



Acronyms

The following acronyms or abbreviations have been used in this EA.

HVAU Hunter Valley Access Undertaking

μg Microgram

μS/cm Micro Siemens per centimetre

ABL The assessment background level (ABL) is defined in the INP as a single figure

background level for each assessment period (day, evening and night). It is the tenth

percentile of the measured L90 statistical noise levels

ABS Australian Bureau of Statistics

AC-OOP Mine Area A and C out-of-pit (emplacement)

ACCC Australian Competition and Consumer Commission

ACCESS Bureau of Meteorology numerical weather prediction system

ACLEP Australian Collaborative Land Evaluation Program
AEISG Australian Explosives Industry Safety Group

AERMOD United States Environmental Protection Agency regulatory dispersion model

Ag Silver

AGO Australian Greenhouse Office
AHD Australian Height Datum

AHIMS Aboriginal Heritage Information Management System

AHMP Aboriginal heritage management plan

Al Aluminium

AMD Acid and metalliferous mine drainage

ANC Acid neutralising capacity

ANZECC Australian and New Zealand Environment Conservation Council

APZ Asset protection zones

AQMS Air quality management system
ARI Average recurrence interval

ARMCANZ Agriculture and Resource Management Council of Australia and New Zealand

ARTC Australian Rail Track Corporation Ltd

As Arsenic

AS 1158 Australian Standard – Lighting for Roads and Public Spaces

AS 4282 Australian Standard – Control of Obtrusive Effects of Outdoor Lighting

AWBM Australian Water Balance Model

B Boron

BCA Benefit cost analysis
BGL Below ground level
BL Baseline load

B-OOP E Mine Area B out-of-pit emplacement (east of Laheys Creek)

B-OOP W Mine Area B out-of-pit emplacement (west of Laheys Creek)

BoM Bureau of Meteorology

B&N Act Brigalow and Nandewar Community Conservation Area Act 2005

Ca Calcium

CaCO₃ Calcium carbonate
CCD Census Collection District

Cd Cadmium

CEC Cation exchange capacity

CH₄ Methane

CHC Cobbora Holding Company Pty Limited
CHPP Coal handling and preparation plant

Cl Chloride

CL Act Crown Lands Act 1989

CMA Catchment Management Authority

CMH&S Act Coal Mine Health and Safety Act 2002

CMP Conservation management plan

CNVMP Construction noise and vibration management plan

Co Cobalt

CO Carbon monoxide

CONCAWE Conservation of Clean Air and Water in Europe

CORTN Calculation of Road Traffic Noise

 ${\rm CO_2}$ Carbon dioxide ${\rm CO_2}$ -e ${\rm CO_2}$ -equivalent ${\rm Cr}$ Chromium

CRCCH/LWRRDC Cooperative Research Centre for Catchment Hydrology Land and Water Resources

Research and Development Corporation

Cu Copper

CWCMA Central West Catchment Management Authority

dB(A) Noise is measured in units called decibels (dB). There are several scales for describing

noise, the most common being the 'A-weighted' scale. This attempts to closely

approximate the frequency response of the human ear

DCCEE Commonwealth Department of Climate Change and Energy Efficiency

DEC NSW Department of Education and Communities (formerly Department of Education

and Training)

DEC NSW Department of Environment and Conservation (now Office of Environment and

Heritage)

DECC NSW Department of Environment and Climate Change (now Office of Environment and

Heritage)

DECCW NSW Department of Environment Climate Change and Water (now Office of

Environment and Heritage)

DEUS NSW Department of Energy, Utility and Sustainability
DEWR NSW Department of the Environment and Water Resources
DGRs Director General's environmental assessment requirements

DIPNR NSW Department of Infrastructure, Planning and Natural Resources

DLALC Dubbo Local Aboriginal Land Council

DLWC NSW Department of Land and Water Conservation

DO Dissolved oxygen

DOP NSW Department of Planning (now Department of Planning and Infrastructure)

DoTARS NSW Department of Transport and Regional Services

DP&I NSW Department of Planning and Infrastructure (formerly Department of Planning)
DPI NSW Department of Primary Industries (now Department of Trade and Investment,

Regional Infrastructure and Services)

DRET Commonwealth Department of Resources, Energy and Tourism

DTIRIS NSW Department of Trade and Investment Regional Infrastructure Services

EA Environmental assessment EAT Emerson aggregate test

EEC Endangered ecological community

EC Electrical conductivity
EL Exploration license

EMM EMGA Mitchell McLennan Pty Limited
EMS Environmental management system

EPBC Act Commonwealth Environment Protection and Biodiversity Conservation Act 1999

EP&A Act NSW Environmental Planning and Assessment Act 1979

EPA NSW Environment Protection Authority
ESCP Erosion and sediment control plan
EPI Environmental planning instrument
EPL Environment protection license
ESD Ecologically sustainable development
ESP Exchangeable sodium percentage

EV Environmental value

FAQs Frequently asked questions

Fe Iron
FeCO₃ Siderite

FM Act Fisheries Management Act 1993

GAB Great Artesian Basin

GAC Gallanggabang Aboriginal Corporation
GDE Groundwater dependent ecosystem

GHG Greenhouse gas
GL Giga litre

GP General practitioner

GPS Global positioning system

GSSE GSS Environmental Pty Limited

GWh Gigawatt hours H&S Health and safety

ha Hectares Hg Mercury

HVAU Hunter Valley Coal Network Access Undertaking

ICNG Interim Construction Noise Guideline

H₂SO₄ Sulfuric acid

IGANRIP Interim Guideline for Assessment of Noise from Rail Infrastructure Projects

IMO International Maritime Organisation

INP Industrial Noise Policy

IPCC Intergovernmental Panel on Climate Change

ITSR Independent Transport Safety Regulator (post-2009)

ITSRR Independent Transport Safety and Reliability Regulator (pre-2009)

JORC Australasian Joint Ore Reserves Committee

K Potassium km Kilometre

km/h Kilometres per hour

kV Kilovolt

 ${\sf L}_1$ The noise level exceeded for 1% of the time.

 ${\it L}_{10}$ The noise level which is exceeded 10% of the time. It is roughly equivalent to the

average maximum noise level

 L_{90} The noise level that is exceeded 90% of the time. Commonly referred to as the

background noise level

LCSC NSW Level Crossing Safety Council

 $L_{e\alpha}\,$ The energy average noise from a source. This is the equivalent continuous sound

pressure level over a given period. The Leq (15min) descriptor refers to an Leq noise

level measured over a 15-minute period

LGA Local government area

L_{max} The maximum sound pressure level received during a measuring interval

LEP Local Environmental Plan
LMP Lighting management plan

LPMA Land Property and Management Authority

m Metre

M Million (1,000,000)
m/s Metres per second
m² Square metre
m³ Cubic metre

m³/s Cubic metres persecond

MAC Mingaan Aboriginal Corporation
Mbcm Million bank cubic metres
Mbgl Metres below ground level

MCMPR Ministerial Council on Mineral and Petroleum Resources

MDB Murray Darling Basin

MDBA Murray-Darling Basin Authority

MDBC Murray Darling Basin Commission

MET Meteorological monitoring station

mg/L Milligrams per litre

MGATSIC Murong Gialinga Aboriginal & Torres Strait Islander Corporation

MIA Mine infrastructure area

ML Megalitre

MIC Maximum instantaneous charge

mL Millilitre

ML/a Mega litres per annum ML/d Mega litres per day

MLALC Mudgee Local Aboriginal Land Council

mm Millimetre
Mn Manganese
Mo Molybdenum

MOU Memorandum of understanding

MR Main Road
Mt Million tonnes

Mtpa Million tonnes per annum MVA Megavolt amperes

MW Megawatts

MWR Mid Western Regional (Council)

 $\mbox{N}_2\mbox{O}$ Nitrous oxide \mbox{N} Total nitrogen \mbox{Na} Sodium

NAF Non acid-forming

NAG Net acid generation

NAPP Net acid production potential

NBNCo National Broadband Network Company
NATA National Association of Testing Authorities

NEM National Electricity Market

NEPCNational Environmental Protection CouncilNEPMNational Environment Protection MeasuresNEWCONorth-East Wiradjuri Corporation Ltd

NG National Greenhouse and Energy Reporting Act 2007

NGERS National Greenhouse and Energy Reporting System

NH₃ Ammonia Ni Nickel

NIOSH National Institute for Occupational Safety and Health

NMP Noise management plan

 NO_2 Nitrite NO_3 Nitrate

NOW NSW Office of Water

NP National Park

NPI National Pollutant Inventory

NPV Net present value

NPWS NSW National Parks and Wildlife Service

NSW New South Wales

NSW-DEUS The former NSW Department of Energy, Utilities and Sustainability

NSWSC NSW Scientific Committee

NTU Nephelometric turbidity unit

NVMP Noise and vibration management plan
OEH NSW Office of Environment and Heritage

OL Operational load

PAA Project application area
PAF Potentially acid-forming

PAF-LC Potentially acid-forming low capacity

PCG Planning Coordination Group

PEA Preliminary environmental assessment

Pb Lead

pH Unit of acidity/alkalinity
PHA Preliminary hazard assessment

PM₁₀ Particulate matter less than 10 microns in aerodynamic diameter PM_{2.5} Particulate matter less than 2.5 microns in aerodynamic diameter

pphm Parts per hundred million

POEO Act NSW Protection of the Environment Operations Act 1997

PBP Planning for Bushfire Protection

PSNL The project-specific noise levels (PSNLS) are criteria for a particular industrial noise

source or industry. The PSNL is the lowest of either the intrusive criteria or amenity

criteria

RAP Registered Aboriginal Party

RBL The rating background level (RBL) is an overall single value background level

representing each assessment period over the whole monitoring period. The RBL is used to determine the intrusiveness criteria for noise assessment purposes and is the

median of the average background levels.

RFDS Royal Flying Doctor Service

RFS Rural Fire Service
RL Reduced level

RMS NSW Roads and Maritime Services

RNP Road Noise Policy
ROM Run of mine
RR Regional Road

RTA NSW Roads and Traffic Authority (now Roads and Maritime Services)

S Sulfur

SCA State Conservation Area

Se Selenium

SF₆ Sulfur hexafluoride

SEPP State Environmental Planning Policy

SEWPaC Commonwealth Department of Sustainability, Environment, Water, Population and

Communities

SH State Highway

SIDRA Signalised Intersection Design and Research Aid

SO₂ Sulfur dioxide

Sound power level (L_w) A measure of the total power radiated by a source. The sound power of a source is a

fundamental property of the source and is independent of the surrounding

environment

SRLUP Strategic Regional Land Use Plan
SSD State Significant Development
SSI State Significant Infrastructure
SWMP Site water management plan
TAFE Technical and Further Education

TAL Tonnes axle load limit for a section of rail track

TDS Total dissolved solids

TEC Threatened ecological community

TEM Transient electromagnetic

TEOM Tapered element oscillating microbalance

TFNSW Transport for NSW the Project Cobbora Coal Project TOC Total organic carbon

TSC Act NSW Threatened Species Conservation Act 1995

TSP Total suspended particulate
TSS Total suspended solids

μm micrometres

UC NAF Uncertain to non acid-forming

UC PAF Uncertain to potentially acid-forming

UJV Unincorporated joint venture

USEPA United States Environmental Protection Agency

V Vanadium

 vkt
 Vehicle kilometres travelled

 VOC
 Volatile organic compound

 VPA
 Voluntary Planning Agreement

VP View points

WAL Water Access License

WBNM Watershed Bounded Network Model

WDCP1 Development Control Plan No.1 – Shire Lighting Control to Protect Siding Spring

Observatory

WDD Wirrimbah Direct Descendants
WM Act NSW Water Management Act 2000

WNTCAC Warrabinga Native Title Claimants Aboriginal Corporation

WQO Water quality objective WSP Water Sharing Plans

WVW Wellington Valley Wiradjuri Aboriginal Corporation

Zn Zinc