

Central Queensland Coal Project Chapter iii - Glossary

Central Queensland Coal

CQC SEIS, Version 3

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Table 1: Glossary of abbreviations

Abbreviation	Definition
\$m	Million dollar(s)
%	Percentage
%MMR	Percentage of Mean Maximum Reflectance
%Sat	Percentage of Saturation
/t	Per tonne
°C	Degrees Celsius
μg/L	Microgram(s) per litre
μg/m³	Microgram(s) per cubic metre
μm	Micrometre(s)
μS/cm	Micro siemens per centimetre
1V:XH	Side Slope Ratio
2D	Two dimensional
3D	Three dimensional
AADT	Annual average daily traffic
AASS	Actual Acid Sulphate Soil
ABA	Acid Base Accounting
ABS	Australian Bureau of Statistics
ACARP	Australian Coal Industry Research Program
ACDC Act	Queensland Agricultural Chemicals Distribution Control Act 1966
ACH Act	Queensland Aboriginal Cultural Heritage Act 2003
Adb	Air dried basis
ADWG	Australian Drinking Water Guidelines 2011
AEP	Annual Exceedance Probability
AGE	Australasian Groundwater and Environmental Consultants Pty Ltd
AgTEM	Agricultural Transient Electromagnetic System
AHD	Australian Heritage Database
AHD	Australian Height Datum
Air NEPM	National Environment Protection (Ambient Air Quality) Measure
Al	Aluminium



Abbreviation	Definition
ALC	Agricultural Land Classes
ALCAM	Australian Level Crossing Assessment Model
ALS	ALS Water Sciences Group
ALS	ALS Environmental Laboratory
AMD	Acid and Metalliferous Drainage
ANC	Acid Neutralisation Capacity
ANCOLD Inc.	Australian National Committee on Large Dams Incorporated
ANFO	Ammonium nitrate / fuel oil
ANZECC	Australian and New Zealand Environment and Conservation Council
ANZG	Australian and New Zealand Guidelines for Fresh and Marine Water Quality
ANZMEC	Australian and New Zealand Minerals and Energy Council
AQMP	Air Quality Management Plan
AR & R	Australian Rainfall and Runoff
ARD	Acid Rock Drainage
ARI	Average Recurrence Interval
ARMCANZ	Agriculture and Resources Management Council of Australia and New Zealand
As	Arsenic
AS	Australian Standard
AS/NZS	Australian Standard/ New Zealand Standard
ASRIS	Australian Soil Resource Information System
ASS	Acid Sulphate Soils
ASSMP	Acid Sulphate Soil Management Plan
ATSIHP Act	Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984
AUD	Australian dollar
AUD/t	Australian Dollar per tonne
AUL (S)	Auxiliary left-turn treatment
AWBM	Australian Water Balance Model
AWQG	Australian Water Quality Guidelines
AWS	Automatic weather station
BAT	Best available technology



Abbreviation	Definition
Bcm	Billion cubic metres
BfMP	Bushfire Management Plan
bgl	Below ground level
BIAs	Biologically Important Areas
BIMP	Biting Insect Management Plans
Biosecurity Act	Queensland Biosecurity Act 2014
Biosecurity Act (Cth)	Commonwealth Biosecurity Act 2015
ВКҮ	Barada Kabalbara Yetimarala
ВМР	Blast Management and Monitoring Plan
ВоМ	Bureau of Meteorology (Queensland)
BOS	Biodiversity Offset Strategy
ВРА	Biodiversity Planning Assessment
BTEXN	Benzene, toluene, ethylbenzene, xylene, naphthalene
Ca	Calcium
CaCO ₃	Calcium Carbonate
CaCO ³ /L	Calcium Carbonate per Litre
CAMBA	China-Australia Migratory Birds Agreement
CAPEX	Capital Expenditure
CaSO ₄	Calcium Sulfate
CAT	Caterpillar Brand Equipment
CCL	Capricornia Coastal Lands
CCL	Cumulative Contaminant Loading
CDMP	Coal Dust Management Plan
CE	Critically Endangered
CEC	Cation Exchange Capacity
CEMP	Construction Environmental Management Plan
CFC	Chlorofluorocarbon
CHL	Commonwealth Heritage List
СНМА	Cultural Heritage Management Agreement
СНМР	Cultural Heritage Management Plan
СНМР	Cultural Heritage Management Plan



Abbreviation	Definition
СНРР	Coal Handling and Preparation Plant
CHR	Channelised right turn
CIA	Cumulative Impact Assessment
Cl	Chloride
CLR	Contaminated Land Register
cm	Centimetre(s)
CMSH Act	Coal Mining Safety and Health Act 1999
CMSH Regulation	Coal Mining Safety and Health Regulation 2017
СО	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ -e	Equivalent carbon dioxide emissions
CO ₂ -e /kg	Carbon dioxide equivalent per kilogram
CO ₂ -e /kl	Carbon dioxide equivalent per kilolitre
CO ₂ -e/kWh	Carbon dioxide equivalent per kilowatt hour
CO ₂ -e/t	Carbon dioxide equivalent per tonne
СР	Core Permeability test
CPESC	Certified Professional in Erosion and Sediment Control
CQC	Central Queensland Coal Proprietary Limited
CRG	Community Reference Group
CSG	Coal Seam Gas
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSN	Crucible Swelling Number
Cth	Commonwealth
DAF	Queensland Department of Agriculture and Fisheries
DAFF	(former) Queensland Department of Agriculture, Fisheries and Forestry
DAWE	Commonwealth Department of Agriculture, Water and the Environment
dB	Decibel - the logarithmic-scaled unit used to report the level or magnitude of sound
dB (Linear)	The Z-weighted (linear) sound pressure level
dB(A)	The A-weighted sound pressure level
DBCT	Dalrymple Bay Coal Terminal



Abbreviation	Definition
deet	N,N-Diethyl- 3-methylbenzamide
DEM	Digital Elevation Model
DEOs	Desired Environmental Outcomes
DES	Queensland Department of Environment and Science
DEWS	(former) Queensland Department of Energy and Water Supply
DGV	Default Guideline Value(s)
DHLGP	Queensland Department of Housing and Local Government Planning
DIDO	Drive-in / Drive-out
DILGP	(former) Queensland Department of Infrastructure, Local Government and Planning
DISER	Commonwealth Department of Industry, Science, Energy and Resources
DIWA	Directory of Important Wetlands of Australia
DME	(former) Queensland Department of Minerals and Energy
DMP	Western Australia Department of Mines and Petroleum
DNRM	(former) Queensland Department of Natural Resources and Mines
DNRME	Queensland Department of Natural Resources, Mines and Energy
DO	Dissolved oxygen
DotEE	(former) Commonwealth Department of the Environment and Energy
DPA	Dugong Protection Area
DPI	New South Wales Department of Primary Industries
DROs	Desired Regional Outcomes
dS/cm	Deci Siemens per centimetre
dS/m	Deci Siemens per metre
DSA	Design Storage Allowance
DSD	(former) Queensland Department of State Development
DSDMIP	Queensland Department of State Development, Manufacturing, Infrastructure and Planning
DSITIA	(former) Department of Science, Information Technology, Innovation and the Arts
DTMR	Queensland Department of Transport and Main Roads
DWSP	Drinking Water Service Provider
Е	Endangered



Abbreviation	Definition
EA	Environmental Authority
EAT	Emerson Aggregate Test
EC	Electrical Conductivity
ED	Environmental Dam
EHP	(former) Queensland Department of Environment and Heritage Protection
EIS	Environmental Impact Statement
ELA	Eco Logical Australia
ELVIS	Elevation Information System
EM	Environmental Management
EMP	Environmental Management Plan
EMR	Environmental Management Register
EMS	Environmental Management System
ENSO	El Niño–Southern Oscillation
EO Act	Queensland Environmental Offsets Act 2014
EO Regulation	Environmental Offsets Regulation 2014
EP	Equivalent person(s)
EP Act	Queensland Environmental Protection Act 1994
EP Regulation	Queensland Environmental Protection Regulation 2019
EPBC	Environment Protection and Biodiversity Conservation
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999
EPBC Regulation	Environment Protection and Biodiversity Conservation Regulation 2000
EPC	Exploration Permit for Coal
EPM	Exploration Permits for Minerals
EPP	Environmental Protection Policy
EPP Air	Environmental Protection (Air) Policy 2019
EPP Noise	Environmental Protection (Noise) Policy 2019
EPP Water and Wetland Biodiversity	Environmental Protection (Water and Wetland Biodiversity) Policy 2019
ERA	Environmentally Relevant Activity(s)
ERP	Emergency Response Plan



Abbreviation	Definition
ESA	Equivalent standard axle
ESA	Environmentally Sensitive Area(s)
ESC	Erosion and sediment control
ESCP	Erosion and Sediment Control Plan
ESD	Ecologically Sustainable Development
ESP	Exchangeable Sodium Percentage
ESSCC	Earth System Science Computational Centre
ET	Evapotranspiration
EV	Environmental Value(s)
Fairway Coal	Fairway Coal Proprietary Limited
FBA	Fitzroy Basin Authority
Fe	Iron
FEL	Front-end Loaders
FeS ₂	Iron Disulphide / Iron Pyrite
FHA	Fish Habitat Area(s)
FHT	Falling Head Slug test
FIA	Failure Impact Assessment
FIFO	Fly-in / Fly-out
Financial Assurance Guideline	Guideline Financial assurance under the Environmental Protection Act 1994
Fisheries Act	Queensland Fisheries Act 1994
FMZ	Fume Management Zone
FOB	Free on Board
Forestry Act	Queensland Forestry Act 1959
FOS	Factor of Safety
FTE	Full-time equivalent
FWQIP	Fitzroy Water Quality Improvement Plan
g	Gram(s)
g/cm ³	Grams per cubic centimetre
g/L	Grams per Litre
g/s	Grams per second



Abbreviation	Definition
GA	Geoscience Australia
GAI	Global Abundance Index
GARD	Global Acid Rock Drainage Guide
GARID	Guidelines for Assessment of Road Impacts of Development
GBA	Great Artesian Basin
GBR	Great Barrier Reef
GBRCMP	Great Barrier Reef Coastal Marine Park
GBRMP	Great Barrier Reef Marine Park
GBRWHA	Great Barrier Reef World Heritage Area
GDA94	Global Datum Australia 1994
GDE	Groundwater Dependent Ecosystem(s)
GDEMMP	Groundwater Dependent Ecosystem Monitoring and Management Plan
GDP	Gross Domestic Product
GEH	General Environmental Harm
GHG	Greenhouse gas
GHGMP	Greenhouse Gas Management Plan
GIS	Geographic Information System
gm/cc	Grams per cubic centimetre
GPG	Giant Parramatta Grass
GPS	Global Positioning System
GQAL	Good Quality Agricultural Land
GRP	Gross regional product
GSP	Gross State Product
GST	Goods and services tax
GTIA	Guide to Transport Impact Assessment
GW	Groundwater
GWDBQ	Groundwater Database Queensland
GWh	Gigawatt hour
GWMMP	Groundwater Management and Monitoring Plan
H ₂ SO ₄	Sulphuric Acid
H ₂ SO ₄ /t	Sulphuric acid per tonne



Abbreviation	Definition
ha	Hectare(s)
НАТ	Highest Astronomical Tide
НСС	Hard coking coal
HES	High Ecological Significance
HEV	High Ecological Value
HGTC	High Grade Thermal Coal
НН	Harm to Humans
HIPAP	NSW Hazardous Industry Planning Advisory Paper
НММР	Hazardous Materials Management Plan (including spill management)
НРІ	High Potential Incident
HQ	63.5mm inside diameter core hole
hr	Hour(s)
HSU	Hydrostratigraphic unit(s)
HV	Heavy vehicle
HVR	High-Value Regrowth
Hz	Hertz – unit of frequency
IAP2	International Association for Public Participation
IAS	Initial Advice Statement
IBA	Important Bird Area
ICOMOS	Australian International Council on Monuments and Sites
IECA	International Erosion and Control Association
IESC	Independent Expert Scientific Committee
INAP	International Network on Acid Prevention
IP	Internet Protocol
IPCC	Intergovernmental Panel on Climate Change
IRC	Isaac Regional Council
ITP	Inspection and Test Plan
JAMBA	Japan-Australia Migratory Birds Agreement
JORC	Joint Ore Reserves Committee
k	Potassium
k	Hydraulic Conductivity



Abbreviation	Definition
kcal/kg	Kilocalorie(s) per kilogram
kg	Kilogram(s)
kg H ₂ SO ₄ /t	Kilograms of Sulphuric Acid per tonne
kg O ₂ /m ³ /s	Kilograms of oxygen per cubed metre per second
Kg/ha	Kilogram(s) per hectare
Kg/m ³	Kilograms per cubic metre
kHz	Kilohertz (1000 hertz per second)
kl	Kilolitre(s)
kl/day	Kilolitre(s) per day
KLC	Kinetic Leach Column
km	Kilometre(s)
km/h	Kilometre(s) per hour
km²	Square kilometre(s)
km²/yr	Square kilometre(s) per year
kN/m³	Kilo Newton per cubic metre
kPa	Kilopascal
Kph	Kilometre(s) per hour
kt	Kilotonnes
Kt/year	Kilotonnes per year
kV	Kilovolt
kVA	Kilovolt Amperes
kWh	Kilowatt per hour
Kx	Styx Coal Measures Geological Unit
L	Litre(s)
L	Level – Sound pressure level
L/day	Litre(s) per day
L/month	Litre(s) per month
L/ROM tonne	Litre(s) per run of mine tonne(s)
L/s	Litres per second
L/s/km	Litres per second per kilometre
L/y	Litre(s) per year



Abbreviation	Definition
LAN	Local area network
Land Act	Queensland Land Act 1994
LC	Least Concern
Icm	Loose cubic metre
LCR	Lakes Creek Road
LGA	Local government area
LHS	Latin Hypercube Sampling
Lidar	Light Detection and Ranging
Litres/m²/h	Litres per square metre, per hour
LoR	Limits of Reporting
LOS	Level of Service
LPSDP	Leading Practice Sustainable Development Program
LSC	Livingstone Shire Council
LTV	Long-term trigger value
LUMP	Land Use Management Plan
Lux	Unit of Illuminance
LWP	Leaf Water Potential
М	Migratory
m	Metre(s)
m AHD	Metre Australian Height Datum
m/s	Metre(s) per second
m ²	Square metre(s)
m ³	Cubic metre(s)
m³/ha/yr	Cubic metre per hectare per year
m³/s	Cubic metre(s) per second
m³/t	Cubic metre(s) per tonne
Ма	Magnesium
MAE	Major accident event
mAHD	Metres Australian Height Datum
MAW	Mine Affected Water
Mbcm	Million bank cubic metres



Abbreviation	Definition
Mbgl	Metres below ground level
MCA	Minerals Council of Australia
MCU	Material Change of Use
MDL	Mineral Development Licence
meq/100g	Milliequivalents per 100 grams
meq/g	Milliequivalents per gram
meq/L	Milliequivalents per litre
MERCP Act	Queensland Mineral and Energy Resources (Common Provisions) Act 2014
MERCP Regulation	Mineral and Energy Resources (Common Provisions) Regulation 2016
Mg	Magnesium
mg/kg	Milligram(s) per kilogram
mg/l	Milligram(s) per litre
mg/m²/day	Milligram(s) per square metre per day
MGA55	Map Grid Australia Zone 55
MHWS	Mean High Water Spring
MIA	Mine Infrastructure Area
MIC	Maximum Instantaneous Charge
MJ/kg	Megajoule(s) per kilogram
MJ/m²	Megajoule(s) per square metre
ML	Mining Lease Application
ML	Megalitre(s)
ml	Millilitre(s)
ML/a	Megalitres per annum
ML/d	Megalitre(s) per day
ML/y	Megalitre(s) per year
MLA	Mining Lease Area
MLCM	Million loose cubic metre
MLES	Matters of Local Environmental Significance
mm	Millimetre(s)
mm/hr	Millimetres per hour
mm/month	Millimetres per month



Abbreviation	Definition
mm/sec	Millimetres per second
mm/yr	Millimitre(s) per year
mm³	Cubic millimetre(s)
MMC	Model Mining Conditions
MMC Guideline	Guideline Mining – Model Mining Conditions
MNES	Matters of National Environmental Significance
Мо	Molybdenum
MOLR	Method of Last Resort
MOV	Maximum Operating Volume
MPA	Maximum Potential Acidity
MR Act	Queensland Mineral Resources Act 1989
MRC	Mackay Regional Council
mS / cm	Millisiemens per centimetre
MSES	Matters of State Environmental Significance
Mt	Million tonne(s)
Mt CO ₂ -e	Million tonnes of equivalent carbon dioxide emissions
Mtpa	Million tonne(s) per annum
MW	Megawatt(s)
MWMP	Mineral Waste Management Plan
N	Nitrogen
Na	Sodium
Na-Cl	Sodium-chloride
NAF	Non-acid forming
NAPP	Net Acid Production Potential
NAR	Net as Received
NATA	National Association of Testing Authorities
NBD	North bound direction
NC Act	Queensland Nature Conservation Act 1992
NCCAF	National Climate Change Adaptation Framework
NCL	North Coast Line
NDVI	Normalised differential vegetation index



Abbreviation	Definition
NEPM	National Environment Protection Measures
NGA	National Greenhouse Accounts
NGER Act	Commonwealth National Greenhouse Energy Reporting Act 2007
NGER Determination	National Greenhouse Energy Reporting Determination 2008
NGER Regulation	National Greenhouse Energy Reporting Regulations 2008
NH ₃	Ammonia
NHL	National Heritage List
NHMRC	National Health and Medical Council
NMD	Neutral Mine Drainage
NO ₂	Nitrogen dioxide
NOx	Nitrogen oxides
NPI	National Pollutant Inventory
NRM	Natural Resource Management
NRMMC	Natural Resource Management Ministerial Council
NSESD	National Strategy for Ecologically Sustainable Development
NSW	New South Wales
NT Act	Commonwealth Native Title Act 1993
NTU	Nephelometric Turbidity Units
NVHR	National Heavy Vehicle Regulator
NVMP	Noise and Vibration Management Plan
NWC	National Water Commission
NWQMS	National Water Quality Management Strategy
NZS	New Zealand Standards
O ₂	Oxygen
O ₃	Ozone
OAMP	Offset Area Management Plan
OCG	Office of Co-ordinator General
ODP	Offset Delivery Plan
OEMP	Operations Environmental Management Plan
OEPT	Open End Permeability Test
OF	Optical fibre



Abbreviation	Definition
OGIA	Office of Groundwater Impact Assessment
OMA	Offset Management Area
OPEX	Operating Expenses
ORP	Oxidation / Reduction Potential
OUV	Outstanding Universal Values
OWS	Office of Water Science
Р	Phosphorus
PAA	Priority Agricultural Area(s)
PAF	Potential Acid-Forming
PAF-LC	Potential Acid Forming-low capacity
РАН	Polynuclear Aromatic Hydrocarbons
PAR	Population at Risk
PASS	Potential Acid Sulphate Soils
PCI	Pulverised Coal Injection
PDCA	Plan-Do-Check-Act
PDWD	Pit dewater dam
рН	Potential of Hydrogen
PIA	Pavement Impact Assessment
PLA	Priority Living Area(s)
Planning Act	Queensland <i>Planning Act 2016</i>
Planning Regulation	Queensland Planning Regulation 2017
PM	Particulate Matter
PM ₁₀	Particulate Matter measuring less than 10 micrometres (μm)
PM _{2.5}	Particulate Matter measuring less than 2.5 micrometres (µm)
PMF	Probable maximum flood
PMST	Protected Matters Search Tool
PN	Pacific National
PPE	Personal protective equipment
ppm	Parts per million
рру	Peak particle velocity
PRCP	Progressive Rehabilitation and Closure Plan



Abbreviation	Definition
PRCP Guidelines	Guideline for Progressive Rehabilitation and Closure Plans 2019
PT	Packer Testing
Pty Ltd	Proprietary Limited
PWD	Process water dam
Qa	Quaternary Alluvium
QA/QC	Quality Assurance / Quality Control
QAS	Queensland Ambulance Service
QEOP	Queensland Environmental Offsets Policy
QFES	Queensland Fire and Emergency Services
QGC	Queensland Gas Company Ltd
QGSO	Queensland Government Statistician's Office
Qh	Quaternary Holocene geological unit
QH Act	Queensland Heritage Act 1992
QLD	Queensland
Qpa	Quaternary Pleistocene Alluvium
QPS	Queensland Police Service
QR	Queensland Rail
QSpatial	Queensland Spatial Catalogue
QTRIP	Queensland Transport and Roads Investment Program
QUA	Quantitative Uncertainty Analysis
QWQG	Queensland Water Quality Guidelines
R.P.E.Q.	Registered Professional Engineer Queensland
RACQ CQ Rescue	Royal Automobile Club Queensland Central Queensland Rescue
Radiation Safety Act	Queensland Radiation Safety Act 1999
Ramsar	Convention on Wetlands of International Importance
RCP	Representative Concentration Pathway
RDA	Regional Development Australia
RDAFCW	RDA Fitzroy and Central West Region
RDAMIW	RDA Mackay-Isaac-Whitsunday
RE	Regional Ecosystem
REMP	Receiving Environment Monitoring Program



Abbreviation	Definition
RFFE	Regional Flood Frequency Estimation
RHART	Rising Head Airlift Recovery Test
RHCRRT	Rising Head Constant Rate Recovery Test
RHT	Rising Head Slug Test
RIA	Road Impact Assessment
RIM	Rail Infrastructure Manager
RL	Reduced Level
RMP	Road-use Management Plan
RNE	Register of National Estate
ROM	Run-of-mine
ROP	Resource Operations Plan
RORO	Roll on roll off
RP	Release point
RPDM	Road Planning and Design Manual
RPI Act	Queensland Regional Planning Interests Act 2014
RPP	Riverine Protection Permit
RRC	Rockhampton Regional Council
RS	Recognised Standard
RSNL	Rail Safety National Law (Queensland) Act 2017
RUSLE	Revised Universal Soil Loss Equation
RWD	Raw water dam(s)
RWQPP	Reef Water Quality Protection Plan 2013
S	Sulphur
S2-	Sulphides
S7 poisons	Schedule 7 poisons
SA	Statistical Area
SAR	Sodium adsorption ratio
SBD	South bound direction
SCA	Strategic cropping area(s)
SCADA	Supervisory Control and Data Acquisition
SCL	Strategic Cropping Land



Abbreviation	Definition
SCR	State Controlled Road(s)
Scr	Chromium Reducible Sulfur
SD	Slightly Disturbed
SDS	Safety Data Sheet
Se	Selenium
SEA	Strategic Environmental Area(s)
SEIS	Supplementary Environmental Impact Statement
SEPP	State Environmental Planning Policies
SEVT	Semi-evergreen vine thickets
SHMS	Safety and Health Management System
SIA	Social Impact Assessment
SILO	Scientific Information for Land Owners
SIMP	Social Impact Management Plan
SLC	Special Least Concern
SMD	Saline Mine Drainage
SMP	Soil Moisture Potential
SO ₂	Sulphur dioxide
SO ₄ ² -	Sulphate
SP Act	Queensland Sustainable Planning Act 2009
SP Regulation	Sustainable Planning Regulation 2009
SPOCAS	Suspended Peroxide Oxidation-Combined Acidity and Sulphate
SPP	State Planning Policy
SRMS	Scaled Root Mean Square
SSCC	Semi-soft coking coal
SSE	Site Senior Executive
SSMP	Significant Species Management Plan
SSRC Act	Queensland Strong and Sustainable Resource Communities Act 2017
SSRC Bill	Queensland Strong and Sustainable Resource Communities Bill 2016
SSTV	Site Specific Trigger Value(s)
STP	Sewage Treatment Plant
STV	Short-term Trigger Value



Abbreviation	Definition
SWBTA	Shoalwater Bay Military Training Area
SWL	Standing Water Level
SWMP	Surface Water Management Plan
SWP	Soil water potential
t	Tonne(s)
t CO²-e	Tonne(s) of equivalent carbon dioxide emissions
t CO ² -e / kL	Tonne(s) of carbon dioxide equivalent per kilolitre
t/ha	Tonnes per hectare
t/ha/year	Tonnes per hectare per year
t/m³	Tonnes per cubic metre
t/year	Tonne(s) per year
TAPM	The Air Pollution Model
TARP	Trigger Action Response Plan
TBC	To be confirmed
TDS	Total Dissolved Solids
TEC	Threatened Ecological Community
TEM	Transient Electromagnetic
The Project	The Central Queensland Coal Project
TI Act	Queensland Transport Infrastructure Act 1994
TIA	Traffic impact assessment
TKN	Total Keildahl nitrogen
TLF	Train Loadout Facility
TMP	Traffic Management Plan
TMR	Transport and Main Roads
TN	Total nitrogen
тос	Total organic carbon
ToR	Terms of Reference
ТР	Total phosphorus
tph	Tonne(s) per hour
ТРН	Total Petroleum Hydrocarbons
TRH	Total Recoverable Hydrocarbons



Abbreviation	Definition
TSP	Total suspended particulate
TSS	Total suspended solids
TVM	Temporal Parameter Variability
UCL	Urban centre locality
ULP	Unleaded Petrol
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFCCC	United Nation Framework Convention on Climate Change
US	United States
US EPA	United State Environmental Protection Agency
US\$/t	American Dollar per tonne
UWIR	Underground Water Impact Report
V	Volt
V	Vulnerable
V	Vanadium
v2	Version 2
VIA	Visual Impact Assessment
Vipac	Vipac Engineers and Scientists Ltd
VM Act	Queensland Vegetation Management Act 1999
vpd	Vehicle(s) per day
vph	Vehicle(s) per hour
VWP	Vibrating Wire Piezometer
W	Watt
W/m²	Watt(s) per square metre
WA	Western Australia
Waratah Coal	Waratah Coal Pty Ltd
WASC	Woorabinda Aboriginal Shire Council
Water Act	Queensland Water Act 2000
WH&S Act	Queensland Work, Health and Safety Act 2011
WHSQ	Workplace Health and Safety Queensland
WMP	Mine Site Water Management Plan
WMP	Waste Management Plan



Abbreviation	Definition
WoNS	Weeds of National Significance
WPA	Wetland Protection Area
WPMP	Weed and Pest Management Plan
WQO	Water Quality Objectives(s)
WQT	Water Quality Targets
WRP	Water Resource Plan(s)
WRR Act	Queensland Waste Reduction and Recycling Act 2011
WT%	Percentage by weight
WTP	Water Treatment Plant
Yr	Year
ZTV	Zone of theoretical visibility

Table 2: Glossary of terms

Term	Definition
Abiotic	Physical rather than biological, not derived from living organisms
Ambient noise	The totally encompassing noise in a given situation at a given time; it is usually composed of noise from many sources, near and far
Anthropogenic	Originating from human activity
Attenuation	A general term used to indicate the reduction of noise or vibration, by whatever method or for whatever reason, and the amount in decibels, by which it is reduced
Attenuation	A general term used to indicate the reduction of light, by whatever method or for whatever reason
A-weighting	A frequency weighting devised to attempt to take into account the fact human response to sound not equally sensitive to all frequencies
Back-filling	Refers to filling employment positions that are vacated as a result of a draw of labour from one sector to another
Bank Storage	Temporary source of groundwater stored within the banks of creeks or rivers which is derived from infiltration associated with flooding or rainfall
Berms	A path, flat strip of land, raised bank, or terrace bordering a road
Biodiversity	Variety of all life forms on earth - the different plants, animals and micro- organisms and the ecosystems of which they are a part
Cadastral data	A public record, survey, or map of the value, extent, and ownership of land as a basis of taxation



Term	Definition
CALMET	A diagnostic meteorological model developed by EarthTec
Carbon footprint	Amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community
Clean water	Surface runoff from catchments undisturbed or relatively undisturbed by mining activities
Consequence	How much harm the impact could have, how many people in could affect and the duration of the harm
Consumer Price Index	The Consumer Price Index is an indicator constructed to measure changes over time in the general level of prices of consumer goods and services that households acquire, use or pay for consumption
Contaminated water	Surface runoff and underground mine water production which could potentially contain hydrocarbons, salts or other chemical contaminants
Critical incident	An incident that: Causes death or permanent injury to a person Incident requiring emergency medical response Causes significant property damage Is likely to give rise to public comment Is likely to result in legal proceedings against the Client and Is a near miss with the potential to cause any of the above.
Cumulative impacts	Within the context of SIA, cumulative impacts refer to the incremental or combined social impacts resulting from both the Project that is being assessed and other projects, either existing or planned, now and in the future. The inclusion of cumulative impact assessment aims to ensure that potential impacts of a project are not considered in isolation to other changes that are, or are expected, to occur
Decibel (dB)	The logarithmic-scaled unit used to report the level or magnitude of sound
DG Class	Dangerous Goods class means the hazard class of the dangerous goods as stated in the Australian Dangerous Goods Code ADG Code
Direct economic impacts	Refers to impacts associated directly with an increase in expenditure within an economy
Dirty water	Surface runoff from disturbed catchments such as the active mine area and run of mine (ROM) and product coal stockpiles, all of which could contain sediments
Disturbance Area or Disturbance Footprint	The area within, and roads adjacent to, the Mining Lease Applications that will be disturbed to enable construction and operation of the mine – covers an area of 1,372.5 ha (taken as the earthworks footprint plus a 10 m buffer to allow for vegetation clearing)
Downstream Environment	Refers to the Styx River and its estuaries and Broad Sound.
Ecosystem services	Ecosystem services are ecosystem functions or groups of functions with utility for human society



Term	Definition
Eight priority metals	Heavy metals including arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc
Emergency	An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which requires a significant and coordinated response
Emissions	The release of a substance (usually a gas) into the atmosphere
Emissions factor	A unique value for scaling emissions to activity data in terms of a standard rate of emissions per unit of activity (e.g., grams emitted per litre of fossil fuel consumed)
Enhanced Leakage	Refers to the potential for water stored within the unsaturated zone to be depleted, due to the drawdown of the underlying water table aquifer, which can increase the rate of water infiltration from the unsaturated zone into underlying sediments
Environmental dam	Contain water captured onsite from overland flow and run-off from the Project area
Ephemeral	Brief or short-lived. This term is generally used to describe watercourses that only flow intermittently throughout periods of heavy rainfall
Equivalent Standard Axles	The measurement used to assess traffic loading
Exchange rate	Rate at which one currency may be converted into another
Factors of production	Represent the factors used during production activities that are not consumed during the process. Includes land, labour, capital and entrepreneurship
Family	The ABS define a family as two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering and who are usually resident in the same household
Fitzroy NRM region	Fitzroy Natural Resource Management region
Flow-on / indirect economic impacts	Flow-on (or indirect) economic impacts refer to impacts throughout an economy induced by a direct increase in expenditure
Fugitive Dust	Dust derived from a mixture of not easily defined sources. Mine dust is commonly derived from such non-point sources such as vehicular traffic on unpaved roads, materials transport and handling.
Fugitive emissions	Emission releases which do not reasonably pass through a stack, chimney, vent or other functionally-equivalent opening
Full time equivalent employment position	Represents one employee working full time for a period of one year
Gigawatt hour	Measure of electrical energy equivalent to a power consumption of one billion watts for one hour
Greenhouse gas (GHG)	Gas that contributes to the greenhouse effect by absorbing infrared radiation (e.g. water vapour, carbon dioxide, methane, nitrous oxide, and ozone)



Term	Definition
Gross Domestic / State / Regional Product	Represents the market value of all final goods and services produced within the Australian / State / regional economy during a given period of time
Gross value added	Measurement of the contribution to the economy of each individual producer, industry or sector, based on the net activity at each stage of production. Gross value added only measures the additional value added at each stage of production, and as such is considered a true measure of economic activity
Hazard	Something with the potential to cause harm. This can include hazardous substances, plant and equipment, work processes or other aspects of the surrounding environment
Herpetofauna	Amphibians (including frogs, toads, salamanders and newts) and reptiles (including snakes, lizards, turtles, crocodilians)
Hertz	The unit of frequency
Homestead	A house, especially a farmhouse, and outbuildings
Household	The ABS defines a household as one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling
Hydrocarbons	Substances containing only hydrogen and carbon including fossil fuels
Incident	An unplanned event that causes or could have caused injury or damage to personnel or property and:
	Involves an employee of Company in the course of their employment;
	Involves an employee of a Consultant or Subcontractor working on behalf of company;
	Occurs at a place under the control of Company, or a Subcontractor while engaged in activities related to the works; and
	Involves operation of the Client's or Company property, plant, or equipment.
Industry output	Measurement of the contribution to the economy of each producer, industry or sector based on the gross sales throughout the whole economy. As a gross measurement, industry output includes the purchase of goods and services consumed in the production process, and as such "double counts" the contribution of these goods and services
Input-output modelling	An economic modelling technique that estimates the level of economic activity associated with an economic stimulus
Interburden	Material of any nature that lies between a bedded or zone and the target coal seam
JORC Code	Australian Code for Reporting of Mineral Resources and Ore Reserves
Kilowatt hour	Measure of electrical energy equivalent to a power consumption of one thousand watts for one hour
L ₀₁	Level that is equal to or exceeded for 1% of the time interval considered in the absence of the noise under investigation. The L_{01} is considered to be representative of road traffic noise. The A-weighted background level is denoted as LA_1



Term	Definition
L01, adj, 15 mins	The sound pressure level, adjusted for tonal character that is equal to or exceeded for 1% of any 15 minutes sample period
L ₁₀	Level that is equal to or exceeded for 10% of the time interval considered in the absence of the noise under investigation. The L_{10} is considered to be representative of road traffic noise. The A-weighted background level is denoted as LA_{10}
L ₁₀ , adj, 15 mins	The sound pressure level, adjusted for tonal character that is equal to or exceeded for 10% of any 15 minutes sample period
L90	The sound pressure level exceeded for 90% of the time under consideration
L90, adj, 15 mins	The sound pressure level, adjusted for tonal character that is equal to or exceeded for 90% of any 15 minutes sample period
L _{A01}	The A-weighted sound pressure level exceeded for 1% of the time under consideration
LA01, adj,15 min	The A-weighted, equivalent continuous sound pressure level that is equal to or exceeded for 1% of any 15 minutes sample period
L _{A10}	The A-weighted, sound pressure level exceeded for 10% of the time under consideration
L _{A90}	The A-weighted, sound pressure level for any 15 minutes sample period exceeded for 90% of the time under consideration
$L_{Abg,T}$	A-weighted sound pressure level, obtained using time weighting F and arithmetically averaging the lowest levels of the ambient sound pressure level, during time interval T
Labour force	The labour supply available for the production of economic goods and services in a given period. Labour force is the most widely used measure of the economically active population
Lacustrine	Relating to or associated with lakes
LAeq	the A-weighted, equivalent continuous sound pressure level
LAeq, adj,15 min	The A-weighted, equivalent continuous sound pressure level for any 15 minutes sample period
LAmax,adj,T	A-weighted sound pressure level, obtained using time-weighting F, and arithmetically averaging the maximum levels of the noise under investigation, during time interval 'T' and adding adjustments for tonality and impulsiveness
L _{Amax,T}	Maximum A-weighted sound pressure level, obtained by arithmetically averaging of the maximum levels of the noise under investigation
L _{Amin,T}	Minimum A-weighted sound pressure level, obtained by arithmetic averaging of the minimum levels of the noise under investigation
Leq	The equivalent continuous sound pressure level
Leq, adj, 15 mins	The equivalent continuous sound pressure level for any 15 minutes sample period



Term	Definition
Likelihood	The chance or probability of an event resulting in an impact occurring.
Local Government Area	A geographical area under the responsibility of an incorporated local government Council
Major Accident Event (MAE)	Sudden occurrence (including a major emission, loss of containment, fire, explosion or release of energy) leading to serious danger or harm to persons, property, both the built or natural environment, whether immediately or delayed
Matters of National Environmental Significance (MNES)	Under the EPBC Act, there are eight listed MNES; six of these apply to the Project: World Heritage properties (sections 12 and 15A) National Heritage places (sections 15B and 15C) Listed threatened species and communities (Sections 18 and 18A) Listed migratory species (Sections 20 and 20A) Commonwealth marine areas (sections 23 and 24A) and Great Barrier Reef Marine Park (sections 24B and 24C).
Metric tonne	Common international measurement for the quantity of greenhouse gas emissions
Mine water dam	Storage dam for groundwater that is removed as part of the preparation for longwall mining activities
Mitigate / Mitigation	The act of lessening in intensity, to prevent or make less severe
MLA area	The boundary of the proposed Mining Lease Application for the Project
Near Surrounds	Land (particularly relevant habitat) adjacent to, or within, approximately 3 km of the Project Site.
Nitrogen oxides (NOx)	Generic term for mono-nitrogen oxides nitric oxide (NO) and nitrogen dioxide (NO ₂). In air quality, the term means total concentration of NO and NO ₂
Noise limit	A maximum or minimum value imposed on a noise index e.g. a legal purpose
Offsetting	Anything that balances, counteracts, or compensates for something else; providing compensation. For example carbon offsetting is the process of reducing greenhouse gas emissions by purchasing credits from others through emissions reductions projects, or carbon trading schemes
Organic	Relating to or derived from living matter. Comprised by carbon
Ozone (O ₃)	A triatomic form of oxygen is a gaseous atmospheric constituent. In the troposphere, it is created both naturally and by photochemical reactions involving gases resulting from human activities (photochemical smog)
Percentage point	Percentage points are the unit for the arithmetic difference between two percentages (e.g., the difference between 3% and 4% is one percentage point)
Project area	Generally refers to Mining Lease Application 80187 and 700022 and the surrounding local areas
Project Boundary	Mining Lease Application 80187 and 700022 boundaries



Term	Definition
Project Site	Everything within the boundaries of Mining Lease Applications 80187 and 700022 – covers an area of 2,661 ha
Raw water	Water sent to the mine site from an external pipeline will be used for potable water supply, vehicle wash down and dust suppression
Raw water dam	Hold water sent to the mine site from an external pipeline, and this water will be used for a potable water supply, vehicle washdown and dust suppression
Reef 2050 Plan	Reef 2050 Long-Term Sustainability Plan
Residual Risk	The likelihood that a harmful consequence might result when exposed to the hazard with the effective implementation of the proposed mitigation measures
Skills shortage	An economic condition in which there are insufficient qualified candidates (employees) to fill available positions
Social Impact Assessment	The process of analysing and managing intended and unintended consequences of planned interventions (projects or policies) and any social change processes invoked by those interventions, to bring about a more sustainable and equitable biophysical and human environment
Sound power	The sound energy radiated per unit time by a sound source, measured in watts
Sound propagation	The transfer of sound from one point to another
Stakeholder	A person or organisation with an interest or stake in a project
Stygofauna	Refers to the fauna that live entirely in underground caves or fissure systems and are reliant on the presence of groundwater
Sustainability	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
Tonnes of carbon dioxide equivalent (t CO2-e)	Concentration of CO2 that would cause the same level of radiative forcing as a given type and concentration of GHG. This unit standardizes the GHG effect of the 6 GHGs considered of great anthropogenic contribution under the Kyoto Protocol
Topography	Arrangement of the natural and artificial physical features of an area
Unmitigated Risk	The likelihood that a harmful consequence might result when exposed to the hazard without implementation of the proposed mitigation measures
Value chain / supply chain	Refers to the chain of interlinked value-adding processes and activities that convert inputs into outputs
Velocity	A vector quantity that specifies the time derivative of displacement
Vibration	Oscillating motion of matter about a fixed equilibrium position
Vulnerability	Inability to withstand the effects of a hostile environment
Water Table Aquifer	Defined for the purposes of this Project as an aquifer associated with the water table.



Term	Definition
Workforce	The ABS defines anyone aged 15 years and over and either employed or unemployed (but looking for work) in the week prior to the Census Night as part of the workforce. Those people not in the workforce are aged 15 years and above and usually studying on a full-time basis, retired or are either physically or mentally incapacitated and therefore unable to undertake work