Mining Services

An integrated approach to engineering, environment, and project delivery



01 ESG, Sustainability & **Indigenous Relations**

- Climate Change & Resilience Planning
- Community Relations & Human Rights
- Corporate & Regulatory GHG Reporting
- Corporate-Level ESG Strategy **Development & Implementation**
- Energy Usage & Efficiency
- ESG Disclosure Readiness, Development & Enhancement
- Indigenous Relations & Partnership Building
- KPI/Target Setting, Tracking & Reporting
- Nature Based Solutions
- Renewable Energy Assessments
- Water Conservation & Stewardship
- Workforce Health & Safety

02 Surface Infrastructure

- Accommodation Camps
- Administration & Offices
- Airstrips & Facilities
- Communications
- Haul Roads & Access Roads
- Mine Dry, Workshops & Warehouses
- Ports, Stockyards, & Shiploading
- Power Supply & Distribution
- Railways & Rolling Stock
- Sewage & Wastewater
- Solid Waste Management
- Watercourse Assessments & Restoration

200 AND

03 Underground

Infrastructure

- Compressed Air Systems
- Crushing & Picking
- Dewatering Systems
- Electrical Distribution Systems
- Incline Conveying Instrumentation & Control
- Mechanical Mine Services
- Shaft Hoisting Systems
- Ventilation & Equipment

04 Plant Engineering

- Balance of Plant
- Process Modifications
- Crushing & Screening
- - Overland Conveyance
 - Plant Conveyors
 - Slurry Pipelines
 - Stockyards & Loadouts
 - Structural Assessment & Repair

- **05** Water Management - Advanced Analytic Testing
 - Climate Change & Adaptation
 - Computational Fluid Dynamics
 - Environmental Impacts Assessments (Surface & Groundwater)
 - Erosion & Sediment Control
 - Flood Management
 - Geomorphology - Hydrogeology
 - Hydrologic & Hydraulic Modeling
 - Metals & Hydrocarbon Removal
 - Nature Based Solutions
 - Nutrient Removal
 - Potable Water Systems
 - Pumping Stations
 - Site Water Balance
 - Stormwater Management
 - Stream Diversions
 - Surface Water & Groundwater Monitoring
 - Ultra-Fine Filtration
 - Water Quality Modeling & Correction
 - Security & Stewardship Programs
 - Supply & Withdrawal
 - Transportation & Storage



06 Tailings & Dams

- Conventional, Thickened. Paste & Filtered Dewatered & Drv Stacked
- Dam Safety Reviews & Inspections
- Design, Construction, **Operations Support, Closure &** Post-Closure
- Engineer of Record Services
- FMEA / Risk Management
- Geosynthetic Barriers
- Hydrotechnical Structures
- Paddock, In-Pit, Central Discharge
- Sub-Aerial, Subaqueous & Submarine
- Surveillance, Maintenance & **Emergency Preparedness**
- Tailings & Waste Rock Co-Disposal / Co-Mingling
- Tailings Dams / **Embankments Design**
- Tailings Deposition Planning
- Tailings Storage Facilities / Transport
- Third Party / Independent **Design Reviews**
- Water / Effluent Retention Dams

AECOM supports the entire project life cycle.

Our team works across the project lifecycle from exploration and development through to operations and decommissioning. Innovation, efficiency, global reach and collaboration — AECOM's winning combination benefits clients, communities and stakeholders around the globe.





MINING RESPONSIBLY, RESTORING SUSTAINABLY Pictured top: Giant Mine Remediation Project, Northwest Territories, Canada Pictured bottom: Strange Lake Rare Earth Mining Project, Quebec, Canada

- Mine Services













UNEARTHING A LOW-CARBON FUTURE Pictured top: Faro Mine Remediation Project, Yukon, Canada Pictured middle: Sydney Tar Ponds and Coke Ovens Site Remediation, Cape Breton Island, Nova Scotia, Canada Pictured bottom: Snow Lake Mine Remediation, Manitoba, Canada



07 Ground Engineering

- Deterministic & Probabilistic Seismic Hazard Assessments
- Foundation Designs
- Geochemistry
- Geologic Assessments
- Geologic Surveys
- Geotechnical Engineering Recommendations
- Ground Freezing
- Ground Improvements / Freezing
- Groundwater Fate & Transport Modeling
- Horizontal Directional Drilling
- Hydrology & Site-Wide Water Balance
- Mine Dewatering
- Retaining Structures
- Site Investigations
- Slope / Mine Waste Dump / Heap Leach Stability



08 Environment Services

- Acoustic Modeling & Noise Control Evaluation
- Air Quality Modeling Assessments & Ambient Monitoring
- Archaeological Investigations & Reporting
- Climate Assessments
- Compliance Checklists & Manuals
- Emerging Contaminant Expertise (PFAS)
- Endangered Species Surveys / Consultation
- Environmental Planning & Permitting
- Impact Avoidance & Mitigation
- Noise & Vibration Monitoring
- Regulatory Compliance Programs
- Spill Prevention, Control & Countermeasures
- Wetland & Stream Delineation

09 Construction Services

- Bid Package Preparation & Management
- Compliance Monitoring Programs - Constructibility Reviews
 - Contract Administration
 - Planning, Scheduling & Cost
 - Estimating
- Pre-Commissioning & Commissioning
- Project Execution
- Quality Assurance & Inspection
- Safety Management



10 Operations

- Asset Management & Integrity
- Commissioning Assistance
- GIS / GPS / Drone Services
- Liability Portfolio Management
- Noise, Vibration & Dust Compliance Monitoring & Reporting
- Operational Readiness
- Unmanned Systems





11 Planning

- Agency Strategy & Negotiations
- Concept Studies & Site Selection
- Definition & Cost Estimating - Engineering Studies & FEED
- Environmental Baseline Studies
- Exploration Permitting
- Public & Stakeholder Engagement
- Regulatory Permitting



12 Closure & Reclamation

- Closure Planning & Remediation
- Compliance Monitoring & Annual Sampling/Reporting
- Demolition Oversight & Management
- Hydrogeological, Geochemical & Transport Modelling
- ML/ARD & Metal Attenuation Studies
- Predictive Water Balance & Water Quality Monitoring
- Regulatory Approvals & Permitting
- Surface Reclamation
- Waste Management