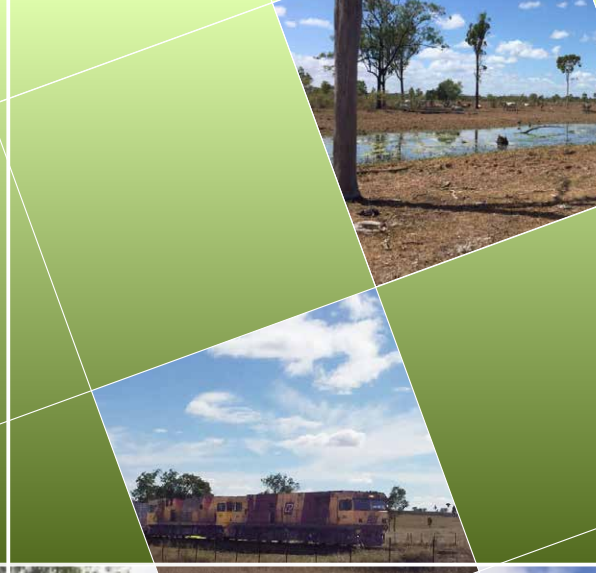


Central Queensland Coal Project

i – Glossary and Abbreviations

Supplementary Environmental Impact Statement



Central Queensland Coal Project i – Glossary and Abbreviations

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CDM Smith Australia Pty Ltd
ABN 88 152 082 936
Level 4, 51 Alfred Street
Fortitude Valley
QLD 4006
Tel: +61 7 3828 6900
Fax: +61 7 3828 6999



Glossary

Table 1 Glossary of abbreviations

| Abbreviation/Acronym | Definition |
|----------------------|---|
| /t | Per tonne |
| % | Percentage |
| %MMR | Percentage of Mean Maximum Reflectance |
| %Sat | Percentage of Saturation |
| °C | Degrees Celsius |
| \$m | Million dollar(s) |
| µg/L | Microgram(s) per litre |
| µg/m ³ | Microgram(s) per cubic metre |
| µm | Micrometre(s) |
| µS/cm | Microsiemens 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 |
| AC | Acid Consuming Capacity |
| ACARP | Australian Coal Industry Research Program |
| ACH Act | <i>Aboriginal Cultural Heritage Act 2003</i> |
| Adb | Air dried basis |
| ADG Code | Australian Code for the Transport of Dangerous Goods by Road and Rail |
| ADWG | Australian Drinking Water Guidelines 2011 |
| AEP | Annual Exceedance Probability |
| AHD | Australian Heritage Database |
| AHD | Australian Height Datum |
| Air NEPM | <i>National Environment Protection (Ambient Air Quality) Measure</i> |
| Al | Aluminium |
| ALA | Atlas of Living Australia |
| ALC | Agricultural Land Classes |
| ALCAM | Australian Level Crossing Assessment Model |
| AMD | Acid and / or Metalliferous Drainage |
| ANC | Acid Neutralisation Capacity |

| Abbreviation/Acronym | Definition |
|----------------------|---|
| ANZECC | Australian and New Zealand Environment and Conservation Council |
| ARD | Acid Rock Drainage |
| ARI | Annual Recurrence Interval |
| ARMCANZ | Agriculture and Resources Management Council of Australia and New Zealand |
| As | Arsenic |
| 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 | <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> |
| ATP | Authority to Prospect |
| AUD | Australian dollar |
| AUD/t | Australian Dollar per tonne |
| AUL (S) | Auxiliary lane (Short) |
| AUSRIVAS | Australian River Assessment System |
| AWBM | Australian Water Balance Model |
| BAMM | Biodiversity Assessment and Mapping Methodology |
| BAT | Best available technology |
| Bcm | Billion cubic metres |
| bgl | Below ground level |
| BIAs | Biologically Important Areas |
| Biosecurity Act | <i>Biosecurity Act 2014</i> |
| BMP | Blast Management Plan |
| BoM | Bureau of Meteorology (Queensland) |
| BPA | Biodiversity Planning Assessment |
| BTEXN | Benzene, toluene, ethylbenzene, xylene, naphthalene |
| Ca | Calcium |
| CaCO ₃ | Calcium Carbonate |
| CAMBA | China-Australia Migratory Birds Agreement |
| CAPEX | Capital Expenditure |
| CCL | Capricornia Coastal Lands |
| CCL | Cumulative Contaminant Loading |
| CDMP | Coal Dust Management Plan |
| CEC | Cation exchange capacity |
| CEMP | Construction Environmental Management Plan |
| CFC | Chlorofluorocarbon |

| Abbreviation/Acronym | Definition |
|------------------------|--|
| CHL | Commonwealth Heritage List |
| CHMP | Cultural Heritage Management Plan |
| CHPP | Coal Handling and Preparation Plant |
| CHR | Channelised right turn |
| Cl | Chloride |
| CLR | Contaminated Land Register |
| cm | Centimetre(s) |
| CHMA | Cultural Heritage Management Agreement |
| CMSH Act | <i>Coal Mining Safety and Health Act 1999</i> |
| CMSH Regulation | <i>Coal Mining Safety and Health Regulation 2001</i> |
| CO | Carbon monoxide |
| CO ₂ | Carbon dioxide |
| CO ₂ -e | Carbon dioxide equivalent |
| 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 |
| CPESC | Certified Professional in Erosion and Sediment Control |
| CRS | Chromium reducible sulphur |
| CSG | Coal seam gas |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation |
| CSN | Crucible Swelling Number |
| DAF | Department of Agriculture and Fisheries |
| dB | Decibel |
| dB(A) | The A-weighted sound pressure level |
| DBCT | Dalrymple Bay Coal Terminal |
| DBMP | Direct Benefit Management Plan |
| DEM | Digital Elevation Model |
| DEOs | Desired Environmental Outcomes |
| DES | Department of Environment and Science |
| DEWS | Department of Energy and Water Supply |
| DHLGP | Department of Housing and Local Government Planning |
| DIDO | Drive-in Drive-out |
| DIWA | Directory of Important Wetlands of Australia |
| DLGP | Department of Local Government and Planning |
| DME | Department of Minerals and Energy |

| Abbreviation/Acronym | Definition |
|----------------------|---|
| DMP | Department of Mines and Petroleum |
| DNRME | Department of Natural Resources, Mines and Energy |
| DO | Dissolved oxygen |
| DotEE | Department of the Environment and Energy |
| DPA | Dugong Protection Area |
| DPI | 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 | Department of State Development |
| DSDMIP | Department of State Development, Manufacturing, Infrastructure and Planning |
| DSITIA | Department of Science, Information Technology, Innovation and the Arts |
| DTMR | Department of Transport and Main Roads |
| DWSP | Drinking Water Service Provider |
| EA | Environmental Authority |
| EC | Electrical Conductivity |
| ECU | Edith Cowan University |
| EET | Emission Estimation Techniques |
| EHP | Department of Environment and Heritage Protection |
| EILs | Ecological Investigation Levels |
| EIS | Environmental Impact Statement |
| EM | Environmental Management |
| EM Plan | Environmental Management Plan |
| EMC | Event Mean Concentration |
| EMR | Environmental Management Register |
| EMS | Environmental Management System |
| EO Act | <i>Environmental Offset Act 2014</i> |
| EP | Equivalent persons |
| EP Act | <i>Environmental Protection Act 1994</i> |
| EP Regulation | <i>Environmental Protection Regulation (2008)</i> |
| EPBC Act | <i>Environment Protection and Biodiversity Conservation Act 1999</i> |
| EPC | Exploration Permit for Coal |
| EPP | Environmental Protection Policy |
| EPP (Air) | <i>Environmental Protection (Air) Policy 2008</i> |
| EPP (Noise) | <i>Environmental Protection (Noise) Policy 2008</i> |

| Abbreviation/Acronym | Definition |
|----------------------|--|
| EPP (Water) | <i>Environmental Protection (Water) Policy 2009</i> |
| EPM | Exploration Permits for Minerals |
| ERA | Environmentally Relevant Activity |
| ERP | Emergency Response Plan |
| ESA | Equivalent standard axle |
| ESA | Environmentally Sensitive Areas |
| ESC | Erosion and sediment control |
| ESCP | Erosion and Sediment Control Plan |
| ESD | Ecologically sustainable development |
| ESP | Exchangeable Sodium Percentage |
| ESS | Extreme Storm Storage |
| ESSCC | Earth System Science Computational Centre |
| ET | Evapotranspiration |
| EV | Environmental Value |
| EVNT | Endangered, Vulnerable and Near Threatened |
| Fairway Coal | Fairway Coal Proprietary Limited |
| FBA | Fitzroy Basin Association |
| Fe | Iron |
| FeS ₂ | Iron Disulphide / Iron Pyrite |
| FHA | Fish Habitat Area |
| FIA | Failure Impact Assessment |
| FIFO | Fly-in Fly-out |
| Fisheries Act | <i>Fisheries Act 1994</i> |
| FMZ | Fume Management Zone |
| FOB | Free on Board |
| Forestry Act | <i>Forestry Act 1959</i> |
| FRP | Bioavailable phosphorous |
| FTE | Full-time equivalent |
| FWQIP | Fitzroy Water Quality Improvement Plan |
| g/cm ³ | Grams per cubic centimetre |
| g/L | Grams per Litre |
| GA | Geoscience Australia |
| GAI | Global Abundance Index |
| GARD Guide | Global Acid Rock Drainage Guide |
| GARID | Guidelines for Assessment of Road Impacts of Development |
| GBRMP | Great Barrier Reef Marine Park |

| Abbreviation/Acronym | Definition |
|--------------------------------|--|
| GBRCMP | Great Barrier Reef Coastal Marine Park |
| GBRWHA | Great Barrier Reef World Heritage Area |
| GCZ | Groundwater chemistry zones |
| GDA94 | Global Datum Australia 1994 |
| GDE | Groundwater Dependent Ecosystem |
| GDP | Gross Domestic Product |
| GHG | Greenhouse gas |
| GIS | Geographic Information System |
| 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 |
| GWDBQ | Groundwater Database - Queensland |
| GWh | Gigawatt hour |
| H ₂ SO ₄ | Sulphuric Acid |
| ha | Hectare(s) |
| HEV | High Ecological Value |
| HGTC | High Grade Thermal Coal |
| HIPAP | NSW Hazardous Industry Planning Advisory Paper |
| hr | Hour(s) |
| HSUs | Hydrostratigraphic units |
| HV | Heavy vehicle |
| Hz | Hertz |
| IAP2 | International Association for Public Participation |
| IAS | Initial Advice Statement |
| ICN | Industry Capability Network |
| ICOMOS | International Council on Monuments and Sites |
| IECA | International Erosion and Control Association |
| IESC | Independent Expert Scientific Committee |
| IFD | Intensity Frequency Duration |
| IPCC | Intergovernmental Panel on Climate Change |
| IRC | Isaac Regional Council |
| ITP | Inspection and Test Plan |

| Abbreviation/Acronym | Definition |
|----------------------|---|
| JAMBA | Japan-Australia Migratory Birds Agreement |
| JORC | Joint Ore Reserves Committee |
| k | Potassium |
| K | Hydraulic Conductivity |
| kcal/kg | Kilocalorie(s) per kilogram |
| kg | Kilogram(s) |
| Kg/ha | Kilogram(s) per hectare |
| kl | Kilolitre(s) |
| KLC | Kinetic leach column |
| kl/d | Kilolitre(s) per day |
| km | Kilometre(s) |
| km/h | Kilometre(s) per hour |
| km ² | Square kilometre(s) |
| km ² /yr | Square kilometre(s) per year |
| kN/m ³ | Kilo Newton per cubic metre |
| kPa | Kilopascal |
| Kph | Kilometre(s) per hour |
| kt | Kilotonnes |
| Kt/year | Kilotonnes per year |
| kV | Kilovolt |
| kVA | Kilovolt Amperes |
| l | Litre(s) |
| L _{Aeq} | Equivalent sound level |
| L _{A1} | Noise exceed 1% of the time |
| L/day | Litre(s) per day |
| Land Act | <i>Land Act 1994</i> |
| LAN | Local area network |
| lcm | Loose cubic metre |
| LDMG | Local Disaster Management Group |
| LGA | Local government area |
| LiDAR | Light Detection and Ranging |
| LNG | Liquefied Natural Gas |
| LSC | Livingstone Shire Council |
| LoR | Limits of Reporting |
| LOS | Level of Service |
| LSAT | Land Suitability Assessment Techniques |

| Abbreviation/Acronym | Definition |
|------------------------|--|
| LTV | Long-term trigger value |
| LUMP | Land Use Management Plan |
| LWP | Leaf water potential |
| M | Metre(s) |
| m/m | Metre(s) per metre(s) |
| m/s | Metre(s) per second |
| m ² | Square metre(s) |
| m ³ | Cubic metre(s) |
| m ³ /ha/yr | Cubic metre per hectare per year |
| m ³ /s | Cubic metre(s) per second |
| m ³ /t | Cubic metre(s) per tonne |
| MAE | Major accident event |
| m AHD | Metre Australian Height Datum |
| MAW | Mine affected water |
| Mbcm | Million bank cubic metres |
| Mbgl | Metres below ground level |
| MCC | Motor Control Centre |
| MCU | Material Change of Use |
| MDL | Mineral Development Licence |
| meq/L | Milliequivalents per litre |
| meq/g | Milliequivalents per gram |
| MERCP Act | Mineral and Energy Resources (Common Provisions) Act 2014 |
| MERCP Regulation | Mineral and Energy Resources (Common Provisions) Regulation 2016 |
| Mg | Magnesium |
| MGA55 | Map Grid Australia Zone 55 |
| mg/kg | Milligram(s) per kilogram |
| mg/l | Milligram(s) per litre |
| mg/m ² /day | Milligram(s) per square metre per day |
| MIA | Mine Infrastructure Area |
| MJ/kg | Megajoule(s) per kilogram |
| MJ/m ² | Megajoule(s) per square metre |
| ML | Mining Lease |
| ML | Megalitre(s) |
| ml | Millilitre(s) |
| ML/d | Megalitre(s) per day |
| ML/yr | Megalitre(s) per year |

| Abbreviation/Acronym | Definition |
|-----------------------|--|
| MLA | Mining Lease Application |
| MLA | Member of the Legislative Assembly |
| MLCM | Million loose cubic metre |
| MLES | Matters of Local Environmental Significance |
| MMC | Model Mining Conditions |
| mm | Millimetre(s) |
| mm/hr | Millimetres per hour |
| mm/sec | Millimetres per second |
| mm/yr | Millimetre(s) per year |
| mm ³ | Cubic millimetre(s) |
| MNES | Matters of National Environmental Significance |
| Mo | Molybdenum |
| MOLR | Method of Last Resort |
| MPA | Maximum potential acidity |
| MR Act | <i>Mineral Resources Act 1989</i> |
| MRC | Mackay Regional Council |
| MSES | Matters of State Environmental Significance |
| mS / cm | Millisiemens per centimetre |
| Mt | Million tonne(s) |
| Mt CO ₂ -e | Million tonnes of carbon dioxide equivalent |
| Mtpa | Millions tonne(s) per annum |
| MW | Megawatt(s) |
| MWMP | Mineral Waste Management Plan |
| N | Nitrogen |
| NBD | North bound direction |
| Na | Sodium |
| Na-Cl | Sodium-chloride |
| NAF | Non-acid forming |
| NAPP | Net Acid Production Potential |
| NATA | National Association of Testing Authorities |
| NC Act | <i>Nature Conservation Act 1992</i> |
| NCCAF | National Climate Change Adaptation Framework |
| NCL | North Coast Line |
| NDVI | Normalised differential vegetation index |
| NEPM | National Environment Protection Measures |
| NGA | National Greenhouse Accounts |

| Abbreviation/Acronym | Definition |
|----------------------|--|
| NGER Act | <i>National Greenhouse Energy Reporting Act 2007</i> |
| NGER Regulation | <i>National Greenhouse Energy Reporting Regulations 2008</i> |
| NGER Determination | National Greenhouse Energy Reporting Determination 2008 |
| NH ₃ | Ammonia |
| NHL | National Heritage List |
| NHMRC | National Health and Medical Council |
| NMD | Neutral mine drainage |
| NO ₂ | Nitrogen dioxide |
| NO _x | Nitrogen oxides |
| NPI | National Pollutant Inventory |
| NRM | Natural Resource Management |
| NRMMC | Natural Resource Management Ministerial Council |
| NSESD | National Strategy for Ecologically Sustainable Development |
| NT Act | <i>Native Title Act 1993</i> |
| NTU | Nephelometric Turbidity Units |
| O ₃ | Ozone |
| ODP | Offset Delivery Plan |
| OEMP | Operations Environmental Management Plan |
| OF | Optical fibre |
| OMA | Offset Management Area |
| OPEX | Operating Expenses |
| OUV | Outstanding Universal Values |
| P | Phosphorus |
| PAA | Priority Agricultural Area |
| PAF | Potential Acid-Forming |
| PAF-LC | Potential Acid Forming-low capacity |
| PAR | Population at risk |
| PASS | Potential Acid Sulphate Soils |
| PCI | Pulverised Coal Injection |
| PDWD | Pit dewater dam |
| pH | Potential of Hydrogen |
| Planning Act | <i>Planning Act 2016</i> |
| Planning Regulation | <i>Planning Regulation 2017</i> |
| PLAs | Priority Living Areas |
| PLC | Programmable Logic Controls |
| PM | Particulate Matter |

| Abbreviation/Acronym | Definition |
|----------------------|---|
| PM ₁₀ | Particulates measuring 10 µm or less |
| PM _{2.5} | Particulates measuring 2.5 µm or less |
| PMF | Probable maximum flood |
| PN | Pacific National |
| PoO | Plan of Operations |
| PPE | Personal protective equipment |
| ppm | Parts per million |
| ppv | Peak particle velocity |
| PRCP | Progressive Rehabilitation and Closure Plan |
| Pty Ltd | Proprietary Limited |
| PWD | Process water dam |
| Q1 | First Quarter |
| Q2 | Second Quarter |
| Q3 | Third Quarter |
| Q4 | Fourth Quarter |
| Q5 | Fifth Quarter |
| 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 Act | <i>Queensland Heritage Act 1992</i> |
| QPS | Queensland Police Service |
| QR | Queensland Rail |
| QSpatial | Queensland Spatial Catalogue |
| QTRIP | Queensland Transport and Roads Investment Program |
| QWQG | Queensland Water Quality Guidelines 2009 |
| RDA | Regional Development Australia |
| RDAFCW | RDA Fitzroy and Central West Region |
| RDAMIW | RDA Mackay-Isaac-Whitsunday |
| RE | Regional Ecosystem |
| REMP | Receiving Environment Monitoring Program |
| RFFE | Regional Flood Frequency Estimation |
| RIA | Road Impact Assessment |
| RL | Reduced Level |
| RMP | Road-use Management Plan |

| Abbreviation/Acronym | Definition |
|-------------------------------|--|
| RNE | Register of National Estate |
| ROM | Run-of-mine |
| RORO | Roll on roll off |
| RP | Release point |
| RPDM | Road Planning and Design Manual |
| RPEQ | Registered Professional Engineer Queensland |
| RPI Act | <i>Regional Planning Interests Act 2014</i> |
| RPP | Riverine Protection Permit |
| RRC | Rockhampton Regional Council |
| RTA | Residential Tenancies Authority |
| Ru | Pore pressure coefficient |
| RUSLE | Revised Universal Soil Loss Equation |
| RWD | Raw water dam(s) |
| RWQPP | Reef Water Quality Protection Plan 2013 |
| S | Sulphur |
| S ²⁻ | Sulphides |
| SAR | Sodium adsorption ratio |
| SBD | South bound direction |
| SCA | Strategic cropping areas |
| SCADA | Supervisory Control and Data Acquisition |
| SCL | Strategic Cropping Land |
| SCR | State controlled road |
| SDS | Safety Data Sheet |
| Se | Selenium |
| SEAs | Strategic environmental areas |
| 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 |
| SMD | Saline Mine Drainage |
| SO ₂ | Sulphur dioxide |
| SO ₄ ²⁻ | Sulphate |
| SOIC | Strategic Offset Investment Corridor |
| SP Act | <i>Sustainable Planning Act 2009</i> |

| Abbreviation/Acronym | Definition |
|---------------------------|---|
| SP Regulation | <i>Sustainable Planning Regulation 2009</i> |
| SPOCAS | Suspended Peroxide Oxidation-Combined Acidity and Sulphate |
| SPP | State Planning Policy |
| SRTM | Shuttle Radar Topography Mission |
| SSCC | Semi-soft coking coal |
| SSE | Site Senior Executive |
| SSMP | Significant Species Management Plan |
| SSRC Act | <i>Strong and Sustainable Resource Communities Act 2016</i> |
| SSRC Bill | Strong and Sustainable Resource Communities Bill 2016 |
| STP | Sewage Treatment Plant |
| STV | Short-term Trigger Value |
| SWBTA | Shoalwater Bay Military Training Area |
| SWP | Soil water potential |
| t | Tonne(s) |
| t CO ₂ -e / kL | Tonne(s) of carbon dioxide equivalent per kilolitre |
| t/ha | Tonnes per hectare |
| t/ha/yr | Tonnes per hectare per year |
| t/m ³ | Tonnes per cubic metre |
| TAPM | The Air Pollution Model |
| TARPs | Trigger Action Response Plans |
| t CO ₂ -e | Tonne(s) of carbon dioxide equivalent |
| TBC | To be confirmed |
| TDS | Total dissolved solids |
| TEC | Threatened ecological community |
| TETRA | Terrestrial Trunked Radio |
| The Act | <i>Food Act 2006</i> |
| The Manual | <i>Manual of Assessing consequence categories and hydraulic performance of structures</i> |
| The Project | Central Queensland Coal Mine Project |
| The Regional Plan | <i>Mackay, Isaac and Whitsunday Regional Plan 2012</i> |
| The Regulation | <i>Food Regulation 2016</i> |
| TI Act | <i>Transport Infrastructure Act 1994</i> |
| TIA | Traffic impact assessment |
| TLF | Train Loadout Facility |
| TKN | Total Keildahl nitrogen |
| TMP | Traffic Management Plan |

| Abbreviation/Acronym | Definition |
|----------------------|--|
| TN | Total nitrogen |
| TOC | Total organic carbon |
| ToR | Terms of Reference |
| TP | Total phosphorus |
| tph | Tonne(s) per hour |
| TPH | Total Petroleum Hydrocarbons |
| TRH | Total Recoverable Hydrocarbons |
| TSP | Total suspended particulate |
| TSS | Total suspended solids |
| UCL | Urban centre locality |
| 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 | Vanadium |
| VIA | Visual Impact Assessment |
| Vipac | Vipac Engineers and Scientists Ltd |
| VM Act | <i>Vegetation Management Act 1999</i> |
| vpd | Vehicle(s) per day |
| Vph | Vehicle(s) per hour |
| W | Watt |
| WA | Western Australia |
| WASC | Woorabinda Aboriginal Shire Council |
| Water Act | <i>Water Act 2000</i> |
| Waratah Coal | Waratah Coal Pty Ltd |
| WH&S Act | <i>Work, Health and Safety Act 2011</i> |
| WMP | Water Management Plan |
| WMP | Waste Management Plan |
| WoNS | Weeds of National Significance |
| WPA | Wetland Protection Area |
| WQOs | Water Quality Objectives |
| WQTs | Water Quality Targets |
| WROLA | <i>Water Reform and Other Legislation Amendment</i> |
| WRP | Water Resource Plan |

| Abbreviation/Acronym | Definition |
|----------------------|---|
| WRR Act | <i>Waste Reduction and Recycling Act 2011</i> |
| WT% | Percentage by weight |
| WTP | Water treatment plant |
| 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 |
| 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 |
| 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 it 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 |

| Term | Definition |
|--|--|
| Critical incident | <p>An incident that:</p> <ul style="list-style-type: none"> ▪ 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 | <p>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</p> |
| Decibel (dB) | <p>The logarithmic-scaled unit used to report the level or magnitude of sound</p> |
| Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) | <p>DSEWPaC is a Commonwealth Government department and is responsible for implementing policies to protect the environment and heritage</p> |
| DG Class | <p>Dangerous Goods class means the hazard class of the dangerous goods as stated in the Australian Dangerous Goods Code ADG Code</p> |
| Direct economic impacts | <p>Refers to impacts associated directly with an increase in expenditure within an economy</p> |
| Dirty water | <p>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</p> |
| Ecosystem functions | <p>Refers to the habitat, biological or system properties or processes of ecosystems. Ecosystem goods (such as food) and services (such as waste assimilation) represent the benefits human populations derive, directly or indirectly, for ecosystem functions (as described in Costanza <i>et al.</i> 1997).</p> |
| Eight priority metals | <p>Heavy metals including arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc</p> |
| Emergency | <p>An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which requires a significant and coordinated response</p> |
| Emissions | <p>The release of a substance (usually a gas) into the atmosphere</p> |
| Emissions factor | <p>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)</p> |
| Environmental dam | <p>Contain water captured onsite from overland flow and run-off from the Project area</p> |
| Ephemeral | <p>Brief or short-lived. This term is generally used to describe watercourses that only flow intermittently throughout periods of heavy rainfall</p> |
| Equivalent Standard Axles | <p>The measurement used to assess traffic loading</p> |
| Exchange rate | <p>Rate at which one currency may be converted into another</p> |

| Term | Definition |
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| 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 |
| Factors of production | Represent the factors used during production activities that are not consumed during the process. Includes land, labour, capital and entrepreneurship |
| 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 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) |
| 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: <ul style="list-style-type: none"> ▪ 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 |

| Term | Definition |
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| 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 ₁ (Level) | Level that is equal to or exceeded for 1% of the time interval considered in the absence of the noise under investigation. The L ₁ is considered to be representative of road traffic noise. The A-weighted background level is denoted as LA ₁ |
| L ₁₀ (Level) | 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 _{A90, T} | Background A-weighted sound pressure level |
| 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 |
| L _{Aeq, T} | Time-average A-weighted sound pressure level |
| L _{Amax, 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 |
| 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 |
| Lacustrine | Relating to or associated with lakes |
| 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 |

| Term | Definition |
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| Matters of National Environmental Significance (MNES) | Under the EPBC Act, there are eight listed MNES; six of these apply to the Project: <ol style="list-style-type: none"> 1. World Heritage properties (sections 12 and 15A); 2. National Heritage places (sections 15B and 15C); 3. Listed threatened species and communities (Sections 18 and 18A); 4. Listed migratory species (Sections 20 and 20A); 5. Commonwealth marine areas (sections 23 and 24A); and 6. 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 |
| Nitrogen oxides (NO _x) | 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 | The Project area is defined as the Mining Lease Application (MLA) area, unless otherwise specified in a chapter |
| 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 |
| 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 |

| Term | Definition |
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| 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 CO ₂ -e) | Concentration of CO ₂ 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 |
| 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 |