

Section 9

Glossary of Technical Terms, Acronyms, Symbols and Units



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GLOSSARY OF TECHNICAL TERMS

A horizon – the top layer of the soil profile containing decomposed organic materials. Commonly referred to as ‘topsoil’.

A-weighted – an electronic filter having the frequency response corresponding approximately to that of human hearing.

acid – substance with a pH less than 7.0; the lower the pH, the higher the corrosive ability of the substance.

acidic – having a pH less than 7.0.

acoustic barrier – an earthen mound or constructed fence or similar structure positioned to reduce noise (and potentially visual) impact of extraction and processing activities.

acoustic shielding – a natural or artificial structure (e.g. a hill or a barrier) that inhibits the transmission of sound.

acoustics – the science of sound and vibration.

adverse weather conditions (in respect to dust) – conditions, such as high wind, that assist the movement of dust from the source in question towards receptors.

adverse weather conditions (in respect to noise) – conditions, such as temperature inversions or gentle winds (<3m/s) blowing from the source in question towards receptors.

Annual Review – a report submitted to the Secretary of DPE identifying environmental performance for the previous period including activities, monitoring results (with evaluation), compliance, non-compliances and responses, discrepancies between actual and predicted impacts and measures to improve performance over the ensuing reporting period.

aerial survey – survey of a landscape from an aircraft, typically involving aerial photography, to determine specific characteristics (e.g. topography or land use).

agricultural resources – the land on which agriculture is dependent upon the associated water resources (quality and quantity) that are linked to that land.

air quality criteria – 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.

alkaline – having a pH greater than 7.0.

alkalinity – in water analysis a measure of the carbonates, bicarbonates, hydroxides and occasionally the borates, silicates and phosphates in the water.

alluvium – a general term for stream-deposited sediment (sand, silt, gravel, etc.) within stream beds or on floodplains or alluvial fans.

ambient – relating to conditions outside the proposed area of activity.

amenity – the desirability of an area.

amphibians – animals (such as frogs) adapted to live both on land and in water.

Applicant – person, organisation or company proposing to carry out an activity / seeking development consent (i.e. Sutton Forest Quarries Pty Ltd).

aquifer – rock or sediment in a formation, group of formations, or part of a formation which is saturated and sufficiently permeable to transmit economic quantities of water to wells and springs.

aquitard – rock strata, layers or other areal features (generally horizontal, but may be vertical such as a dyke) which prevent the transmission of water flow through them; barrier to flow; impermeable or impervious.

arboreal – pertaining to tree habitats.

archaeology – the scientific study of human history, particularly the relics and cultural remains of the distant past.

artefact – anything made by human workmanship, particularly by previous cultures (such as chipped and modified stones used as tools).

atmospheric stability – a measure of turbulence which determines the rate at which airborne particulates are dispersed as they are transported by the wind.

attenuation – reduction in sound pressure levels between two locations.

auxiliary turn lane – an additional lane approaching an intersection to allow vehicles intending to turn across traffic to wait while allowing through traffic movements to continue uninterrupted.

B horizon – material located below the A horizon material and above the parent rock. Commonly referred to as 'subsoil'

background level – the concentration (deposition) level of a pollutant which must be added to the concentration (deposition) level of the modelled sources in order to obtain a total.

background dust level – dust level in the absence of extraction and processing activities.

background noise level – noise level in the absence of extraction and processing activities.

bank cubic metre (bcm) – a volume of 1m³ in the ground prior to disturbance.

baseline data – a body of information collected over time to define specific characteristics of an area (e.g. species occurrence or noise levels) prior to the commencement of an activity (e.g. an extraction operation). Baseline data allows any impacts arising from the activity to be identified by comparison with previously existing conditions.

baseline monitoring – monitoring performed prior to the commencement of site activities.

basin – the drainage area of a river and its tributaries or of a groundwater system.

bedrock – unweathered rock lying below the soil and weathering profile.

bench – a step in the face of the active extraction area which typically would typically be up to 10m high.

best management practice – the most effective actions which minimise human impact on the environment.

biodiversity – the full range of living things and the ecosystem in which they live.

biodiversity offset strategy – a strategy designed to offset residual impacts to native vegetation attributable to a project through protection of native vegetation elsewhere using additional or compensatory measures.

biota – living components of a habitat.

bore – a hole, usually of less than 20 cm diameter, sunk into the ground and from which water is pumped.

brackish – a term for water that contains noticeable proportion of salt but far less than salt water.

buffer – a physical barrier / structure or width of land that encloses, partially encloses, or defines a particular environment. A buffer serves to minimise the impacts of non-desirable external influences on the adjoining environment.

bulldozer – an item of tracked mobile earth moving equipment fitted with a front blade and with rear rippers used for pushing and ripping soil and rock.

catchment – drainage area of a reservoir, river, creek, etc.

catchment area – the area determined by topographic features within which rainfall will contribute to runoff at a particular point.

channel – natural or man-made structure to convey water – displays a bed and a bank.

colluvium – unconsolidated soil and angular rock material moved largely by gravity, deposited on lower slopes and/or at the base of a slope.

compliance monitoring – monitoring to determine whether standards are being complied with.

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concrete – mixture of aggregate, sand, cement, water and admixtures for use in building.

conductivity – the measurement of the ability of a substance (either a measure of solid, liquid or gas) to transmit electricity; used to determine the amount of salt in a soil sample.

confluence – junction of streams.

conservation – the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations, while maintaining its potential to meet the needs as aspirations of future generations.

contractor – specialist brought in to perform a specific task, such as the construction of the processing plant.

conveyor – a device fitted with an endless rubber belt used for moving materials.

core – rock brought to the surface by drilling for the purpose of geological interpretation.

cross-section – a two-dimensional representation of an area presented as if the area had been cut along its length.

crown – the portion of a tree above the main trunk, made up of branches, twigs and leaves.

crusher – that part of a processing plant where the sandstone is mechanically crushed into smaller pieces.

crushing – the mechanical process of reducing rock size usually by pressure or impact.

culvert – large pipe or channel carrying water underneath a structure (e.g. a road) or underneath the ground.

cumulative – increasing by successive additions.

cut-off drains – drains constructed to divert upslope runoff around disturbed areas.

day time period – the period from 7:00am to 6:00pm Monday to Saturday and 8:00am on Sundays and Public Holidays (when relating to noise).

detection limit – the smallest concentration of a substance that an analytical procedure can accurately and precisely detect.

Development Application – an application a local council or other Authority for approval of an activity deemed to require an approval prior to commencement.

diamond core – a cylindrical-shaped drilling sample obtained by use of a diamond surfaced drilling bit.

dip – the angle that rock strata make with a horizontal surface measured at right angles to the strike.

dispersion model – a set of mathematical equations relating to the release of air pollutants to the corresponding concentrations in the ambient atmosphere or deposition on surfaces.

dissolved oxygen – the amount of gaseous oxygen dissolved in water and available for a biochemical activity (e.g. breathing in by fish).

distribution of species – the entire area in which a population of a species, subspecies or other taxon is found.

diversion bank – an earth bank constructed to divert water away from disturbed areas.

drawdown – the difference between the water level observed during pumping and the non-pumping water level (static water level or static head).

drilling – the action of boring holes (usually less than 20cm in diameter) into the ground, typically to establish a water bore or to investigate the geology found at depth.

dust – particles of mostly mineral origin generated by erosion of surfaces, the extraction and handling of materials, farming, etc.

dust deposition – dust particles that settle out from the air – measured in grams per square metre per unit month (g/m²/month).

dust deposition gauge – instrument set up to record the rate of deposition of dust.

ecology – the relationship between living things and their environment.



ecologically sustainable development (ESD)

– 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.

ecosystem – a functional unit of energy transfer and nutrient cycling in a given place. Includes all the relationships within the biotic community and between the biotic components of the system.

elevated concentration – a concentration of an element that substantially exceeds the average crustal abundance of that element.

Elliot trap – a baited cage used in faunal surveys to capture small animals.

emission – a discharge of a substance (e.g. dust) into the environment.

emissions inventory – an information, collection and processing system containing data on emissions of, and sources of, air pollution from both man-made and natural causes.

environmental constraints – limitations on a project by components of the environment.

Environmental Impact Statement (EIS) – a formal description of a project and an assessment of its likely impact(s) on the physical, social and economic environment. It includes an evaluation of feasible alternatives and an overall justification of the project. The EIS is used as a vehicle to facilitate public comment and as the basis for analysing the project with respect to granting development consent.

ephemeral – intermittent water flow, not permanent, e.g. a stream that flows only seasonally or after rainfall or a lake that periodically dries out.

equilibrium – state of balance between opposing forces or effects.

erosion – the wearing away of the land surface (whether natural or artificial) by the action of water, wind and ice.

evaporation – the loss of water as vapour from the surface of a liquid that has a temperature lower than its boiling point.

evapotranspiration – loss of water from a land mass through transpiration from plants and evaporation from the soil.

evening period – the period from 6:00pm to 10:00pm (when relating to noise).

excavate – to dig into natural material or fill using an excavator or other machinery.

excavator – item of earthmoving equipment fitted with a bucket on an articulated boom and used for digging material from a face in front of, or below the machine.

fauna – a general term for animals (birds, reptiles, marsupials, fish etc.) particularly in a defined area or over a defined time period.

feral – domesticated animals that have become wild.

flora – a general term for plant, particularly those found in a defined area or characteristic of a defined time period.

fluvial – pertaining to or produced by a river.

formation – a large stratigraphic sequence of rock beds (e.g. sandstone, shale.) generally deposited over a distinct geological period.

front-end loader – a machine used to lift and place soil, earth, rocks, etc. on a construction or quarry site.

fugitive emissions – emissions not entering the atmosphere from a stationary vent (stack). Examples of fugitive dust sources include vehicular traffic on unsealed roads, handling of raw materials, wind erosion of dusty surfaces.

geological reserves – the measured total quantity of in-situ resource in a deposit, prior to consideration of extraction parameters.

geological time – the time periods over which geological processes such as sedimentation or erosion occur (generally from tens of thousands to hundreds of millions of years).

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geotechnical – technical or engineering aspects relating to soil, rock and other materials.

grader – an item of earthmoving equipment, rubber tyred and fitted with a centrally mounted blade and rippers used to shape and trim the ground surface, particularly unsealed roads

gradient – rate of change of a given variable (such as temperature or elevation) with distance.

Greenhouse effect – the heating of the earth's surface because outgoing long-wavelength radiation from the earth is absorbed and re-emitted by the carbon dioxide and water vapour in the lower atmosphere and eventually returns to the surface.

groundwater – the water contained in interconnected pores located below the water table in an unconfined aquifer or located in a confined aquifer.

groundwater dependent ecosystems – ecosystems that use groundwater as part of survival, and can potentially include wetlands, vegetation, springs, base flows, cave ecosystems, river pools and hanging swamps.

habitat – the place where an organism normally lives; can be described by their floristic and physical characteristics.

haul road – a road used for haulage of extracted rock within the Site.

haul truck – a truck specifically designed for hauling and tipping soil or rock within the Site.

head (hydraulic head) – energy contained in a water mass, produced by elevation, pressure or velocity.

heavy vehicle – a motor vehicle or trailer that has a gross vehicle mass greater than 4.5 tonnes. Also includes motor vehicles with seats for more than 12 adults.

heritage – the things of value which are inherited.

hydraulic conductivity (k) – 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 second or metres per day.

hydraulic gradient – the direction of flow of groundwater.

in situ – a term used to distinguish material (e.g. rocks, minerals, fossils, etc.) found in its original position of formation, deposition, or growth, as opposed to transported material.

igneous – a rock or mineral that solidified from molten or partly molten material.

indigenous – belonging to, or found naturally in, a particular environment.

infiltration – the process of surface water soaking into the soil.

inflow – flow directed into the extraction area

inter-generational equity – the principle that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

intermittent – flows periodically, irregularly.

interbedded – two or more types of sedimentary rock deposited alternately to build up a sequence.

inversion – 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.

land condition – the present (compared with the historical) capacity of the land to support vegetation or agriculture).

landform – a specific feature of a landscape (such as a hill) or the general shape of the land.

light vehicle – a vehicle that has a gross vehicle mass of 4.5 tonnes or less.



Local Environmental Plan (LEP) – a plan developed by a council to control development in part or all of its local government area.

low loader – a trailer which has a relatively low carrying deck and used to transport large items of equipment such as bulldozers or scrapers.

mitigation measures – measures employed to reduce (mitigate) an impact (such as the construction of a noise barrier to reduce sound emissions).

mobile equipment – wheeled or tracked self-propelled equipment such as trucks, front-end loaders, and bulldozers.

monitoring – the regular measurement of components of the environment to establish environmental standards are being met.

National Park – an area set aside for the protection of flora and fauna and for public recreation.

neutral – neither acidic nor basic (e.g. a pH equal to 7.0).

night-time period – the period from 10:00pm to 7:00am Monday to Saturday and 10:00pm to 8:00am on Sundays and Public Holidays (when relating to noise).

noise contours – theoretical lines connecting points of equal noise value.

non-combustible residue – dust residue that cannot be burnt (i.e. free of organic litter).

particulate matter – small solid or liquid particles suspended in or falling through the atmosphere - sometimes expressed by the term particulates.

permeability – a material property relating to the ability of the material to transmit water.

pH – a measure of the degree of acidity or alkalinity of a solution; expressed numerically (logarithmically) on a scale of 1 to 14, on which 1 is most acid, 7 is neutral acid, and 14 is most basic (alkaline).

piezometer – a bore drilled specifically for the monitoring of groundwater levels and/or water quality.

piezometric surface – water table surface.

pollution – the alteration of air, soil, or water as a result of human activities such that it is less suitable for any purpose for which it could be used in its natural state.

porosity – the percentage of a solid material that consists of voids and areas of space, or the ratio, expressed as a percentage of the volume of the pores or interfaces of a substance to the total volume of the mass. A measure of its ability to hold liquid.

precautionary principle – the principle that, if a threat of serious or irreversible environmental damage exists, lack of full scientific certainty that the damage will occur should not be used as a reason to postpone measures to prevent that environmental damage.

privately-owned residence – an occupied dwelling not owned or under an option to purchase by the Applicant or another resource company, or the subject of a purchase or lease agreement with the Applicant or by any other resource company – referred to as receptors when considered with the predicted noise and/or air quality impacts.

pump test – the systematic pumping of water from a bore to test the response of water bearing strata.

quality assurance – procedures built into a sampling and analytical program to maintain the quality of the results obtained.

Rating Background Level – the overall single-figure background noise level representing each assessment period (day / evening / night) over the whole monitoring period.

rehabilitation – the preparation of a final landform following extraction and related activities and its stabilisation with grasses, trees and shrubs – often preferably undertaken progressively.

remnant woodland – native woodland

resource – an estimate of potentially recoverable extractive material in a defined area based on preliminary information.

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Resource company-owned residence – an occupied dwelling owned or under an option to purchase by the Applicant or another resource company, or the subject of a purchase or lease agreement with the Applicant or by any other resource company.

revegetation – replacement of vegetation, principally grasses and legumes on areas disturbed by mining activities.

riparian – pertaining to a river or stream bank.

runoff – that portion of the rainfall falling on a catchment area that flows from the catchment past a specified point.

saline – water with elevated salt concentrations.

salinity – the total content of dissolved solids in groundwater, commonly expressed as parts of dissolved solids per million parts of solution, or milligrams of dissolved solids per litre of solution (mg/L);

sampling period – range of time over which samples are taken.

sedimentation – process or rate of depositing of sediment.

silt trap – structure designed to trap silt and sediment close to its source.

Site – the area of land which corresponds with the area of application for development consent.

social capital – the expected collective or economic benefits derived from the preferential treatment and cooperation between individuals and groups.

social cohesion – the bonds and relationships people have with their family, friends and the wider community.

social infrastructure – community facilities, services and networks which help individuals, families, groups and communities meet their social needs, maximise their potential for development and enhance community wellbeing.

sight distance – the distance along the road visible to the driver. It is measured along the normal travelled path of a roadway from the driver's location (such as at an intersection) to a specified height above the roadway when the view is unobstructed by traffic.

species – a taxonomic grouping of organisms that are able to interbreed with each other but not with members of other species.

species diversity – a measure of the number of different species in a given area.

stakeholder – person, group or organisation or company with an interest in an activity or outcome.

stockpile – a pile used to store material (such as soil, raw sandstone or sandstone products) for future use.

storage capacity – the maximum volume of water able to be retained in a dam.

stormwater – surface water runoff immediately after rainfall.

stratigraphy – the succession and age of strata of rock and unconsolidated material.

stream order – defined by the Strahler stream order used to define stream size based upon a hierarchy of tributaries.

- **first order streams** – the smallest streams in a drainage network that have no tributary streams.
- **second order streams** – two first order streams unite to form a second order stream.
- **third order streams** – have second and first order streams as tributaries.
- **fourth, fifth, sixth, etc. orders** – reflect a similar approach to second or third order streams.

As the order of the stream increases, the discharge increases, the gradient decreases and the channel dimensions increase to accommodate discharge.

Study Area – a defined area for the purposes of a specific area of environmental study.



sub-catchment – a smaller area within a catchment drained by one or more watercourses.

subsoil – the layer of soil lying below the topsoil; usually contains less organic matter and is less fertile but is essential for retention of moisture for plant growth. Also referred to as the 'B Horizon'.

surface water – all water flowing over, or contained on, a landscape (e.g. runoff, streams, etc.).

survey transect – a path along which one records and counts occurrences of the phenomenon of study (e.g. plants).

suspended solids – analytical term applicable to water samples referring to material recoverable from the sample by filtration.

temperature inversion – an increase in air temperature with height.

terrestrial – of or relating to the land, as distinct from air or water.

threatened species – a species specified in Schedules of the *Biodiversity Conservation Act 2016* or listed in the categories as defined in Section 179 of the *EPBC Act 1999*.

topography – the physical relief and contour of a region.

topsoil – the surface layer soil profile containing the main percentage of organic material. Also referred to as the 'A Horizon'.

total suspended particulates (TSP) – the mass of all particulate matter suspended in air.

total suspended solids – a common measure used to determine concentrations of fine materials present in water.

transmissivity – the rate at which groundwater is transmitted at a specific hydraulic gradient through a rock mass of a specified width.

tributary – a stream or river that flows into a larger river or lake.

tubestock – tree seedlings supplied with roots enclosed in soil.

turbidity – the optical property of water that prevents light from being transmitted. Caused by the presence of very fine suspended matter such as clay or organic matter.

vehicle movement – a one-way trip.

vibration – oscillating movement.

visual amenity – attractiveness to the eye.

watercourse – a creek or river or a longitudinal depression in the landscape often without a bed or bank that intermittently carries runoff.

weed – any plant (in particular an herbaceous one) that survives in an area where it is harmful or troublesome to the desired land use.

wildlife corridor – a strip of vegetation that has a design purpose of allowing animals to pass from one area to another and acting as an undisturbed area for wildlife preservation.

wind direction – the direction from which the wind, averaged over a certain period of time, is blowing.

wind rose – diagrammatic representation of wind direction, strength, and frequency of occurrence over a specified period.

water quality criteria – generally refers to numeric levels specified for key water quality variables, such as electrical conductivity or pH, which can be measured to determine the suitability of water for human consumption, supporting aquatic life, etc.

yield – (of a water bore) - the amount of water actually withdrawn.

GLOSSARY OF ACRONYMS, SYMBOLS AND UNITS

~ – approximately.

° – degrees.

°C – degrees Celsius.

°C/100 m – degrees Celsius per 100m.

µg/g – micrograms per gram.

µg/L – micrograms per litre.

µg/m³ – micrograms per cubic metre.

µm – micron, one millionth of a metre (one thousandth of a millimetre).

µS/cm – microsiemens per centimetre; a measure of electrical conductivity.

% – percentage.

\$M – million dollars.

3-D – three dimensional.

24-hour air quality standard – value of an air quality variable not to be exceeded when averaged over 24 hours.

72-hour rainstorm – total rainfall recorded over a 72-hour period.

100 year flood limit – predicted extent of a 1 in 100 year flood occurrence.

< – less than.

≤ – less than or equal to.

> – greater than.

≥ – greater than or equal to.

95% exceedance – a value that is exceeded by 95% of sample values.

AADT – Average Annual Daily Traffic.

ABS – Australian Bureau of Statistics.

ADO – Automotive Diesel Oil.

AEP – Annual Exceedance Probability.

AGV – air guideline value

AHD – Australian Height Datum; in metres (similar to metres above mean sea level).

AHIMS – Aboriginal Heritage Information Management System.

ANZECC – Australian and New Zealand Environment and Conservation Council.

ARI – average recurrence interval.

AS – Australian Standard.

A-Scale – a sound level measurement scale. It discriminates against low frequencies and approximates the human ear.

bcm – bank cubic metre – a volume of 1m³ in the ground prior to disturbance.

BOM – Bureau of Meteorology.

CL&W – Crown Lands & Water.

cm – centimetre (unit of length) = 0.01 metre.

CM – coarse matter.

CO₂ – carbon dioxide

CO₂-e – carbon dioxide equivalent.

CSIRO – Commonwealth Scientific and Industrial Research Organisation.

D% – dispersion percentage.

dB – decibel. The unit used to express sound intensity.

dB(A) – decibels, A-weighted scale. The unit used for most measurements of environmental noise. The scale is based upon typical responses of the human ear to sounds of different frequencies.

DECCW – Department of Environment, Climate Change and Water (NSW). Now OEH.

DGRs – Director-General's Requirements.

DMR – Department of Mineral Resources (now Division of Resources and Geoscience [DRG]).

DP&I – Department of Planning and Infrastructure (NSW) (now DPE)

DPE – Department of Planning and Environment (NSW).

DP – Deposited Plan.

DPI – Department of Primary Industries (NSW)

dS/cm – deciSiemens per centimetre; a measure of electrical conductivity.

EC - electrical conductivity.

EIS – Environmental Impact Statement.

ENM – Environmental Noise Model.

EPA – Environment Protection Authority (NSW).

EP&A Act – Environmental Planning and Assessment Act 1979 (NSW).

EP&A Regulation – Environmental Assessment and Planning Regulation 2000.

EPL – Environment Protection Licence.

ESD – Ecologically Sustainable Development.

Fe – iron.

FP – fine particle.

g – gram (= 0.001 kilogram).

g/m²/month – grams per square metre per month unit for deposited dust.

GHG – greenhouse gas.

GWh – gigawatt hours.

ha – hectare (100 m x 100 m).

ha/year – hectares per year.

HVAS – High Volume Air Sampler.

hz – Hertz – a unit of frequency.

ID – Identification

kg – kilogram (weight measure).

kg/day – kilograms per day.

kg/ha – kilograms/hectare

kg/minute – kilograms per minute.

kL – kilolitre (thousand litre).

km – kilometre (= 1 000 metres).

km² – square kilometres.

km/hr – kilometres per hour.

kV – thousand volts (Electrical Potential Unit).

kVA – kilovolt amps.

kwh – kilowatt hours.

kW – thousand watts (energy unit).

lcm – loose cubic metres.

L – litre.

L/day – litres per day.

L/s – litres per second.

L/t – litres per tonne.

L_{A10} – sound level exceeded 10 per cent of the sampling time.

L_{A90} – sound level exceeded 90 per cent of the sampling time.

L_{Aeq} – the **L_{Aeq}** is the energy average of the varying noise over the sample period and is equivalent to the level of a certain noise which contains the same energy as the varying environment. It is a common measure of environmental and traffic noise.

L_{Aeq 1 hour} – the “equal energy” average noise level over 60 minutes – used for assessing impacts of motor vehicles.

L_{Aeq T} – sound level of continuous noise which emits the same energy as the fluctuation sound over a given time period (T).

L_{Amax} – the absolute maximum noise level measured in a given time interval.

L_{AN} – the A-weighted sound pressure level exceeded by N% of a given measured period.

LALC – Local Aboriginal Land Council.

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LEP – Local Environmental Plan.

LDP – Licensed Discharge Point.

lcm – loose cubic metres.

LGA – Local Government Area

LPG – liquid petroleum gas.

m – metre.

m AHD – metres Australian Height Datum.

m BGL – metres below ground level.

M – million.

m² – square metre.

m³ – cubic metre.

m³pa – cubic metres per annum.

mg – milligram (weight unit).

MLpa – megalitres per annum.

Mg – magnesium.

mg/L – milligrams per litre (parts per million).

ML – Megalitre (1 million litres) – typically of water.

ML/a – megalitres per annum.

ML/day – megalitres per day.

ML/year – megalitres per year.

mm – millimetre (= 0.001 metres).

Mm³ – million cubic metres.

mm/day – millimetres per day.

mm/month – millimetres per month.

mm/s – millimetres per second.

Mn – manganese.

MR – Main Road.

m/s – metres per second.

m³/s – cubic metre per second.

Mt – million tonnes (metric tonne = 1 000 kg).

Mtpa – million tonnes per annum.

MW – megawatt.

Na – sodium.

NATA – National Association of Testing Authorities.

NEPC – National Environment Protection Council

NEPM – National Environment Protection Measures

NFR – non-filterable residue of suspended solids.

NHMRC – National Health and Medical Research Council.

NO – nitrogen oxide.

NO₂ – nitrogen dioxide.

NO_x – nitrous oxides.

NP&W Act – National Parks and Wildlife Act 1974 (NSW).

NPI – Noise Policy for Industry.

NTU – Nephelometric turbidity units.

O₃ – ozone.

PAD – Potential Archaeological Deposit.

pH – measurement indicating whether water or soil is acid or alkaline.

PLC – Programmable Logic Controller

PM₁₀ – particulate matter <10µm in diameter.

PM_{2.5} – particulate matter <2.5µm in diameter.

PPD – Patched Point Dataset.

ppm – parts per million.

PVS – peak vector sum.

RH – relative humidity.

RMS – Roads and Maritime Services



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RTA – Roads and Traffic Authority (NSW) – now RMS.

SEARs – Secretary's Environmental Assessment Requirements.

SEPP – State Environmental Planning Policy.

SG – specific gravity.

SR – Shire Road.

SWL – standing water level.

t – tonnes.

TAPM – The Air Pollution Model.

TDS – total dissolved solids – expressed in mg/l.

TEOM – Tapered Element Oscillating Microbalance dust sampling unit.

t/m³ – tonnes per cubic metre.

tpa – tonnes per annum.

tpd – tonnes per day.

tph – tonnes per hour.

TSC Act – Threatened Species Conservation Act 1995 (NSW).

TSP – Total Suspended Particulate.

µg/m³ – micrograms per cubic metre.

µm – micron (1 micron=0.001 millimetre).

µPa – micro pascals.

µS/cm – microsiemens per centimetre.

V – volt.

V:H – vertical to horizontal ratio.

WHO – World Health Organisation.

w/v – weight per volume.

WSP – Water Sharing Plan.