Cyprus Thompson Creek Mine, Challis, Idaho

