

Industrial Minerals

Support for all facets of industrial minerals production—from extraction to reclamation

Demand for industrial minerals is dictated by growth or slowdowns in multiple sectors, including construction, chemical, and manufacturing. Tetra Tech has the know-how and experience to provide the best possible services for its clients, regardless of how rare or complicated their products are.

Our industrial minerals portfolio of projects includes aggregates (sand, gravel, stone), graphite, gypsum, mineral sands (titanium dioxide and tungsten), industrial gems (diamonds), ball clay, borates, bentonite, wollastonite, talc, sodium carbonate (soda ash), mica, feldspar, trona, iodine, sodium sulfate, and rare earth elements (REE). These minerals are essential components of food, clothing, housing, transportation, and entertainment systems, among others. And as new applications are developed, we make it our business to stay on top of the trends.

Focusing on supporting clients wherever deposits of these widely varying but essential minerals are found, we have done extensive work around the world in 14 countries, with more being added all the time.

Our company's professionals are particularly strong in water management, environmental assessment and monitoring, and reclamation and remediation programs. They know how to deal with the impacts of producing industrial minerals, as well as applying these minerals in industrial processes.

For our industrial minerals clients, we have provided both research to identify and define mining issues and engineering to address the issues.



De Beers Canada, Gahcho Kué Project, Canada, Northwest Territories – Geotechnical site investigation for new mine

Services

Consulting and Studies

- Due diligence reports
- Resource evaluations, estimations, and modeling
- Mine engineering planning and design
- Compliant scoping, pre-feasibility and feasibility studies
- Process flow sheets and plant design
- Transportation planning and design

Engineering, Procurement, and Construction Management

- Project management
- Multidisciplinary engineering design services
- Procurement management
- Material and contract management
- Construction management
- Plant commissioning
- Full-service sustaining capital projects

Environment and Socioeconomics

- Baseline studies
- Social and environmental permitting
- Clean water, clean air, and endangered species regulatory compliance
- Environmental impact assessments and statements
- Monitoring of air, water, and soil quality
- Tailings management
- Water and waste management
- Mine closure and reclamation

Tetra Tech is a leading provider of consulting, engineering, program management, construction management, and technical services. The Company supports government and commercial clients by providing innovative solutions to complex problems focused on water, environment, energy, infrastructure, and resource management. With 13,000 employees worldwide, Tetra Tech's capabilities span the entire project life cycle.

Example Projects



BHP Billiton, Ekati Diamond Mine, Canada, NWT— geotechnical services



Avalon Rare Metals, Thor Lake, Canada, NWT—REE project, technical report



North American Tungsten, Cantung Mine, Canada, NWT— engineering services; soil sampling in progress

- Active in mining and minerals for more than 50 years
- +1,300 dedicated technical mining professionals
- 100+ assignments, for more than 80 industrial minerals clients, in 14 countries

Corporate Headquarters

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Tetra Tech Mining & Minerals

Australia	Perth, Western Australia
Brazil	Belo Horizonte, Minas Gerais State
Canada	Vancouver, British Columbia Toronto, Ontario
Chile	Santiago, Santiago Province
UK	Swindon, Wiltshire
US	Denver, Colorado Golden, Colorado

Countries where industrial minerals projects have been executed:



- UK – aggregates, tungsten, silica sands, kaolin
- Australia – mineral sands, tungsten
- United States – aggregates, gypsum, graphite, REE, tungsten
- Sierra Leone – diamonds
- Brazil – tungsten, diamonds, graphite
- Canada – diamonds, graphite, REE, tungsten
- Morocco – gypsum
- Turkey – marble
- Spain – gypsum
- Argentina – REE
- Greenland – REE
- Mongolia – REE
- Mexico – graphite
- Russia – tungsten