

## Abbreviations

<b>ABS</b>	Australian Bureau of Statistics
<b>AECLR</b>	The aquatic ecological community of the lowland Lachlan River catchment
<b>AHC</b>	Australian Heritage Commission
<b>AHD</b>	Australian height datum (in metres)
<b>AHIMS</b>	Aboriginal Heritage Information Management System
<b>AHIP</b>	Aboriginal Heritage Impact Permit
<b>ANZEC</b>	Australian and New Zealand Environment Council
<b>ANZECC</b>	Australian and New Zealand Environment and Conservation Council
<b>ARPANSA</b>	The Australian Radiation Protection and Nuclear Safety Agency
<b>AS</b>	Australian Standard
<b>AWS</b>	Automatic Weather Station
<b>BCA</b>	Building Code of Australia
<b>BGW (TSC)</b>	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland (Box-Gum Woodland) – TSC Act Status qualification
<b>BoM</b>	Bureau of Meteorology
<b>CEMP</b>	Construction Environmental Management Plan
<b>CMA</b>	Catchment Management Authority
<b>CO</b>	Carbon monoxide
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CWD</b>	course woody debris
<b>DA</b>	Development Application
<b>DBH</b>	Diameter at breast height
<b>DEC</b>	Department of Environment and Conservation (NSW)
<b>DECC</b>	Department of Environment and Climate Change (NSW)
<b>DEH</b>	Department of Environment and Heritage (Commonwealth)
<b>DEWHA</b>	The Commonwealth Department of the Environment, Water, Heritage and the Arts
<b>DGRs</b>	Director-General's Requirements
<b>DIPNR</b>	Department of Infrastructure, Planning and Natural Resources (NSW)
<b>DNR</b>	Department of Natural Resources
<b>DoP</b>	Department of Planning (NSW)
<b>DP</b>	Deposited Plan
<b>DPI</b>	Department of Primary Industries (NSW)
<b>DWE</b>	Department of Water and Energy
<b>EA</b>	Environmental Assessment
<b>EC</b>	Electrical conductivity
<b>ECRTN</b>	Environmental Criteria for Road Traffic Noise
<b>EEC</b>	Endangered Ecological Community
<b>EIA</b>	Environmental Impact Assessment
<b>EIS</b>	Environmental Impact Statement
<b>EMF</b>	Electric and Magnetic Field
<b>EMP</b>	Environmental Management Plan
<b>EMS</b>	Environmental Management Systems
<b>ENCM</b>	Environmental Noise Control Manual
<b>EP&amp;A Act</b>	NSW Environment Planning and Assessment Act 1979
<b>EPA</b>	Environment Protection Authority
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
<b>EPI</b>	Environmental Planning Instrument
<b>EPL</b>	Environment Protection Licence
<b>ESC</b>	Effective Survey Coverage

## Abbreviations

<b>ESD</b>	Ecologically Sustainable Development
<b>ETL</b>	Electricity Transmission Line
<b>EWP</b>	Elevated work platform
<b>F</b>	Cleared Farmland/ Cropped Paddock without Paddock Trees
<b>F+T</b>	Cleared Farmland/ Cropped Paddock with Paddock Trees
<b>FFMP</b>	Flora and Fauna Management Plan
<b>FM Act</b>	Fisheries Management Act 1994
<b>FMP</b>	Fire Management Plan
<b>FPC</b>	Foliage Percent Cover
<b>GHG</b>	Greenhouse Gas
<b>GIS</b>	Geographic Information System
<b>GPS</b>	Global Positioning System
<b>HIL</b>	Health-Based Soil Investigation Level
<b>IGB</b>	Inland Grey-Box Woodland
<b>INP</b>	Industrial Noise Policy
<b>IPCC</b>	International Panel on Climate Change
<b>LALC</b>	Local Aboriginal Land Council
<b>LEP</b>	Local Environmental Plan
<b>LGA</b>	Local Government Authority
<b>MI</b>	Mugga Ironbark Woodland on hills
<b>MI/CP</b>	Mugga Ironbark-Box-White Cypress Pine Woodland
<b>MIC</b>	Maximum Instantaneous Charge
<b>NA</b>	Not Applicable
<b>NATA</b>	National Association of Testing Authorities
<b>NEM</b>	National Electricity Market
<b>NEMMCO</b>	National Electricity Market Management Company
<b>NEPC</b>	National Environment Protection Council
<b>NEPM</b>	National Environment Protection Measure
<b>NER</b>	National Electricity Rules
<b>NES</b>	National Environmental Significance
<b>NGRS</b>	National Greenhouse Response Strategy
<b>NHMRC</b>	National Health and Medical Research Council
<b>NO<sub>2</sub></b>	Nitrogen Dioxide
<b>NO<sub>x</sub></b>	Oxides of Nitrogen
<b>NP</b>	National Park
<b>NP&amp;W Act</b>	National Parks and Wildlife Act 1974 (NSW).
<b>NPWS</b>	National Parks and Wildlife Service (NSW)
<b>NSW</b>	New South Wales
<b>NSW NPWS</b>	NSW National Parks and Wildlife Service
<b>NVC Act</b>	Native Vegetation Conservation Act 1997 (NSW)
<b>O<sub>3</sub></b>	Ozone
<b>OCGT</b>	Open Cycle Gas Turbine
<b>OEMP</b>	Operation Environmental Management Plan
<b>OS</b>	Open Sites
<b>PAD</b>	Potential archaeological deposit
<b>PM<sub>10</sub></b>	Particles effectively less than 10µm diameter
<b>PM<sub>2.5</sub></b>	Particles effectively less than 2.5µm diameter
<b>POEO Act</b>	Protection of the Environment Operations Act 1997 (NSW)
<b>POEO Reg</b>	Protection of the Environment Operations Regulations
<b>RBL</b>	Rating Background Level

## Abbreviations

<b>REF</b>	Review of Environmental Factors
<b>REP</b>	Regional Environmental Plan
<b>RNE</b>	Register of the National Estate
<b>ROTAP</b>	Rare or Threatened Australian Plants
<b>RPM</b>	Revolutions per Minute
<b>RRG</b>	River Red Gum Riparian Woodland
<b>RS/I</b>	Red Stringybark and/or Ironbark Open Forest
<b>RTA</b>	Roads and Traffic Authority (NSW)
<b>SEPP</b>	State Environment Planning Policy
<b>SIS</b>	Species Impact Statement
<b>SO<sub>2</sub></b>	Sulfur dioxide
<b>sp.</b>	Species (singular)
<b>spp.</b>	Species (plural)
<b>subsp.</b>	subspecies
<b>TSC Act</b>	Threatened Species Conservation Act 1995 (NSW).
<b>VBMP</b>	Vegetation and Biodiversity Management Plan.
<b>WMS</b>	Work Method Statement
<b>UNITS</b>	
°	degrees
°C	degrees Celsius
%	percentage
<b>bcm</b>	bank cubic metre
<b>Cm</b>	centimetres
<b>D%</b>	dispersion percentage
<b>dB</b>	decibels
<b>dB d</b>	decibel, unit used to express sound intensity
<b>deg</b>	degrees
<b>g</b>	gram (= 0.001 kilogram)
<b>GL</b>	gigalitre (109 L or 106 m <sup>3</sup> )
<b>Gt</b>	gigatonnes (=1 billion tonnes)
<b>GWh</b>	gigawatt Hour
<b>ha</b>	hectare
<b>hr</b>	hour
<b>Hz</b>	Hertz
<b>kg</b>	Kilogram
<b>KJ</b>	Kilojoules
<b>kL</b>	Kilolitre
<b>km</b>	Kilometre
<b>km/hr</b>	Kilometres per hour
<b>km<sup>2</sup></b>	Square kilometre
<b>kPa</b>	Kilopascals
<b>kV</b>	Kilovolts
<b>kVA</b>	kilovolt – amperes
<b>kW</b>	Kilowatts
<b>L</b>	litre
<b>L/hr</b>	litres per hour
<b>L/s</b>	litres per second
<b>L/t</b>	litres per tonne
<b>LA10</b>	sound level exceeded 10% of the sampling time

## Abbreviations

<b>LA90</b>	sound level exceeded 90% of the sampling time
<b>LAeq</b>	the LAeq is the “equal energy” average noise levels, and is used in some instances for the assessment of traffic noise effects or the risk of hearing impairment due to noise exposures
<b>LAeq 1 hour</b>	the “equal energy” average noise level over 60 minutes – used for assessing impacts of noise from motor vehicles
<b>LAeq T</b>	sound level of continuous noise which emits the same energy as the fluctuation sound over a given time period (T)
<b>LAm<sub>ax</sub></b>	the absolute maximum noise level measured in a given time interval
<b>LAN</b>	the A-weighted sound pressure level exceeded by N% of a given measured period
<b>m</b>	metre
<b>M</b>	million
<b>m AHD</b>	metres above Australian Height Datum
<b>m/s</b>	metres per second
<b>m<sup>2</sup></b>	square metre
<b>m<sup>3</sup></b>	cubic metre
<b>mg</b>	milligram
<b>mg/L</b>	milligrams per litre (parts per million)
<b>MHz</b>	Megahertz
<b>ML</b>	Megalitre
<b>ML/day</b>	megalitres per day
<b>ML/pa</b>	megalitres per annum
<b>mm</b>	millimetre
<b>mm/s</b>	millimetres per second
<b>Mt</b>	million tonnes (metric tonne = 1 000kg)
<b>Mtpa</b>	million tonnes per annum
<b>MW</b>	Megawatts
<b>Pa</b>	per annum
<b>pH</b>	degree of acidity or alkalinity of a solution.
<b>PM10</b>	particulate matter <10µm in diameter
<b>ppm</b>	Parts per million
<b>S</b>	second
<b>t</b>	tonne (= 1 000kg)
<b>tpa</b>	tonnes per annum
<b>µg/m<sup>3</sup></b>	micrograms (1 x 10 <sup>-6</sup> grams) per cubic metre
<b>µm</b>	micrometres (= 0.001mm)
<b>µS/cm</b>	microsiemens per centimetre

## Glossary

<b>acid mine drainage (AMD)</b>	Runoff of acidic water, typically from mine waste rock, following acid formation within the rock.
<b>aboriginal archaeological site (Aboriginal site)</b>	A place where physical remains or modification of the natural environment indicate past and 'traditional' activities by Aboriginal people. Site types include artefact scatters, isolated artefacts, burials, shell middens, scarred trees, quarries and contact sites.
<b>acid mine drainage (AMD)</b>	Runoff of acidic water, typically from mine waste rock, following acid formation within the rock.
<b>acid sulphate soils (ASS)</b>	Soils containing pyrite which produces sulphuric acid when exposed to oxygen. Main cause of acid generation within the soil mantle. Commonly found less than five metres above sea level, particularly in low-lying coastal areas such as mangroves, salt marshes, floodplains, swamps, wetlands, estuaries, and brackish or tidal lakes.
<b>air pollutant</b>	A substance in ambient atmosphere, resulting from the activity of man or from natural processes, causing adverse effects to man and the environment.
<b>air pollution emissions inventory</b>	All information, collection and processing system containing data on emission of, and sources of, air pollution from both man-made and natural causes.
<b>air quality criteria</b>	Quantitative relationship between a pollutant's dose, concentration, deposition rate or any other air quality-related factors, and the related effects on receptors, e.g. humans, animals, plants, or materials. Air quality criteria serve as the scientific basis for formulating ambient air quality standards or objectives.
<b>alluvial deposits</b>	Soil or sediment deposited by a river or other running water. Typically made up of a variety of materials, including fine particles of silt and clay and larger particles of sand and gravel.
<b>ambient</b>	Surrounding environment.
<b>Ambient Noise</b>	The all-encompassing sound at a site comprising all sources such as industry, traffic, domestic, and natural noises. This is represented as the $L_{eq}$ noise level in environmental noise assessment. (See also $L_{Aeq}$ )
<b>amenity</b>	The desirability of an area.
<b>anecdotal evidence</b>	Informal, oral or written evidence of an event.
<b>aquifer</b>	Rock formation containing water in recoverable quantities.
<b>arboreal</b>	Arboreal is meaning relating to or resembling trees. In biology, relates to an animal which inhabits or spends large amounts of time in trees or bushes.
<b>archaeology</b>	The scientific study of human history, particularly the relics and cultural remains of the distant past.
<b>backfill</b>	Material used to fill created void.
<b>background dust level</b>	dust level in the absence of mining and processing activities.
<b>Background Noise</b>	Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is measured statistically as the A-weighted noise level exceed for ninety per cent of a sample period. This is represented as the $L_{90}$ noise level
<b>background noise levels</b>	the level of the ambient sound indicated on a sound level meter in the absence of the sound under investigation (e.g. sound from a particular noise source; or sound generated for test purposes).
<b>background</b>	Aboriginal artefacts that cannot be usefully related to a place or focus of past activity.

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<b>scatter</b>	
<b>baseline monitoring</b>	monitoring performed prior to site development.
<b>batter</b>	An engineered slope of soil or rock fill on either side upslope of downslope of a road, embankment or mine waste storage.
<b>biobanking scheme</b>	The Biodiversity Banking and Offset Scheme (Biobanking) has been established by the NSW DECC to help address the loss of biodiversity and threatened species.
<b>biodiversity</b>	Biodiversity is defined as encompassing biological variety at genetic, species and ecosystem scales (DASETT 1992). The maintenance of biodiversity, at all levels, is acknowledged internationally as a high conservation priority, and is protected by the International Convention on Biological Diversity 1992.
<b>biodiversity offset</b>	Biodiversity offset or credit can be created by a landowner by establishing a biobank site committing to enhancing and protecting biodiversity values. The biobank site can be sourced by developers via market mechanism to offset biodiversity loss due to a development.
<b>bioregion</b>	An ecologically and geographically defined area smaller than an ecozone. They cover relatively large areas of land or water, and contain characteristic, geographically distinct assemblages of natural communities and species distinct from other bioregions.
<b>blast rock</b>	rock that is propelled into the air by force of an explosion. Usually comes from pre-broken material on the surface or upper open face.
<b>bore</b>	A well sunk into the ground and from which water is pumped.
<b>box cut</b>	an area excavated from ground level to provide the entry to an underground mine (via an adit or portal).
<b>bunds</b>	An earthwork or wall to contain and control spillages, normally associated with tank farms, fuelling and chemical storage facilities.
<b>catch drains</b>	Drains used to intercept and redirect runoff.
<b>catchment area</b>	the area determined by topographic features within which rainfall will contribute to runoff at a particular point.
<b>causeway</b>	watercrossing type: a road or railway elevated on a sandbank, usually across a broad body of water or wetland
<b>channel</b>	River or irrigation channel, includes bed and bank.
<b>clay</b>	A size term denoting particles, regardless of mineral composition, with diameter less than 0.004 mm.
<b>colluvium</b>	Colluvium is the name for loose bodies of sediment that have been deposited or built up at the bottom of a low-grade slope or against a barrier on that slope, transported by gravity. The deposits that collect at the foot of a steep slope or cliff are also known by the same name.
<b>community</b>	a combination of plants that are dependant on their environment and influence one another and modify their own environment. They form together, with their common habitat and other associated organisms, an ecosystem, which is also related to neighbouring ecosystems and to the macroclimate of the region.
<b>conglomerate</b>	Sedimentary rock consisting of poorly sorted grains (typically pebbles surrounded by finer material, such as sand or silt).
<b>conservation</b>	The management of natural resources in a way that will benefit both present and future generations.
<b>contour bank</b>	An earth bank constructed across a slope parallel to contours.
<b>cross-section</b>	A two dimensional diagram of an object presented as if the object had been cut along its

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	length.
<b>crusher</b>	that part of the ore-processing plant where the ore is mechanically crushed into smaller pieces.
<b>culvert</b>	Large pipe or channel carrying water underneath a structure (e.g. a road or railway track or underneath the ground).
<b>dB (Decibel)</b>	A unit of sound level measurement. The human ear responds to sound logarithmically rather than linearly, so it is convenient to deal in logarithmic units in expressing sound levels. To avoid a scale which is too compressed, a factor of 10 is introduced, giving rise to the decibel. It is equivalent to 10 times the logarithm (to base 10) of the ratio of a given sound pressure to a reference pressure.
<b>deposition</b>	Laying down a particulate material (e.g. sediment in a lake or tailings solids in a tailings storage).
<b>dip</b>	the angle that rock strata make with a horizontal surface measured at right angles to the strike.
<b>dispersibility</b>	A characteristic of soils relating to their structural breakdown in water to individual particles.
<b>diurnal</b>	Occurring or active during the daytime rather than at night.
<b>diversion bank</b>	An earth bank constructed to divert water away from disturbed areas.
<b>drainage line</b>	A passage along which water concentrates and flows towards a stream, drainage plain or swamp intermittently during or following rain.
<b>drawdown</b>	the difference between the water level observed during pinging and the non-pumping water level (static water level or static head).
<b>drilling</b>	The action of boring holes (usually less than 30cm in diameter and up to several kilometres deep) into the ground, typically to establish a water bore or to investigate the geology found at depth.
<b>dust concentration</b>	The amount of a substance, expressed as mass or volume, in a unit volume of air.
<b>Easement</b>	the easement is a 45m 'right of way' along the transmission line route. Easements are required to enable TransGrid to access the line for inspection and maintenance purposes. The easement rights also enable TransGrid to control any activity that may pose a risk to the line or to public safety.
<b>Echolocation (anabat) recordings</b>	Recordings from animals such as bats, who emit calls to the environment to navigate and forage. Echolocation recordings are used to identify presence of species.
<b>Ecologically Sustainable Development</b>	Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future can be increased.
<b>ecosystem</b>	The totality of biological processes and interaction within a specified physical environment.
<b>electromagnetic</b>	Relates to electromagnetic field. Is a physical field produced by electrically charged objects. It affects the behaviour of charged objects in the vicinity of the field.
<b>Emerson Class No.</b>	ranking given to a soil or clay according to the Emerson crumb test.
<b>emission</b>	A discharge of a substance (e.g. dust) into the environment.
<b>endangered ecological communities</b>	A community listed under Schedule 1, Part 3 of the NSW Threatened Species Conservation Act 1995.
<b>endangered</b>	Those plants and animal species likely to become extinct unless action is taken to remove

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<b>species</b>	or control the factors that threaten their survival.
<b>environment</b>	The physical, biological, cultural, economic and social characteristics of an area, region or site.
<b>Environmental Assessment</b>	The orderly and systematic evaluation of a proposal, including alternatives and objectives, and its effects on the environment, including the mitigation and management of these effects.
<b>environmental constraints</b>	Limitations on a project by components of the environment.
<b>ephemeral</b>	Lasting for a short period of time, intermittent
<b>erodibility</b>	the tendency of a soil, earth or rock to erode.
<b>erosion potential</b>	The susceptibility of a parcel of land to the prevailing agents of erosion. It is dependant on a combination of climate, landform, soil, landuse and land management factors.
<b>exotic</b>	Relating to biodiversity. A species is defined as exotic (introduced) in certain geographical areas, if that area is outside the native distribution range, and the species arrived there by human activity.
<b>exploration licence</b>	A license issues by the Department of Mineral Resources for exploration in a defined area.
<b>feasibility study</b>	A preliminary technical and economic study to assess the viability of a project.
<b>flora</b>	Plants as distinguished from fauna.
<b>foraging</b>	The acquisition of food by hunting, fishing, or the gathering of plant matter.
<b>Frequency</b>	Frequency is synonymous to pitch and is measured on a scale in units of Hz.
<b>geotechnical grader</b>	Relating to the form, arrangement and structure of the geology. An item of earthmoving equipment, rubber tyred and fitted with a centrally mounted blade and rippers used to shape and trim the ground surface.
<b>grassland</b>	Land with grass growing on it, especially farmland used for grazing or pasture.
<b>greenhouse effect</b>	Predicted global climatic change (e.g. global warming) associated with build up of certain gases (such as water vapour, carbon dioxide, methane, chloroflurocarbons, ozone, nitrous oxide, etc.) within the atmospheric environment of the earth. These are known as Greenhouse Gases.
<b>greenhouse gas</b>	A gas which has an effect on the radioactive absorptivity of the earth's atmosphere and the atmosphere's temperature.
<b>greenhouse gas intensity</b>	The amount of greenhouse gases per unit of energy produced from a power station (e.g. in units of kg CO <sub>2</sub> -e/MWh).
<b>ground vibration</b>	Oscillatory motion of the ground caused by the passage of seismic waves originating from a blast.
<b>groundcover</b>	Vegetation that grows close to the ground (such as grasses and herbs) providing protection from erosion.
<b>groundwater</b>	Subsurface water contained within the saturated zone.
<b>groundwater depression</b>	Localised lowering of the regional water table.
<b>groundwater surface</b>	the upper surface of the water table.
<b>habitat</b>	The place where an organism normally lives; habitats can be described by their floristic and physical characteristics.
<b>haul road</b>	road used in a mine for haulage of rock from the active face to the processing or stockpile area and for general site access.
<b>haultruck</b>	a truck specifically designed for hauling and tipping soil or rock within the mine or similar

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	situation.
<b>heritage (cultural heritage)</b>	A term which encompasses Aboriginal and post-contact archaeological sites and material remains (cultural resources).
<b>heritage significance</b>	of aesthetic, historic, scientific, cultural, soils, archaeological, natural or aesthetic value for past, present or future generations.
<b>higher heating value</b>	The heat content of fuel, measured in a bomb calorimeter when the products of combustion are cooled to the initial temperature and all of the water vapour formed during combustion is condensed to liquid. This gives the gross, or higher heat content of the fuel, which includes in the reported value the heat of vaporisation of the water produced from combustion of hydrogen atoms in the fuel. The lower heating value excludes the heat of vaporisation of the water produced from combustion of hydrogen atoms in the fuel.
<b>highwall</b>	exposed wall of excavation designed to stand open for mine life.
<b>Horizon</b>	A soil horizon is a specific layer in the soil which measures parallel to the soil surface and possesses physical characteristics which differ from the layers above and beneath. Horizon formation is a function of a range of geological, chemical, and biological processes and occurs over long time periods. Soils vary in the degree to which horizons are expressed. Relatively new deposits of soil parent material, such as alluvium, sand dunes, or volcanic ash, may have no horizon formation, or only the distinct layers of deposition. As age increases, horizons generally are more easily observed.
<b>hydraulic conductivity (k)</b>	The rate of flow of water in an aquifer through a cross section of unit area under a unit hydraulic gradient, at the prevailing temperature. Usually expressed in units of metres per day.
<b>hydraulic gradient</b>	the direction of flow of groundwaters
<b>hydrogeology (geohydrology)</b>	The study of groundwater and the related geologic aspects of surface waters.
<b>hydrology</b>	The scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.
<b>infiltration</b>	The process of surface water soaking into the soil.
<b>inflow</b>	flow directed into a particular feature, such as lake or a mine pit.
<b>interburden</b>	In the mining context refers to non-economic material that occurs between two coal seams.
<b>inversion</b>	generally used in meteorology with respect to an increase of temperature with height in contrast with the usual decrease of temperature with height in the troposphere. An inversion layer is distinguished by its large stability, which limits the turbulence and therefore the dispersion of pollutants.
<b>invertebrate</b>	An animal without a backbone.
<b>Isolated find</b>	Single stone artefact, not located within a rock shelter which occurs without any associated evidence of Aboriginal occupation within a radius of 60 m.
<b>LA1</b>	The noise level exceeded for 1% of the 15 minute interval.
<b>LA10</b>	The noise level exceeded for 10% of the 15 minute interval. This is commonly referred to as the average maximum noise level.
<b>LA90</b>	The noise level exceeded for 90% of the 15 minute interval. This is commonly referred to as the average background noise level.
<b>LAeq</b>	The energy averaged noise level over the 15 minute interval.
<b>landform</b>	A specific feature of a landscape (such as a hill) or the general shape of the land.

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<b>Leq</b>	The equivalent continuous sound level in dB(A); that is, the constant sound level which has the same acoustic energy as the original fluctuating noise for the same period of time.
<b>linguistic group</b>	category based on language characteristics of a group.
<b>Lithologies</b>	Rock types.
<b>Local Environment Plan (LEP)</b>	A plan developed by a council to control development in part or all of their shire or municipality.
<b>low-yielding macropods</b>	an aquifer which yields water at a low rate. Marsupials such as kangaroos, wallabies, pademelons.
<b>mean</b>	The sum of n values divided by n.
<b>median</b>	The middle value of a set of values.
<b>middens</b>	Midden deposits can contain a variety of archaeological material, including animal bone, faeces, shell, botanical material, and other artefacts associated with past human occupation.
<b>mitigation measures</b>	Measure employed to reduce (mitigate) an impact (such as the construction of a perimeter bund to reduce sound emissions).
<b>Monitoring</b>	The checking of impacts of a proposal or an existing activity in order to improve or evaluate environmental management practices. To check the efficiency and effectiveness of the environmental impact assessment process. To determine if the requirements of environmental legislation and associated regulations are being met.
<b>native vegetation</b>	A broad term for vegetation comprised of plant species which occur naturally in Australia (but which are not necessarily indigenous).
<b>nocturnal</b>	Of or pertaining to the night. Animal species that are active during the night.
<b>Noise Barrier</b>	Solid walls or partitions, solid fences, earth mounds, earth berms, buildings. Etc used to reduce noise without eliminating it.
<b>noxious</b>	Introduced species considered to be harmful to native species or to the habitat of native species.
<b>offset strategy</b>	a method of providing for disturbance attributable to the project through additional or compensatory measures.
<b>open pit</b>	A large hole excavated in an open cut mining operation to remove the ore.
<b>Operation Environmental Management Plan</b>	An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the construction phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.
<b>Ozone</b>	A form of oxygen having three atoms to the molecule. Ozone is a powerful oxidising agent.
<b>particle size distribution</b>	the relative proportions of particles that fall within specific size categories.
<b>particulate</b>	Small particles, usually in suspension in or falling through the atmosphere. .
<b>Perception of Sound</b>	The number of sound pressure variation per second is called the frequency of sound, and is measured in Hertz (Hz). The normal hearing for a healthy young person ranges from approximately 20 Hz to 20 kHz. In terms of sound pressure levels, audible sound ranges from the threshold of hearing at 0 dB to the threshold of pain at 130 dB and over. A change of 1 dB or 2 dB in the level of a sound is difficult for most people to detect, whilst a 3 dB to 5 dB change corresponds to small but noticeable change in loudness. Although an increase of 6 dB represents a doubling of the sound pressure, an increase of about 8 – 10 dB is required before the sound subjectively appears to be significantly louder. The smallest perceptible change is about 1 dB.

## Glossary

<b>perennial</b>	refers to a stream which has flow throughout the year.
<b>permeability</b>	A material property relating to the ability of the material to transmit water.
<b>Permian</b>	the geological period of time from 280 to 225 million years.
<b>pH</b>	a measure of the degree of acidity or alkalinity of a solution.
<b>Photomontages</b>	A composite image combining two or more photographs
<b>piezometer</b>	a core drilled specifically for the monitoring of groundwater levels and water quality.
<b>potable water</b>	Water suitable for drinking
<b>precautionary principle</b>	the principle of ESD which states that decision about any proposed development should be guided by careful management to avoid serious and irreversible damage to the environment.
<b>quadrat</b>	a square survey area
<b>Quaternary</b>	Geological period of time from 2 millions years before present to present.
<b>Register of the National Estate</b>	A list of the National Estate developed under the provisions of the Commonwealth's Australian Heritage Commission Act 1975.
<b>rehabilitation</b>	To restore to a condition of good health ie rehabilitate land and vegetation.
<b>relief</b>	The variation in landscape elevation over a region.
<b>resource</b>	an estimate of potentially usable coal in a defined area based on preliminary information
<b>revegetation</b>	Replacement of vegetation, principally grasses and legumes on areas disturbed by mining activities.
<b>riparian</b>	Relating to, or situated on the bank of a river or other body of water ie riparian vegetation.
<b>risk</b>	Likelihood of a specific undesirable event occurring within a specified period or in specified circumstances. Listed as a frequency or probability.
<b>salinity</b>	The dissolved salt content of water expressed in terms of milligrams per litre.
<b>scarred tree</b>	tree with cuts in its bark or wood made by Aborigines.
<b>scat</b>	The excrement of an animal.
<b>scraper</b>	irregularly shaped artefact that has been modified in a manner that suggests use in scraping activities, notably woodworking.
<b>security fence</b>	A fence designed to prevent unlawful intrusion to a prohibited area.
<b>seedbank</b>	A seedbank stores seeds as a source for planting in case seed reserves are destroyed (a type of gene bank).
<b>Snag</b>	in freshwater ecology it refers to trees, branches and other pieces of naturally occurring wood found in a sunken form in rivers and streams.
<b>Sodic soils</b>	Sodicity is a term given to the amount of sodium held in a soil. High sodicity causes clay to swell excessively when wet. The clay particles move so far apart that they separate (disperse). This weakens the aggregates in the soil, causing structural collapse and closing-off of soil pores. For this reason water and air movement through sodic soils is severely restricted.
<b>soil erosion hazard</b>	the susceptibility of an area of land to erosion and includes rainfall erosivity, slope, soil erodility and cover.
<b>soil structure</b>	a well structured soil will enable robust biological activity by readily accepting, storing, and transmitting water, gases, nutrients, and energy; and by providing adequate and suitable surfaces and space for life and biochemical exchanges
<b>Sound Pressure (SPL)</b>	Sound pressure is the measure of the level or loudness of sound. Like sound power level, it is measured in logarithmic units. The symbol used for sound pressure level is SPL, and it is generally specified in dB. 0 dB is taken as the threshold of human hearing.
<b>stemming</b>	The fine material placed in a drill blast hole after the explosive to ensure blast force is

## Glossary

	directed laterally.
<b>stockpile</b>	a pile used to store material (such as coal) for future use.
<b>stripping</b>	Removal of vegetation and topsoil.
<b>subsoil</b>	the layer of soil lying below the topsoil; usually contains less organic matter and is less fertile.
<b>surface waters</b>	All water flowing over, or contained on, a landscape.
<b>sustainable use</b>	Use of organism, ecosystem or their renewable resource at a rate within its capacity for renewal.
<b>terrestrial</b>	Of or pertaining to the land as distinct from the water.
<b>thermal efficiency</b>	The proportion of energy converted from the fuel to electricity in the generation process is an indication of CO2 emissions.
<b>threatened species</b>	Any species (including animals, plants, fungi etc) which are vulnerable to extinction in the near future.
<b>topography</b>	The relief features or surface configuration of an area.
<b>topsoil</b>	The upper layer of soil, usually containing more organic material and nutrients than the subsoil beneath it.
<b>transect</b>	Is a path along which one records and counts occurrences of the phenomenon of a study ie plants.
<b>transformer</b>	a device that transfers electrical energy from one circuit to another through inductively coupled conductors — the transformer's coils or "windings".
<b>understory</b>	Is the term for the area of a forest which grows in the shade of the emergent or forest canopy.
<b>vascular plants</b>	plants that have lignified tissues for conducting water, minerals, and photosynthetic products through the plant. Vascular plants include the ferns, clubmosses, flowering plants, conifers and other gymnosperms.
<b>vertebrate</b>	Species that have a backbone or spinal column.
<b>visibility</b>	Measure of extent to which particular components of a development may be visible from surrounding areas.
<b>visual absorption capacity</b>	An estimation of the capacity of the landscape to absorb development without creating a significant change in visual character or producing a reduction in scenic quality.
<b>volatiles</b>	Any chemical compound which will evaporate quickly due to its low boiling point.
<b>vulnerable species</b>	Those that may soon become endangered unless action is taken.
<b>weed</b>	Naturalised, non-indigenous plant species which may be noxious weeds (or agriculture), environmental weeds or any other generally undesirable introduced species.
<b>wind climate</b>	A description of the meteorological conditions created by the wind involving measurements of wind speed, direction and frequency of gusts for average, seasonal and annual conditions.