



LAYFIELD

ENVIRONMENTAL PRODUCTS AND SERVICES FOR MINING

Layfield has provided environmental protection services and products to the mining industry for many years. We are uniquely set up as both a material supplier and an environmental contractor. Call on Layfield for all of your environmental product needs.

www.LayfieldEnvironmental.com/mining

Mine Development

Geosynthetic Services

Layfield has provided innovative geosynthetic designs for a number of mine developments. We have helped mining companies with unique designs such as tailings dam installations in arctic winters, liners for liquid molten sulfur, and long term slag pile covers. Our services include:

- Installation and design assistance
- Ponds and tailings dams
- Heap leach pads
- Solution pond liners and covers
- Sulfur block liners
- Secondary containments for fuel storage
- Retaining walls and steepened slopes
- Landfills
- Prefabricated vertical drains
- Temporary dams and water diversions
- Geoweb® for haul roads



Site access road built over muskeg using the Geoweb® system

Geosynthetic Products

Layfield has many materials available for mine development. These construction materials include:

- Woven Geotextiles for road construction
- Geogrids for road and slope construction
- Non-woven drainage fabrics
- Silt fence and site sediment control products
- Stream and Channel construction products
- Turbidity curtains
- Aqua Dams
- Construction tarps and enclosures



This heap leach pad liner used prefabricated geomembranes to meet development schedules in a remote location.



Turbidity barriers restrict the flow of silt laden runoff from a land disturbance, confine it to a limited area, and allow the silt and sediment to be collected.



This tailings dam liner in Siberia was installed during the winter months to limit environmental impacts on the local hydrogeology and to keep the mine development on schedule.

Mining Operations

Geosynthetic Services

Layfield can provide many services as a contractor or subcontractor on your mine site.

- Pond scheduled maintenance and repair
- Pond leak location and repair
- Retaining wall and steepened sloped design
- Maintenance of silt control devices
- Extension of landfills and sulfur blocks
- Tailings dam extensions
- Extension of secondary containment facilities

Geosynthetic Products

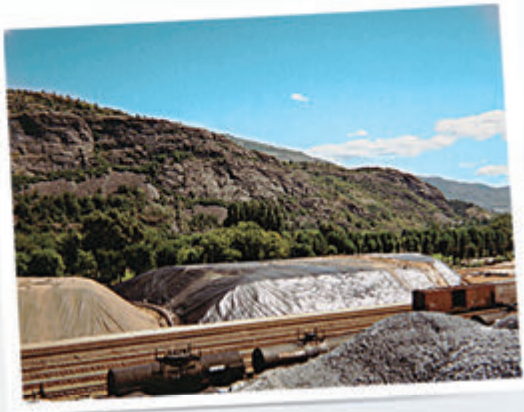
During the operation of a mine there are many materials that are needed for efficient operation.

Layfield can provide:

- Blast hole liners
- Sample bags (printed or plain)
- Polyethylene film
- Silt and sediment control products
- Waste storage liners
- Run off pond liners
- Secondary containment berms and liners
- Insulated construction tarps
- Enclosures for maintenance and repairs



Sulfur Block Liner

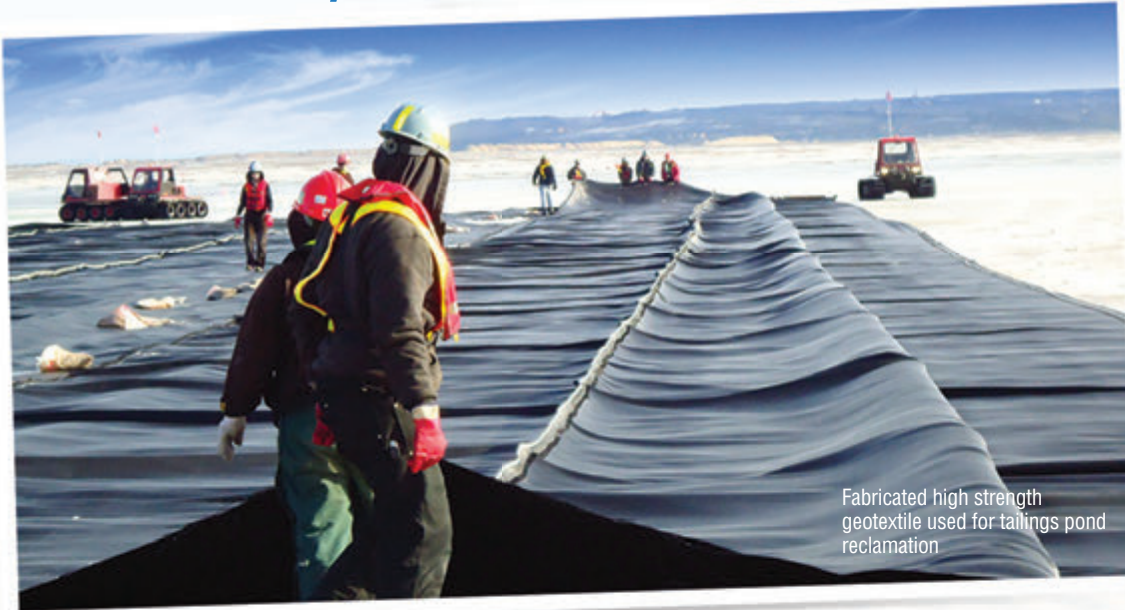


A soil remediation liner being installed at a coal mine.



Layfield's Enclosure systems can help protect mine infrastructure and facilitate repairs and maintenance in the winter.

Mine Closure/Remediation



Fabricated high strength geotextile used for tailings pond reclamation

Geosynthetic Services

Mine reclamation is an important aspect in the life of any mine. Layfield provides a unique selection of mine reclamation products and services:

- Soil remediation liners and covers
- Installation services
- Slag pile covers
- Landfills and covers
- Land closures and covers
- Erosion control products
- Desludging tubes
- Sludge pond closures
- Geotube® Dewatering

High strength geotextile pond closure for a white phosphorus sludge pond cover. The geotextile supported a permanent earthen cover.



Geotube® Dewatering system used for sludge removal from tailings



Slag pile covers at a smelter.