

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.
Archaeological Survey Unit (ASU)	A discrete area of archaeological survey in terms of pedestrian or vehicular survey. Each ASU is usually contained within a singular landform unit.
Attenuation	A reduction in the magnitude of an effect. For example, a reduction in received noise with increasing distance from a noise source.
Avifauna	All species of bird.
Biodiversity	The diversity of different species of plants, animals and micro-organisms.
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 Plies	Thin layers of coal present between other rock strata.
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.
Colluvium	Weathered material transported by gravity.

Containment	To stop the uncontrolled movement of materials.
dB	Decibel; unit used to express sound intensity.
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.
dB(L)	Linear decibels; this measurement of air pressure includes energy outside of the limit of human hearing.
Debitage	An archaeological term for the small pieces of rock by-product produced in the flaking process of making stone tools from a larger rock.
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.
Dragline	A piece of mining equipment with a large bucket suspended from a boom used to remove overburden.
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.
Emission	The discharge of a substance (e.g. dust) into the environment.
Endangered Species	A categories of threatened species as defined in Division 2 of the Threatened Species Conservation Act 1995. The species is likely to become extinct in nature if threats continue, or its numbers are reduced to a critical level, or its habitat is reduced.

Environment	Components of the earth, including: a). Land, air and water, b). Any layer of the atmosphere, 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).
Excavator	A piece of mining equipment used to remove overburden that may be operated in either a back-hoe or shovel configuration for the excavating bucket.
Fine Rejects	Coal rejects from a coal preparation plant usually less than 0.5 mm in diameter. Also known as tailings.
Free Dig	Overburden or interburden material able to be excavated without the prior use of explosives to fracture the rock strata
Geotechnical	Parameters and data associated with geological features and structures.
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.
In-situ	Material (e.g. soils) found in its original position of formation as opposed to transported material.
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).
Interburden	The rock material in between coal seams.

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.
Land Form Unit (LFU)	A landform division used to provide a framework within which to place archaeological material or areas of significance. Units are defined in terms of morphological type, slope, dimension and geomorphological agents of landform elements throughout the study area.
L1	The L1 percentile is often called the average peak noise level and is used by the NSW EPA as a measure of potential disturbance to sleep.
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.
Leachate	Water containing leached minerals or salts.
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.
Lineament	A naturel linear surface longer than a mile (1500).
Lmax/Lmin	These are the maximum and minimum sound power level values occurring during a sample.
Muckpile Digability	A mining term used to indicate the relative ease with which rock strata can be excavated following the use of explosives to fracture the rock strata.
Overburden	The rock material that covers coal seams.
Ped	An individual natural soil aggregate consisting of a cluster of primary particles separated from adjacent peds by surfaces of weakness that are recognisable as natural voids.
Permeability	The property or capacity of a porous rock, sediment, clay or soil to transmit a fluid.
PM ₁₀	Particles with and aerodynamic diameter less then 10 microns.
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.
Riparian	Pertaining to, or situated on, the bank of a body of water, especially a stream or river.
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).
Sill	An igneous intrusion formed parallel to the bedding plane of the host rocks.
Spontaneous Combustion	Spontaneous ignition of a combustible material.
Strip Ratio	Ratio of overburden material removed to the coal produced from an open cut. The higher the ratio the more expensive the coal is to mine.
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.
Threatened Species	<p>The Threatened Species Conservation Act 1995 contains lists of threatened species, which are divided into the following several categories:</p> <ul style="list-style-type: none"> • Species presumed extinct • Endangered species • Endangered populations • Endangered ecological communities • Vulnerable species.
Vulnerable Species	A categories of threatened species as defined in Division 2 of the Threatened Species Conservation Act 1995. The species is likely to become endangered if threats continue.
Workings	A mining term to indicate areas that have been subject to mining activities. The term is usually applied to underground mining operations.