

# A | Glossary



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## Appendix A Glossary, Abbreviations and Units

### A.1. Glossary

**Table A-1 SEIS Glossary Terms**

Term	Definition
The EIS	Kevin's Corner Coal Mine Project Environmental Impact Statement
The Proponent	Hancock Galilee Pty Ltd
The Project	Kevin's Corner Coal Mine Project
Aquitard	A saturated geological unit with a relatively low permeability that retards and restricts the movement of water, but does not prevent the movement of water; while it may not readily yield water to boreholes and springs, it may act as a storage unit.
Artesian	(Of water) rising to the surface under internal hydrostatic pressure; where the piezometric level is at an elevation higher than ground level.
Commercial Vehicle	A vehicle above 10 tonnes gross vehicle mass.
Degree of Saturation (DOS)	The ratio of arrival (demand) flow rate to capacity during a given flow period.
Delay	The additional travel time experienced by a vehicle at an intersection.
Dynamic water level	Groundwater level within a bore during pumping.
Hydraulic conductivity	Measure of the ease with which water will pass through earth material; defined as the rate of flow through a cross section of one square metre under a unit hydraulic gradient at right angles to the direction of flow (m/day).
Intersection	A place at which two roads meet or cross.
labile	Said of rocks and minerals that are mechanically or chemically unstable; easily decomposed.
Lacustrine	Of a lake, or relating to a lake.
Land System	An area or group of areas that have a re-occurring pattern of topography, soils and vegetation.
Level of Service (LOS)	An index of the operational performance of traffic on a given traffic lane, carriageway, road or intersection, based on service measures such as speed, travel time, delay and degree of saturation during a given flow period.
Midblock	The section of a road between intersections.
Palustrine	Inland marshes and swamps, as well as bogs, fens, tundra and floodplains.
Physical Properties (soil)	Those characteristics, processes or reactions of a soil caused by physical forces, which can be described by, or expressed in, physical terms or equations. These can be difficult to separate from chemical properties, hence the terms, physical-chemical or physio-chemical.
Piezometric level	The elevation to which groundwater levels rise in bores that penetrate confined or semi-confined aquifers.
Ply	Bed or sub-seam.



Term	Definition
Potentiometric surface	An imaginary surface representing the piezometric pressure or hydraulic head throughout all or part of a confined or semi-confined aquifer; analogous to the water table of an unconfined aquifer.
Riverine	Located on or inhabiting the banks of a river.
Seagull Intersection	A T-intersection where the right turn-out of the side road gives way to oncoming traffic from the right and is provided with an acceleration lane in the median to merge into the traffic stream approaching from the left.
Soil Classification	The systematic arrangement of soils into groups or categories on the basis of similarities and differences in their characteristics.
Soil Erodibility	The susceptibility of a soil to the detachment and transportation of soil particles by erosive agents.
Soil Structure	Refers to the way soil particles are arranged and bound together to form aggregates or peds.
Soil Texture	The relative proportions of the various soil separates in a soil as described by the classes of soil texture. It is the general coarseness or fineness of soil material as it affects the behaviour of a moist ball (bolus) when pressed between the thumb and forefinger.
Subartesian	Water that occur naturally in, or is introduced artificially into, an aquifer, which if tapped by a bore, would not flow naturally to the surface.
Subsoil	Refers to B soil horizon.
T-Intersection	An intersection where two roads meet (whether or not at right angles) and one of the roads ends.
Topsoil	Refers to A1 and A2 soil horizons.
Transmissivity	Transmissivity can be defined as the rate at which water is transferred through a unit width of an aquifer under a unit hydraulic gradient. It is expressed as the product of the hydraulic conductivity and the thickness of the saturated portion of an aquifer.

## A.2. Abbreviations

**Table A-2 SEIS Abbreviations Terms**

Abbreviation	Definition
AADT	Annual Average Daily Traffic
AARC	AustralAsian Resource Consultants
ABA	Acid Base Account
ABARE	Australian Bureau of Agricultural and Resource Economics
ABCC	Acid Buffering Characterisation Curve
ABS	Australian Bureau of Statistics
ACARP	Australian Coal Association Research Program
ACH Act	Aboriginal Cultural Heritage Act 2003
ACH Act (Qld)	Aboriginal Cultural Heritage Act 2003 (Qld)
ACIRL	Australian Coal Industry Research Laboratories
ACIRP	Australian Coal Industry Research Program
ACP	Alpha Coal Project
ACTFR	Australian Centre for Tropical Freshwater Research
ADB	Air Dried Basis
ADG	Australian Code for Transport of Dangerous Goods by Road and Rails
ADWG	Australian Drinking Water Guidelines
AEP	Annual Exceedance Probability
AGC	Australian Groundwater Consultants
AGO	Australian Greenhouse Gas Office
AHD	Australian Height Datum
AL	Ambient Noise Level
ALARP	as low as reasonably practicable
ALC	Agricultural Land Class
ALP	Australian Labor Party
ALS	Australian Laboratory Services
AMD	Acid and Metaliferous Drainage or Acid Mine Drainage
AMIRA	Australian Minerals Industry Research Association
AMP	Archaeological Management Plan
AN	Ammonium nitrate
ANC	Acid Neutralising Capacity
ANFO	Ammonium nitrate fuel oil
ANRA	Australian Natural Resources Atlas
ANRA	Australian Natural Resource Atlas
ANZECC	Australia and New Zealand Environment and Conservation Council
ARD	Acid Rock Drainage



Abbreviation	Definition
ARI	Average Recurrence Interval
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
AS	Australian Standard
As	Arsenic
AS/NZS	Australian Standards/New Zealand Standards
ASC	Australian Soil Classification
ASRIS	Australian Soil Resource Information System
ASS	Acid Sulfate Soils
ATSIHP Act	Aboriginal and Torres Strait Islander Heritage Protection Act 1984
ATP	Authority to Prospect
ATP	Alpha Test Pit
AUSRIVAS	Australian River Assessment System
Ba	Barium
BCM	Bank Cubic Metre
BFS	Bankability Feasibility Study
bgl	Below ground level
BIBO	Bus-in Bus-out
BMA	BHP Billiton Mitsubishi Alliance Coal Operations Pty Ltd
Bo	Boron
BOM	Bureau of Meteorology
BPA	Biodiversity Planning and Assessment
BRC	Barcaldine Regional Council
BSTP	Bulk Sample Test Pit
CaCO <sub>3</sub>	Calcium Carbonate
CAMBA	China-Australia Bird Agreement
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations
CBD	Central Business District
CCMP	Clermont Coal Mine Project
CCS	Carbon Capture and Storage
Cd	Cadmium
CFu	Colony Forming Units
CH <sub>4</sub>	Methane
CHLa	Chlorophyll 'a'
CHMP	Cultural Heritage Management Plan
CHPP	Coal Handling and Preparation Plant
CHRC	Central Highlands Regional Council
CHSS	Central Highlands Safety Services

Abbreviation	Definition
CID	Community Infrastructure Designation
CLR	Contaminated Land Register
CO	Carbon monoxide
Co	Cobalt
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> -e	Carbon dioxide equivalent emissions
CO <sub>2</sub> -e/y	Carbon dioxide equivalent per year
COAG	Council of Australian Governments
CoG	The Coordinator-General of the State of Queensland
CoP	Code of Practice
CPP	Coal Processing Plant
CQU	Central Queensland University
Cr	Chromium
CRC	Cooperative Research Centres
CRD	Connors River Dam
CRD	Cumulative Rainfall Departure
CSG	Coal Seam Gas
CSIA	Cumulative Social Impact Assessment
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CU	Upper C Seam
Cu	Copper
CV	Commercial Vehicles
DAFF	Department of Agriculture, Fisheries and Forestry
DCC	Department of Climate Change
DCCEE	Department of Climate Change and Energy Efficiency (Commonwealth Government)
DCS	Qld Department of Community Safety
DEC	Department of the Environment and Conservation, NSW Government
DEEDI	Qld Department of Employment, Economic Development and Innovation
DEM	Digital Elevation Model
DEO	Desired environmental outcome
DERM	Queensland Department of Environment and Resource Management
DEWHA	Department of the Environment, Water, Heritage and the Arts
DEWR	Department of Employment and Workplace Relations
DEWS	Department of Energy and Water Supply
DHLGP	Department of Housing and Local Government Planning
DIDO	Drive-in Drive-out
DIP	Qld Department of Infrastructure and Planning
DITR	Department of Industry, Tourism and Resources



Abbreviation	Definition
DLGP	Department of Local Government and Planning
DLGPSR	Department of Local Government, Planning, Sport and Recreation
DLL	D Lower Seam
DLM	D Middle Seam
DME	Former Qld Department of Mines and Energy (now DEEDI)
DNR	Department of Natural Resources
DNRM	Department of Natural Resources and Mines
DNPRSR	Department of National Parks, Recreation, Sport and Racing
DO	Dissolved oxygen
DOS	Degree of Saturation
DPI	Department of Primary Industries
DSDIP	Department of State Development, Infrastructure and Planning
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities
DTMR	Department of Transport and Main Roads
DU	D Upper Seam
e.g.	For example
EA	Environmental Authority
EC	Electrical conductivity
eCEC	Effective cation exchange capacity
EEO	Energy Efficiency Opportunities
EETM	Emission Estimation Technique Manual
EF	Emission factor
EFO	Environmental Flow Objectives
EIS	Environmental Impact Statement
EM Plan	Environmental Management Plan
EMOS	Environmental Management Overview Strategy
EMR	Environmental Management Register
EMS	Environmental Management System
ENSO	El Niño/La Niña-Southern Oscillation
EP	equivalent persons
EP Act	Environmental Protection Act 1994 (Qld)
EP Regulation	Environmental Protection Regulation 2008
EPA	Queensland Environmental Protection Agency
EPBC	Environmental Protection and Biodiversity Conservation
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999 (CWLTH)
EPC	Exploration Permit for Coal
EPCA	Exploration Permit for Coal Application



Abbreviation	Definition
EPM	Exploration Permits for Mining
EPHC	Environment Protection Heritage Council
EPP	Exploration Petroleum Permit
EPP	Environmental Protection Policy (water, air, waste and noise)
EPP (Air)	Queensland Environmental Protection (Air) Policy 2008
EPP (Noise)	Environmental Protection (Noise) Policy 1997, 2008
EPP (Water)	Environmental Protection (Water) Policy 1997
EPT	Ephemeroptera, Plecoptera and Trichoptera taxa
ERA	Environmentally Relevant Activity
ERE	Endangered Regional Ecosystem
ESA	Environmentally Sensitive Area
ESCP	Erosion and sediment control plan
ESD	Ecologically sustainable development
ESP	Exchangeable Sodium Percentage
ET	Evapotranspiration
ETA	Electronic Transactions Act
EVs	Environmental Values
EVNT	Endangered, venerable or near threatened
EVR	Endangered, Vulnerable and Rare
FA	Fisheries Act 1994
Fe	Iron
FEL	Front End Loader
FFG	Functional Feeding Group
FIFO	Fly-in Fly-out
FML	Flexible membrane liner
FMZ	Fuel Management Zone
FPC	Foliage Protection Cover
FO	Fuel Oil
FTE	Full Time Equivalent
GAB	Great Artesian Basin
GARD	Global Acid Rock Drainage
GARID	Guidelines for the Assessment of Road Impacts of Developments 2006
GBR	Great Barrier Reef
GBRWHA	Great Barrier Reef World Heritage Area
GCL	Geosynthetic clay liner
GDA94	Geocentric Datum of Australia 1994
GDE	Groundwater dependent ecosystem
GDP	Gross Domestic Product



Abbreviation	Definition
GDR	Great Dividing Range
GED	General Environmental Duty
GGE	Greenhouse Gas Emissions
GHD	Gutteridge Haskins and Davey P/L
GHG	Greenhouse gas
GIS	Geographic information systems
GPS	Global positioning system
GOAL	Good Quality Agricultural Land (in State Planning Policy 1/92: Development and the Conservation of Agricultural Land)
GRP	Gross Regional Product
GSSE	GSS Environmental
GSV	Gross calorific value
GSV	Ground surface visibility
GVKCDPL	GVK Coal Developers (Singapore) Pte Limited
GWM	Groundwater monitoring
H <sub>2</sub>	Hydrogen
H <sub>2</sub> O	Water
H <sub>2</sub> S	Hydrogen sulphide
H <sub>2</sub> SO <sub>4</sub>	Sulphuric acid
HACC	Home and Community Care
HANFO	Heavy Ammonium Nitrate and Fuel Oil
HAZMAT	Hazardous Material
HAZOP	Hazard and Operability Study
HCC	Hancock Consultative Committee
HCl	Hydrochloric acid
HCO <sub>3</sub>	Bicarbonate
HCPL	Hancock Coal Pty Ltd
HDPE	High Density Polyethylene
HEAT	Heavy Equipment Access Track
HEC-RAS	Hydraulic Engineering Centre – River Analysis System
HERBREC	Queensland Herbarium Records
HES	High Ecological Significance
Hg	Mercury
HGPL	Hancock Galilee Pty Ltd
HIPAP	NSW Department of Planning's Hazardous Industry Planning Advisory Papers
HMP	Hazard Management Plan
HP	High Priority
HPPL	Hancock Prospecting Pty Ltd

Abbreviation	Definition
HPS	High Pressure Sodium
HSE	Health Safety and Environment
HSEC	Health, Safety, Environmental and Community
HSECH	Health, Safety, Environment, Community and Heritage
HSM	Habitat Suitability Maps
HV	Heavy Vehicle
HVR	High Value Regrowth
i.e.	That is,
ICN	Industry Capability Network
IEP	Indigenous Employment Programme
IAIA	International Association for Impact Assessment
IAP2	International Association for Public Participation Spectrum
IAS	Initial Advice Statement, as defined by Part 4 of the State Development & Public Works Organisation Act 1971
ICOMOS	International Council on Monuments and Sites
IDC	Index of Diversion Condition
IDAS	Integrated Development Assessment System
ILUA	Indigenous Land Use Agreement
IMC	IMC Pty Ltd
INAP	International Network on Acid Prevention
IP Act	Integrated Planning Act 1997 (Qld) (repealed, now SPA 2009)
IPCC	Intergovernmental Panel on Climate Change or In-Pit Crushing and Conveying
IRC	Isaac Regional Council
IRTM	Interactive Resource Tenure Map
ISQG	Interim Sediment Quality Guidelines
IWMP	Interim Waste Management Plan
JAMBA	Japan-Australia Migratory Bird Agreement
JORC	Joint Ore Reserves Committee
JSC	Jericho Shire Council
JSEA	Job Safety and Environmental Analysis
JSPS	Jericho Shire Planning Scheme 2006
KPIs	Key Performance Indicators
K	Hydraulic conductivity in metres per day (m/day) or metres per second (m/s)
KC	Kevin's Corner
KCCC	Kevin's Corner Consultative Committee
KCMP	Kevin's Corner Mine Project
KC_OC_S	Kevin's Corner Open Cut South



Abbreviation	Definition
KC_OC_N	Kevin's Corner Open Cut North
KC_UG	Kevin's Corner Underground
KLC	Kinetic leach column
KRA	Key Resource Area
Kxy	Horizontal Hydraulic Conductivity
Kz	Vertical Hydraulic Conductivity
LA1, 10, 90	A Weighted Noise Levels Exceeded 1%, 10% or 90% of the Time
LCD	Lagoon Creek Downstream
LCL	Lagoon Creek Lagoon
LCSR	Lagoon Creek Final Discharge
LCU	Lagoon Creek Upstream
LFA	Landscape Function Analysis
LFG	Landfill Gas
LGA	Local Government Areas
LGAQ	Local Government Association of Queensland
Li	Lithium
LIA	Light Industrial Area
LOM	Life of Mine
LOS	Level of Service
LMU	Land Managements Unit
LP Act	Land Protection (Pest and Stock Route Management) Act 2002
LPG	Liquefied Petroleum Gas
LS	Land Suitability
LSCU	Little sandy Creek Upstream
LV	Light Vehicle
MAP	Mean Annual Precipitation
MDL	Mining Development Licence
MH	Metal Halide
MIA	Mine Infrastructure Area
MIA	Mine Industrial Area
MIC	Maximum Instantaneous Change
ML	Mining Lease
ML/annum	Mega litres per annum
MLA	Mining Lease Application
MLA70425	Subject Mining Lease
MOU	Memo of Understanding
Mn	Manganese
MNES	Matters of National Environmental Significance, as defined by the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)

Abbreviation	Definition
MPa	Megapascal
MPA	maximum potential acidity
MR Act	Mineral Resources Act 1989
MRL	Mandatory reporting Level
MSDS	Material Safety Data Sheet
MWD	Mine Water Dam
n/a	Not applicable
NAF	Non Acid Forming
NAG	Net Acid Generation
NAPP	net acid producing potential
NATA	National Association of Testing Authorities
NB	“Nota Bene” – note well
NCAS	National Carbon Accounting System
NC Act	Nature Conservation Act 1992 (Qld)
NCL	Native Companion Creek
NCWE	National Committee on Water Engineering
NCWR	Nature Conservation Wildlife Regulation 1999
NEPC	National Environmental Protection Council
NEPM	National Environment Protection Measure
NEPM (Ambient Air Quality)	National Environment Protection Measure (Ambient Air Quality)
NET	Northern Economic Triangle
NFPA	National Fire Protection Association
NGA	National Greenhouse Accounts
NGER Act	National Greenhouse and Energy Reporting Act 2007
NGO	Non-Government Organisation
NHMRC	National Health and Medical Research Council
NH4	Ammonium
Ni	Nickel
NMA	non-mine affected
NMD	Neutral Mine Drainage
No.	Number
NO	Nitric Oxide
NO2	Nitrogen Dioxide
NOHSC	National Occupational Health and Safety Commission (Australia)
NPI	National Pollutant Inventory
NPR	Net Potential Ratio
NPWS	National Parks and Wildlife Service
NQ	North Queensland



Abbreviation	Definition
NQBP	North Queensland Bulk Ports Corporation
NRM	Natural Resource Management
NSESD	National Strategy for Ecologically Sustainable Development (1992)
NSW	New South Wales
NSW RTA	New South Wales Road Traffic Authority
NT Act	Native Title Act 1993
NTC	National Transport Commission
NTEC	NTEC Environmental
NTU	Nephelometric Turbidity Units
O <sub>2</sub>	Oxygen
O <sub>3</sub>	Ozone
OAM	Office of Advanced Manufacturing
OC	Organochlorin Pesticide
OCE	Open Cut Examiner - Statutory Position under the Coal Mining Safety and Health Regulation 2001 (Qld)
ODV	Over Dimensional Vehicles
OEM	Operational Environmental Management
OESR	Office of Economic and Statistical Research
OLC	Overland Conveyor
OQPC	Office of the Queensland Parliamentary Counsel
PAF	Potentially Acid Forming
PAF-LC	Potentially Acid Forming – Low Capacity
Pb	Lead
PB	Parsons Brinckerhoff
PC	Performance criteria
PFS	Pre-Feasibility Study
P&G Act	Petroleum and Gas (Production and Safety) Act 2004
pH	Measure of Acidity (<7) or Alkalinity (>7) of a Sample.
PHA	Preliminary Hazard Analysis
PIFU	Planning Information and Forecasting Unit
PM	Particulate Matter (fine dust)
PM <sub>10</sub>	Particulate Matter less than 10 microns
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns
PM <sub>2.5</sub> and PM <sub>10</sub>	Particulate matter with an equivalent aerodynamic diameter of 2.5 or 10 micrometres.
PMAV	Property Map of Assessable Vegetation
PMF	Probable Maximum Flood
PMP	Pest Management Plan
PMP	Probable Maximum Precipitation



Abbreviation	Definition
PNL	Planning Noise Levels
PoO	plan of operation
PPE	Personal Protective Equipment
PPV	Peak Particle Velocity
PSI	Preliminary Site Investigation
PVC	Polyvinyl chloride
PWTP	Potable Water Treatment Plant
QAS	Queensland Ambulance Service
QDM	Queensland Department of Mines
QFRS	Queensland Fire Rescue Service
QH	Queensland Health
QH Act	Queensland Heritage Act 1992
QHR	Queensland Heritage Register
QGN	Queensland Guidance Note
Qld	Queensland
QPP	Queensland Planning Provision
QPED	Queensland Petroleum Exploration Database
QPS	Queensland Police Service
QRC	Queensland Resources Council
QWQ	Queensland Water Quality
QWQG	Queensland Water Quality Guidelines
RBL	Rating Background Levels
RCS	Relative Composite Sensitivity
RCU	Rocky Creek Upstream
RE	Regional Ecosystem
RAPAD	Remote Area Planning and Development Board
REDD	Regional Ecosystem Description Database
REMP	Receiving Environmental Monitoring Programme
RFDS	Royal Flying Doctor Service
RFS	Rural Fire Service
ROKAMBA	Republic of Korea - Australia Migratory Bird Agreement
ROL	Reconfiguration of lots
ROM	Run of Mine
ROM	Run of Mill
ROP	Resource Operation Plans
ROW	Right of Way
RMSE	Root-mean-square-error
RP	Release Point



Abbreviation	Definition
RRM	Rainfall Residue Mass
RSL	Returned Service League
RSO	Radiation Safety Officer
RTN	Right to Negotiate
RTO	Registered training organisations
RUMP	Road-Use Management Plan
RUSLE	Revised Universal Soil Loss Equation
RWD	Raw Water Dam
Sc	Storage coefficient
SCR	State Controlled Road
SCT	SCT Operations Pty Ltd
SCT	Strata Control Technology
SD	Statistical Division
SDPWO Act	State Development and Public Works Organisation Act 1971
SEIFA	Scio-Economic Index for Areas
SEIS	Supplementary Environmental Impact Assessment
SEWPaC	Department of Sustainability, Environment, Water, population and Communities, Australian Government
SGCP	South Galilee Coal Project
SIA	Social Impact Assessment
SIA CAR	Social Impact Assessment Cross Agency Reference (Group)
SIAU	Social Impact Assessment Unit
SIDRA	Signalised and Unsignalised Intersection Design and Research Aid
SIGNAL	Stream Invertebrate Grade Number – Average Level
SIMP	Social Impact Management Plan
SLA	Statistical Local Area
SMD	Slightly to Moderately Disturbed
SMP	Subsidence Management Plan
SMU	Soil Management Unit
SNL	Specific Noise Levels
SO2	Sulphur Dioxide
SO4	Sulphate
SOPs	Standard Operating Procedures
SP Act	Sustainable Planning Act 2009
SP Regulation	Sustainable Planning Regulation 2009
SPP	State Planning Policies
SPRP	State Planning Regulatory Provision
SPU	Spring Creek Upstream
SRE	Short Range Endemic



Abbreviation	Definition
SRD	Spoil Runoff Dam
SSE	Senior Site Executive
SST	Sandstone
STEL	Short Term Exposure Standard
STP	Sewage Treatment Plant
SWL	Static Water level
Sy	Specific Yield
T	Transmissivity in square metres per day (m <sup>2</sup> /day)
TAFE	Technical and Further Education
TAPM	The Air Pollution Model
TARP	Trigger Action Response Plan
TDS	Total Dissolved Solids
TEC	Threatened Ecological Community
TEOM	Tapered Element Oscillating Balance
TI Act	Transport Infrastructure Act 1994
TIA	Traffic Impact Assessment
TLO	Train Load Out
TMP	Topsoil Management Plan
TN	Total Nitrogen
TOR	Terms of Reference as Defined by Part 4 of the State Development and Public Works Organisation Act 1971
TOS	Total Oxidisable Sulphur Content
TP	Total Phosphorous
TP Act	Trade Practices Act 1974
TPH	Total Petroleum Hydrocarbons
TR	Tourism Region
TRAMP	Testing, Reporting and Maintenance Program
TSF	Tailings Storage Facility
TSP	Total Suspended Particulates
TSPP	Temporary State Planning Policy
TSS	Total Suspended Solids
ULP	Unleaded Petrol
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UQSCTL	University of Queensland's Spontaneous Combustion Testing Laboratory
URS	URS Australia Pty Ltd
US EPA	United States Environmental Protection Agency
V:H	Vertical to Horizontal ratio

Abbreviation	Definition
VAC	Visual Absorption Capability
VEA	Voluntary Environmental Assessment
VIA	Visual Impact Assessment
Vis-NIR-SWIR	Visible, Near Infrared, Short Wavelength Infrared
VKT	Vehicle Kilometres Travelled
VM Act	Vegetation Management Act 1999
VOC	Volatile Organic Compound
VWP	Vibrating wire piezometer
W & J	Wangan & Jagalingou
WA	Water Act 2000
WA	Western Australia
WA EPA	Western Australia Environmental Protection Authority
WC	Wall Creek
WEEE	Waste Electrical and Electronic Equipment
WERD	Water Entitlements Registration Database
WHA	World Heritage Area
WHAM	Whitsunday Hinterland and Mackay
WHO	World Health Organisation
WMC	Western Mining Corporation Ltd
WMP	Weed Management Plan
WMS	Water Management System
WONS	Weeds of National Significance
WPMP	Weed and Pest Management Plan
WQO	Water Quality Objectives
WRP	Water Resource Plan
WWTP	Wastewater Treatment Plant
Zn	Zinc
4T	4T Consultants Pty Ltd.

### A.3. Units

**Table A-3 SEIS Units**

Term	Definition
%	Percent
+ -	Plus or Minus
<	Less than
>	Greater than
µg/L	Micrograms per litre
µg/m <sup>3</sup>	Micrograms (one-millionth of a gram) per cubic meter air
µS/cm	Microsiemens per centimetre
0C	Degrees Celsius
0E	Degrees East
0S	Degrees South
Bt	Billion tonnes
CH <sub>4</sub>	Methane
dB	Decibels
dB(A)	Unit used to measure 'A-weighted' sound pressure levels
dB(L)	Linear sound pressure levels
dB(Z)	Zero-weighted sound pressure levels
lb/hp-hr	Pounds per horse power hour
G	Giga
GL	Giga litre
g/KW-hr	Grams per Kilowatt hour
GL/year	Giga litre per year
g/L	Grams per litre
g/m <sup>2</sup> /month	Grams per square metre per month
g/ml	Grams per millilitre
ha	Hectare(s)
K	Hydraulic Conductivity
kg	Kilogram
Kg/h	Kilograms per hour
kg/ha	Kilogram per hectare
Kg/l	Kilograms per litre
Kg/KW-hr	Kilograms per Kilowatt hour
Kg/yr	Kilograms per year
kL	Kilolitres
kL/day	Kilolitres per day
km	Kilometre(s)

Term	Definition
km/h	Kilometres per hour
km <sup>2</sup>	Square kilometre
Kph	Kilometres per hour
kt	Kilotonne
kV	Kilovolt
kVA	Kilovolt-ampere
KWh	Kilowatt hour
KW-hr/l	Kilowatt hour per litre
L	Litres
L/s	Litres per second
L/yr	Litres per year
LA10 (1 hour)	The LA10 level measured over a 1-hour period.
LA10 (18 hour)	The arithmetic average of the LA10 levels for the 18-hour period between 0600 and 2400 hours on a normal working day. It is a common traffic noise descriptor.
LA10 (Time)	The sound pressure level that is exceeded for 10% of the time for which the given sound is measured.
LA90 (Time)	The A-weighted sound pressure level that is exceeded for 90 per cent of the time over which a given sound is measured. This is considered to represent the background noise e.g. LA90 (15 min)
LAeq (1 hr)	The LAeq noise level for a one-hour period. It represents the highest tenth percentile hourly A-weighted Leq during the period 7 am to 10 pm, or 10 pm to 7 am, (whichever is relevant).
LAeq (15 hr)	The LAeq noise level for the period 7 am to 10 pm. (Day and Evening)
LAeq (9 hr)	The LAeq noise level for the period 10 pm to 7 am. (Night)
LAeq (Time)	Equivalent sound pressure level: the steady sound level that, over a specified period of time, would produce the same energy equivalence as the fluctuating sound level actually occurring. This is considered to represent ambient noise.
LAMax (Time)	The maximum sound level recorded during a specified time interval.
LAMin (Time)	The minimum sound level recorded during a specified time interval.
LAN	Statistical sound measurement recorded on the "A" weighted scale.
LLF	Low frequency noise level in the frequency range 20 Hz to 200 Hz.
LN	Statistical sound measurement recorded on the linear scale.
l/s	Litres per second
M	Million or mega
m	Metre
m AHD	Meters Australian Height Datum
m bgl	Metres below ground level
mbtoc	Metres below top of casing
m/d	Metres per day

Term	Definition
ME	Mean Error
m/s	Metres per second
m <sup>2</sup>	Square metres
m <sup>3</sup>	Cubic metres
m <sup>3</sup> /h	Cubic metres per hour
m <sup>3</sup> /s	Cubic metres per second
m <sup>3</sup> /y	Cubic metres per year
Mbcm	Million bank cubic metres
mg	Milligram (10 <sup>-3</sup> grams)
mg/kg	Milligrams per kilogram
mg/L	Milligrams per litre
MJ/kg	Mega joules per Kilogram
MJ/L	Mega joules per litre
µg/m <sup>3</sup>	Micrograms per cubic metre
ML	Million litres or megalitre
ML/a	Mega-litres per annum
ML/yr	Megalitres per year
µm	Micrometres
mm	Millimetre
mm/day	Millimetres per day
mm/s	Millimetres per second
Mt	Million tonnes
Mtpa	Million tonnes per annum
Mtyr	Million tonnes per year
MW	Megawatt
MWh	Megawatt hours
N/m <sup>2</sup>	Newtons/m <sup>2</sup>
P	Pressure (overpressure)
PJ	Petajoule
ppm	Parts per million
t	Tonnes
t/h	Tonnes per hour
t/m <sup>3</sup>	Tonnes per cubic metre
tpa	Tonnes per annum
tph	Tonnes per hour
uS/cm	Micro siemens per centimetre (used in electrical conductivity measurements)
W/W	Percentage solution" is an ambiguous term which is used to describe a solution with the unit "%"

Term	Definition
yr	Year
µg/L	Micrograms per litre
µg/m <sup>3</sup>	Micrograms per cubic metre
µm	Micrometres
µS/cm	Microsiemens per centimetre
VKT	Vehicle Kilometres Travelled