

13 Glossary

ANFO	A base explosive named for two primary ingredients, ammonium nitrate and fuel oil.
Back	The ceiling of a mine stope or development heading.
Backfill	Waste material used to fill the void created by mining an orebody.
Ball mill	A rotating steel cylinder which uses cascading steel balls to grind the ore.
Barrier pillar	A portion of ore left unmined to provide support for adjacent workers that is extracted at the end of mine life.
Berm	A ridge or small dyke that breaks the continuity of a slope and may be used to isolate a work area.
Best Management Practices	A practice or a combination of practices that are determined to be the most technically and economically feasible means of preventing or managing potential impacts.
Binder	The cement added to mine backfill to consolidate it.
Blind heading	A dead-end stope or drift that has one entrance and no alternate escape route.
Breasting	Blasting a drift or stope face downward to an existing void.
Bulkhead	A vertical wall used to control ventilation flow or contain backfill.
Check dam	A small dam constructed in a ditch or channel to decrease water velocity and promote the accumulation of sediment.
Coffer dam	A watertight enclosure built within a channel that is pumped dry to allow for construction or maintenance activities in the isolation of flowing water.
Concentrate	A product containing a high concentration of the valuable minerals of an ore from which most of the waste material has been removed.
Concentrator	A plant with grinding and mineral separation steps that produces a concentrate of the valuable minerals or metals.
Cone crusher	A machine that crushes ore between a gyrating cone or crushing head and an inverted truncated cone known as a bowl.
Crosscut	A drift driven perpendicular to geological bedding.
Cyclone	A conical-shape equipment which separates the coarser and heavier fractions of solids to the apex of a long cone and the finer and lighter fractions to the central vortex at the top.
Deleterious substance	A substance harmful to fish or fish habitat: (a) any substance that, if added to water, would degrade, alter, or form part of a process of degradation or alteration of the quality of water; so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water.

	(b) any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water.
Dense Media Separation	A process whereby minefeed is split between two products based on density. One product sinks and the other floats in a liquid media whose density falls between the two product densities.
Density	The mass of a substance per unit volume.
Dilution	Waste rock mixed in with ore. Dilution % is defined as weight of waste divided by weight of ore.
Dip	The angle that the orebody is inclined from vertical.
Diversion dam	A barrier built within an active channel in order to divert water along a different flow path.
Drift and fill	A mining method that extracts the ore using multiple lifts and backfill. It is distinguished from cut-and-fill in that vertical backfill walls are exposed.
Drift	An underground lateral passage.
Ephemeral channel	A watercourse that flows for only short periods during the year, but which may still provide important habitat during those times.
Erosion and sediment control plans	A set of measures designed to control surface runoff and erosion, and to retain sediment on a particular site during the period in which construction- or maintenance-related land disturbances, fills, and soil storage occurs.
Erosion	Detachment and transport of soil particles by water, wind, ice, gravity or the activity of organisms.
Extensometer	A distance measuring device use to determine closure of mine openings.
Float	Pieces of rock that are lighter than the fluid in a dense media separation process.
Flotation cell	An equipment where the slurry is agitated and aerated to separate a mineral-laden froth from barren tailings.
Flotation	A milling process by which mineral particles are induced to attach to air bubbles and float. In this way the valuable minerals are concentrated and separated from the gangue (waste).
Flowsheet	An illustration showing the sequence of operations by which ore is treated in a milling, concentration, or metallurgical process.
Footwall	The lower of two ore/waste contacts, the other being the hangingwall.
Gangue	The part of the ore containing minerals that have no value and are separated from the valuable minerals during the concentration process.
Genset	A diesel powered electrical generator.

Geotextile	A synthetic material used for erosion control to block sediment from water flowing across an area.
Grade	The metal content of rock or concentrate.
Grizzly	Coarse screen that prevents oversized ore from entering the process.
Hangingwall	The upper of the two ore/waste contacts, the other being the footwall. Named because when exposed by mining, it hangs above the open stope.
Herringbone Panel	A stoping room developed from the main access at an angle to it., named because it gives the multiple panels and stope drift take on the appearance of a fish skeleton.
Industrial complex	The main building for the operation, which houses the mill, DMS plant, paste backfill plant, concentrate storage area, maintenance facility, warehouse, mine dry and offices.
Jackleg	A hand operated drill used primarily for drilling horizontal holes for bolting or blasting.
Jaw crusher	A machine that crushes rock between a moving and a stationary steel plates.
Leaky feeder	A radio communications system for mines that uses a suspended fibre optic cable for translation of signals.
Lift	A 4 m vertically thick horizontal slice through the orebody that will be serviced by the same stope access. The lift contains a stope drift, herringbone panels, and the uphole slashing areas.
Liquefaction	A phenomenon where sand to clay sized materials, when saturated with water, can behave like liquid instead of like solid materials – usually caused by vibrations or shaking.
Magazine	Specialized storage for explosives or detonators (which are always stored separately).
Magnetic separator	A machine that applies a strong magnetic field to separate and collect the magnetic materials onto a rotating drum, away from non-magnetic materials.
Mill	A piece of equipment consisting of a revolving drum for grinding ores and reducing the particle size.
Mineral	A naturally occurring material having definite physical properties, chemical composition and, crystal form which may be of value.
Mitigation	Actions taken during the planning, design, construction and operation of works and undertakings to eliminate or reduce potential adverse environmental effects of the project.
Muck	<i>noun</i> - broken rock, ore or waste; <i>verb</i> - to remove the broken rock.
Muckberm	A pile of broken rock used to contain water or backfill.
Muckpile	A pile of broken rock, ore or waste.
Ore	A mixture of valuable minerals and gangue from which at least one of the minerals can be extracted at a profit.

Panel	A single dead-end heading in a stope
Pneumatically	Offloading of a material using compressed air
Portal	A lateral mine entry.
Pyrophoric	Spontaneous combustion occurring when a finely divided and dry material is exposed to air at low temperature.
Quonset hut	A temporary structure on surface shaped like a half-pipe cylinder.
Raise	A vertical or steeply inclined passage in a mine used for ventilation and access.
Raising	Excavating a raise.
Ramp	A lateral development heading driven at a grade to provide access for mining.
Rebar	A steel rockbolt installed with resin grout in a hole to support the ground.
Recovery	The percentage of valuable metal in the ore that is recovered by metallurgical treatment.
Regulator	A bulkhead with a variably-sized opening used to adjust ventilation flow volume.
Remuck station	A short dead-end section of drift used to temporarily store broken muck prior to be loaded in the truck.
Reserve	The portion of a resource that can be extracted economically, as proven by sufficient engineering.
Resource	The estimated quantity and grade of a mineralized zone as established by the geological and assay data. A resource is divided into “measured”, “indicated” and “inferred” classifications based on degree of confidence in the estimate.
Rock Breaker	A hydraulic or pneumatic hammer mounted on a hinged arm (usually over a grizzly) to break very large rocks into smaller fragments before they get to the crusher.
Rockbolt	A rod, usually of metal, installed in a drilled hole to support the ground.
Rod mill	A rotating steel cylinder that uses steel rods as a means of grinding ore.
Run-of-mine	Raw material as it exists in the mine of average grade, size, or quality.
Schistose	Rock that has been sericitized, giving it a wavy and greasy texture and making it very weak and friable.
Scooptram	An underground muck hauling machine.
Shanty-back	A mine heading with a distinct profile, where the walls are vertical and the back is sloped, making one wall taller than the other, one upper corner an acute angle and the other obtuse.
Shotcrete	A mixture of rock and cement that is wetted and sprayed on mine walls and backs to support them.
Silt fence	A synthetic barrier erected to restrict the movement of unconsolidated material from a disturbed area to any sensitive area.

Sink	Pieces of rock that are heavier than the fluid in a dense media separation process.
Spalling	Progressive deterioration of a rock wall by progressive peeling of slabs.
Splitset	A tubular steel rockbolt slit its full length that compresses into a hole that is smaller in circumference than the splitset.
Stope	A single working in the mine from which ore is extracted. The stope is comprised of multiple lifts.
Stoper	A hand operated drill used primarily for drilling vertical holes for bolting or blasting.
Suspended solids	Particulate matter, such as silt or clay that is entrained within a water column (i.e., has not settled to the substrate)
Swale	A temporary ditch or drainage pathway constructed across or around disturbed areas to intercept storm runoff.
Tailings	Material that has been ground up and remains after most of the recoverable valuable minerals have been extracted.
Thickener	A large, round tank used for settling and separation of solids from liquids by gravity, where clear fluid overflows from the tank and solid particles sink to the bottom.
Toxic substance	Pollutants that have particularly adverse and long-lasting impacts on the environment and human health.
Trommel	A heavy-duty circular screen attached to the discharge end of a grinding mill for washing and removing larger rocks and tramp materials.
Uphole slashing	Extracting the ore above the stope drift by blasting with vertical or steeply inclined upholes.
Waste	Barren rock in a mine, or mineralized material that is too low in grade to be mined and processed at a profit.

