“Where there is cinnabar above, yellow gold will be found below. Where there is lodestone above, copper and gold will be found. Where there is calamine above, lead, tin and red copper will be found. Thus it can be seen that mountains...
Mining Client Services

Every day in multiple ways, mining touches our lives. Largely unnoticed by most, the benefits derived from mining range from powering our homes to supporting space exploration.

By their very nature, the basic activities of mining affect land, air and water systems. The great challenge today is to develop mining projects that are economically and environmentally sustainable.

Having an experienced consultant as your partner can help you achieve your goals. Whether it’s planning for environmental permitting requirements, engineering for operational infrastructure or design-build options, HDR can help with services from exploration to closure. HDR has the experience and resources to offer a full slate of mine operation support services. Treating the land with sensitivity during exploration and permitting, offering environmentally sustainable infrastructure and production process development, and ensuring proper land restoration and reclamation during closure and decommissioning, are hallmarks of HDR’s comprehensive mine support services.

HDR offers integrated mining support services in the following areas:

- Engineering
- Environmental
- Industrial Water
- Energy
- Transportation
- Reclamation
- Remediation
Partnerships
A significant part of our PARTNERSHIP philosophy with the mining community is to understand our clients and the industry through membership and participation in the following organizations:

- American Society of Mining and Reclamation
- Texas Mining and Reclamation Association
- Arizona Mining Association-AMIGOS
- Wyoming Mining Association
- Illinois Mining Institute
- Indiana Coal Association
- Illinois Coal Association
- Alaska Miners Association
- Association for Mineral Exploration British Columbia
- Society for Mining, Metallurgy and Exploration

Guiding Principles
For every client, for every project, HDR...

- Taps the experience of our skilled personnel, with nationally recognized experts in key service areas tied to mining
- Commits to achieve zero harm with a keen eye focused on mine health, safety and the environment
- Manages client relationships alongside project schedules and budgets
- Backs our work with comprehensive and defensible documentation
- Offers open communication, trust and respect
Engineering Services
- Facility design
- Civil, structural and mine engineering
- Engineer of Record services
- Project siting, planning and needs analysis
- Geotechnical engineering
- Design-build project delivery
- Treatment process design
ACHIEVING BALANCE BETWEEN THE BUILT AND NATURAL ENVIRONMENTS
Environmental Services

- Full permitting support (NEPA, Section 404, SMCRA and NPDES, along with federal, state and local support)
- Wetlands, vegetation and habitat analysis and delineation
- Mitigation planning/environmental baseline studies
- Air and water quality studies and analysis
- Macroinvertebrate studies
- Fisheries analysis
- Wildlife and threatened and endangered species studies and monitoring
- Development of mine-specific management plans
- Cultural resources
Stream Crossing Evaluations and Measurements, Pebble Project | Koktuli River, Iliamna, AK
Industrial Water Services

- Mine water treatment plant design and operational management
- Pump station design
- Hydrology and hydraulics studies
- Waste minimization and solid waste diversion
- Water rights analysis and support
- Dewatering of abandoned mines
- Process water treatment
Energy Services

- Power supply system development
- Mine equipment load studies
- Transmission and distribution (T&D) siting, infrastructure design and development
- Electrical power studies
- Equipment purchase and construction bidding support
Transportation Services

- Rail system and connection design
- Railroad build-out design and support
- Bridge and waterway crossing design
- Roadway and infrastructure development, including roadway crossing infrastructure
- Traffic control systems
Reclamation Services
- Reclamation planning
- ERP and bond release
- Soil studies

- Revegetation plans
- Land use planning
- Mitigation planning

| ACHIEVING BALANCE BETWEEN THE BUILT AND NATURAL ENVIRONMENTS |
Remediation Services

- Tailings dam stabilization
- Acid mine drainage studies
- Remediation planning
- Closure planning
- Phase 1 and 2 assessments
Other Services

- Alternatives development and characterization
- GIS mapping and data development
- Construction oversight and management
- Real estate evaluations
- Cost characterization and cost opinion preparation
- Sustainable Return on Investment (SROI) proprietary analysis
- Public outreach and participation
We practice increased use of sustainable materials and reduction of material use.