

GLOSSARY OF TERMS

Alluvial lands	Land formed from alluvium. Alluvial lands are equivalent to the flood plain of a stream.
Alluvium	Sediment deposited by a stream, consisting of unconsolidated material such as gravel, sand, silt and clay.
Aquifer	Geological formation, group of formations, or part of a formation which can transmit and yield significant quantities of water.
Attenuation	A reduction in the magnitude of an effect. For example, a reduction in received noise with increasing distance from a noise source.
Box Cut	A means of access to underground workings by way of a relatively narrow excavation from the ground surface to intersect with a coal seam. Similar to, and at times an alternative term for, an access slot or portal. Also the initial excavation to commence an open cut mine.
Bund	A barrier designed to contain materials within an area.
Catchment	The area in which water (from rainfall or otherwise) collects, to form the supply of a river, stream, or drainage area.
Coal Rejects	The unsaleable material removed from raw coal during the beneficiation process conducted by a coal preparation plant.
Coal Reserves	Those parts of the Coal Resources which are planned to be mined.
Coal Resources	All of the potentially useable coal within a defined area.
Coal Seam	An identifiable discrete coal unit.
Coarse Rejects	Coal rejects from a coal preparation plant other than the rejects from the fine coal processing circuit. Usually consisting of particles greater than 0.5 mm in diameter.
Coking Coal	Coal capable of forming, either as a sole source or component of a blend of coals, coke when heated in a coke oven. Coking coals usually have a low ash content.
Containment	To stop the uncontrolled movement of materials.

Colluvium	Weathered material transported by gravity.
Continuous Miner	A particular coal mining machine that cuts coal to form underground tunnels. Some continuous miners allow the rock strata to be supported while coal cutting takes place.
dB(A)	The sound level or noise level most appropriate to the human ear is usually expressed in terms of decibels (dB), which is measured as the 'A weighting' filter incorporated in sound level meters.
Designated Development	Development under the Environmental Planning and Assessment Act, 1979 which requires an environmental impact statement.
Dip	The direction and angle in which the rock strata are inclined.
Dispersible Soils	Soils in which the clay fraction forms a suspension on wetting, often resulting in soils prone to severe erosion.
Duplex Soils	A soil in which there is a sharp change in texture between upper and lower layers of the soil.
Dyke	A vertical or sub-vertical, linear igneous intrusion that cuts across the strata of other rocks. In underground mines, dykes are often too hard to mine through with conventional coal mining equipment.
Ecologically Sustainable Development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Environment	Components of the earth, including: a). Land, air and water, and b). Any layer of the atmosphere, and c). Any organic or inorganic matter and any living organism, and d). Human-made or modified structures and areas And includes interacting natural ecosystems that include the components referred to in paragraphs (a). – (c).
Fine Rejects	Coal rejects from a coal preparation plant usually less than 0.5 mm in diameter. Also known as tailings.
Geotechnical	Parameters and data associated with geological features and structures.

Goaf	The area of collapsed strata in areas previously mined by underground mining methods.
Groundwater	Subsurface water within the saturated zone. Also known as phreatic water.
Hydraulic gradient	The change in static head per unit of distance in a given direction (the slope of the water table).
Hydrogeology	The study of subsurface water.
Hydrology	The interaction between waters and the earth.
Igneous	Rock formed from solidified magma.
Indigenous	Native to, or originating in, a particular locality or country.
Infiltration	The process of surface water soaking into the earth.
Integrated Development	Development that requires development consent and one or more of the approvals listed within the Environmental Planning and Assessment Act 1979 (as amended).
Inter-generational equity	The principle that the present generation should leave succeeding generations with an equivalent set of opportunities to those of the present generation.
Intrusion (igneous)	The forcing of molten rock into other rock strata or formations.
L ₁₀ Noise Level	Incident noise – the noise level which is exceeded for 10% of the sampling period and is considered to be the average maximum noise level.
L ₉₀ Noise Level	Background noise – noise level which is exceeded for 90% of the sampling period and is referred to as the average minimum or background noise level.
L _{eq}	Equivalent continuous noise level. The L _{eq} of a fluctuating noise signal is the continuous noise level which, if occurring for the duration of the signal, would deliver equivalent acoustic energy to the actual signal.

Longwall Mining	A technique of underground coal mining that utilises specialist equipment to create a “long wall” mining face of up to 300 m. The longwall mining method maximises coal extraction, up to approximately 85% recovery of mineable coal.
Permeability	The property or capacity of a porous rock, sediment, clay or soil to transmit a fluid.
Petrographic	General term used to describe the chemistry of rocks.
Porosity	Volume of voids and total volume as a percentage.
Rehabilitation	The return of previously mined land to a stable land surface and for useful purposes.
RL	Reduced Level. The standard reference level used to express the relative elevation of various features. A height given in metres RL is essentially the height above sea level. Levels quoted are either Australian Height Datum (AHD) or Mine Datum (10,000 m below AHD).
Roadway	A term for an underground coal mine tunnel.
Sill	An igneous intrusion formed parallel to the bedding plane of the host rocks.
Spontaneous combustion	Spontaneous ignition of a combustible material.
Tapanomic	Physical processes which may effect an archaeological site once it has been deposited.
Thermal Coal	Coal used to create heat. Also known as steaming coal. Main uses are in electricity generation, cement manufacture and as fuel for boilers.