



Tasman Extension Project Environmental Impact Statement

SECTION 9

ABBREVIATIONS, ACRONYMS AND GLOSSARY

9 ABBREVIATIONS, ACRONYMS AND GLOSSARY

9.1 ABBREVIATIONS AND ACRONYMS

		Cessnock LEP 1989	<i>Cessnock Local Environmental Plan, 1989</i>
		Cessnock LEP 2011	<i>Cessnock Local Environmental Plan, 2011</i>
		CHPP	Coal Handling and Preparation Plant
ACARP	Australian Coal Association Research Program	cm	centimetre
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail	CO _{2-e}	carbon dioxide equivalent
AEMR	Annual Environmental Management Report	CSIRO	Commonwealth Scientific and Industrial Research Organisation
AHD	Australian Height Datum	dba	A-weighted decibel
AHIMS	Aboriginal Heritage Information Management System	DCCEE	Commonwealth Department of Climate Change and Energy Efficiency
ALC	Aboriginal Land Claim	DEC	NSW Department of Environment and Conservation (now OEH)
Ambient Air-NEPM	<i>National Environment Protection (Ambient Air Quality) Measure</i>	DECC	NSW Department of Environment and Climate Change (now OEH)
ANZECC	Australian and New Zealand Environment Conservation Council	DECCW	NSW Department of Environment, Climate Change and Water (now OEH and NOW)
ANZMEC	Australia and New Zealand Minerals and Energy Council	DGRs	Director-General's Requirements
Approved Methods	<i>Approved Methods for the Modelling and Assessment of Air Pollutants</i>	DgS	Ditton Geotechnical Services
AS	Australian Standard	DMR	NSW Department of Mineral Resources
AUSRIVAS	Australian River Assessment System	DNRM	Queensland Department of Natural Resources and Mines
AWS	automatic weather station	Donaldson Coal	Donaldson Coal Pty Limited
BFMC	Bush Fire Management Committee	DoP	NSW Department of Planning (now DP&I)
Bloomfield	Bloomfield Collieries Pty Limited	DP&I	NSW Department of Planning and Infrastructure
BoM	Commonwealth Bureau of Meteorology	DPI	NSW Department of Primary Industries
CCC	Community Consultative Committee	DPI-MR	NSW Department of Primary Industries – Mineral Resources (now DRE)
CCL	Consolidated Coal Lease	DRE	Division of Resources and Energy
CEO	Chief Executive Officer		

DTIRIS	NSW Department of Trade and Investment, Regional Infrastructure and Services	HMP	Heritage Management Plan
DUAP	NSW Department of Urban Affairs and Planning (now DP&I)	Hunter-Central Rivers CMA	Hunter-Central Rivers Catchment Management Authority
EA	Environmental Assessment	HVAS	High Volume Air Sampler
EC	electrical conductivity	ICOMOS	International Council on Monuments and Sites
EDAW	EDAW Australia Pty Ltd	IEA	International Energy Agency
EDG	Environmental Design Guideline	Infrastructure SEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
EEC	endangered ecological community	INP	<i>NSW Industrial Noise Policy</i>
EEO Act	<i>Commonwealth Energy Efficiency Opportunities Act, 2006</i>	km	kilometre
EIS	Environmental Impact Statement	km ²	square kilometre
EL	Exploration Licence	km/hr	kilometres per hour
EPA	NSW Environment Protection Authority	kt	kilotonne
EP&A Act	<i>NSW Environmental Planning and Assessment Act, 1979</i>	kV	kilovolt
EP&A Regulation	<i>NSW Environmental Planning and Assessment Regulation, 2000</i>	L _{Aeq}	equivalent continuous noise level
EPBC Act	<i>Commonwealth Environment Protection and Biodiversity Conservation Act, 1999</i>	Lake Macquarie LEP	<i>Lake Macquarie Local Environmental Plan 2004</i>
EPL	Environment Protection Licence	LALC	Local Aboriginal Land Council
ERA	Environmental Risk Assessment	L _{AN}	noise exceedance level
ESD	ecologically sustainable development	LEP	local environmental plan
FM Act	<i>NSW Fisheries Management Act, 1994</i>	LFA	Landscape Function Analysis
FOC	fibre optic cable	LGA	Local Government Area
GCL	Gloucester Coal Ltd	LIDAR	light detection and ranging
GHG Protocol	Greenhouse Gas Protocol	m	metre
g/m ² /month	grams per square metre per month	M	million
ha	hectare	m ³	cubic metre
HB	handbook	MCA	Minerals Council of Australia
		MDG	Mine Design Guideline
		mg/L	milligrams per litre
		Mining SEPP	<i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>

ML	megalitre	Orica	Orica Australia Pty Limited
ML	Mining Lease	PAD	potential archaeological deposit
MLA	Mining Lease Application	PHA	Preliminary Hazard Analysis
ML/day	megalitres per day	PM _{2.5}	particulate matter less than 2.5 micrometres in size
mm	millimetre	PM ₁₀	particulate matter less than 10 micrometres in size
mm/m	millimetres per metre	PoEO Act	NSW <i>Protection of the Environment Operations Act, 1997</i>
MOP	Mining Operations Plan	REMP	Rehabilitation and Environmental Management Plan
MREMP	Mining, Rehabilitation and Environmental Management Process	RFS	Rural Fire Service
MRRT	Minerals Resources Rent Tax	RMP	Rehabilitation Management Plan
MSB	Mine Subsidence Board	RMS	NSW Roads and Maritime Services
MSDS	Material Safety Data Sheet	ROM	run-of-mine
Mt	million tonne	RTA	NSW Roads and Traffic Authority (now RMS)
Mtpa	million tonnes per annum	SCZ	subsidence control zone
m/s	metres per second	SEPP	State Environmental Planning Policy
NGA Factors	<i>National Greenhouse Accounts Factors July 2011</i>	SEPP 33	<i>NSW State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i>
NGER Act	<i>Commonwealth National Greenhouse and Energy Reporting Act, 2007</i>	SEPP 44	<i>NSW State Environmental Planning Policy No. 44 – Koala Habitat Protection</i>
NGERS	National Greenhouse and Energy Reporting System	SEPP 55	<i>State Environmental Planning Policy No. 55 – Remediation of Land</i>
NOW	NSW Office of Water	SEWPaC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities
NPWS	NSW National Parks and Wildlife Service	SMP	Subsidence Management Plan
NSESD	<i>National Strategy for Ecologically Sustainable Development</i>	SP Solutions	Safe Production Solutions
NSW	New South Wales	SSD	Statistical Subdivision
NTSCORP	Native Title Services Corporation Limited		
NTU	nephelometric turbidity unit		
NZS	New Zealand Standard		
OEH	NSW Office of Environment and Heritage		

State and Regional Development SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>	Ambient air quality	The all-encompassing air quality associated with a given environment. It is the cumulative result of emissions (e.g. dust, particulates) from many sources, both near and far.
the Minister	NSW Minister for Planning and Infrastructure		
the Project	Tasman Extension Project	Amenity	Useful and enjoyable quality.
tpa	tonnes per annum		
TSC Act	NSW <i>Threatened Species Conservation Act, 1995</i>	Aquatic	Living in or on water, or concerning water.
TSP	total suspended particulate		
Umwelt	Umwelt (Australia) Pty Ltd	Aquifer	A sub-surface rock formation containing water in recoverable quantities.
VCP	Vegetation Clearance Protocol		
WBCSD	World Business Council for Sustainable Development	Background	The condition (e.g. noise levels) already present in an area before the commencement of a specific activity.
WRI	World Resources Institute		
°	degree		
°C	degrees Celsius	Baseflow	The discharge of sub-surface water into a stream (i.e. groundwater seepages).
%	percent		
µg/m ³	micrograms per cubic metre	Baseline monitoring	Monitoring conducted over time to collect a body of information to define specific characteristics of an area (e.g. species occurrence or noise levels) prior to commencement of a specific activity.
µm	micrometre		
µS/cm	microSiemens per centimetre		

9.2 GLOSSARY

Adit	A direct entry to a coal seam exposed at the surface either by seam outcrop, excavation, or the high wall of an open cut.	Biological diversity	The diversity of different species of plants, animals and micro-organisms, including the genes they contain, in the ecosystem of which they are part.
Alluvial	A general term for clay, silt, sand and gravel transported by water and deposited, on the bed of a flood plain, river or stream.	Catchment	The entire land area from which water (e.g. rainfall) drains to a specific watercourse or water body.
		Conveyor	Fixed mechanical apparatus consisting of a continuous moving belt used to transport coal from one place to another.

<p>Cross-section</p> <p>A two-dimensional diagram of an object presented as if the object had been cut along its length.</p>	<p>Endemic</p> <p>Native plant or animal restricted to a specific locality or geographic region.</p>
<p>dB</p> <p>Decibel; unit used to express sound intensity.</p>	<p>Fault</p> <p>Major fracture of the earth's crust caused by the relative movement of the rock masses on either side.</p>
<p>dBA</p> <p>Decibels (A-weighted scale); unit used for most measurements of environmental noise; the scale is based upon typical responses of the human ear to sounds of different frequencies.</p>	<p>Floristics</p> <p>The study of the geography of plants, particularly their distribution at different taxonomic levels, i.e. family, genus and species. Patterns of distribution are interpreted in terms of climatic and anthropogenic influence, but above all in terms of earlier continental configurations and migration routes.</p>
<p>dB</p> <p>Linear decibels; measurable effect of an event (e.g. blast) on air pressure including measurement of generated energy which is below the limit of human hearing.</p>	<p>Greenhouse gases</p> <p>Gases with potential to cause climate change (e.g. methane, carbon dioxide and non-methane volatile organic compounds). Usually expressed in terms of carbon dioxide equivalent.</p>
<p>Drift</p> <p>A sloping entry from the surface which is driven at an incline to access or intersect a coal seam</p>	<p>Groundwater</p> <p>All waters occurring below the land surface; the upper surface of the soils saturated by groundwater in any particular area is called the watertable.</p>
<p>Dyke</p> <p>A sheetlike vertical intrusion of igneous rock cutting across the strata of older rocks.</p>	<p>Habitat</p> <p>The particular local environment occupied by an organism.</p>
<p>Ecologically Sustainable Development (ESD)</p> <p>Development that improves the quality of life, in a way that maintains the ecological processes on which life depends.</p>	<p>Hydraulic properties</p> <p>Parameters which measure the rate at which water moves through a soil/rock mass.</p>
<p>Ecosystem</p> <p>An interacting system of animals, plants, other organisms and non-living parts of the environment.</p>	<p>Igneous</p> <p>A rock which originated as molten magma from beneath the earth's surface and subsequently came to the surface as an extrusion, or remained below ground as an intrusion.</p>
<p>Electrical Conductivity (EC)</p> <p>The ability of a substance (either solid, liquid or gas) to transmit electricity.</p>	<p>Emission</p> <p>The discharge of a substance (e.g. dust) into the environment.</p>

Income	The amount of money or its equivalent received during a period of time in exchange for labour or services, from the sale of goods or property, or as profit from financial investments.	Land capability	A method of land use assessment used to estimate the ability of the land to support a particular land use. Classification is based on an assessment of the land's biophysical characteristics.
Indirect Regional Output	The gross value of business turnover that arises in other enterprises through production-induced linkages (other businesses supplying inputs to production) and consumption-induced linkages (other businesses supplying goods and services demand by employees of the enterprise).	Macroinvertebrate	Larger invertebrates (animals without backbones) which can be studied without a microscope.
Infrastructure	The supporting installations and services that supply the needs of the Project.	Permeability	The ability of a rock or soil to allow fluid to pass through it.
<i>In-situ</i>	A term used to distinguish material (e.g. soils, minerals, fossils, etc.) found in its original position of formation, deposition, or growth, as opposed to transported material.	pH	A measure of the degree of acidity or alkalinity of a solution; expressed numerically (logarithmically) on a scale of 1 to 14, on which 1 is most acid, 7 is neutral, and 14 is most basic (alkaline).
Inter-generational equity	That the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.	Population	A group of individuals of one species in an area.
Intra-generational equity	The concept that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of their own generation.	Portal	The surface entry or exit point of an underground access passage.
L _{Aeq}	The equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.	Potable water	Water of quality suitable for human consumption.
		Recharge	The addition of water to an aquifer, directly from the surface, indirectly from the unsaturated zone, or by discharge from overlying or underlying aquifer systems.
		Rehabilitation	The restoration of a landscape and especially the vegetation following its disturbance.
		Relative humidity	The ratio of actual moisture in the air to the amount the air could hold if saturated, at a given temperature.

<p>Remnant vegetation</p> <p>Native vegetation remaining after widespread clearing has taken place.</p>	<p>Subsidence impact</p> <p>Physical changes to the ground and its surface caused by subsidence effects.</p>
<p>Riparian</p> <p>Pertaining to, or situated on, the bank of a body of water, especially a watercourse such as a river.</p>	<p>Substrate</p> <p>An underlying layer (e.g. of sediment under water).</p>
<p>Run-of-mine (ROM)</p> <p>Raw coal, stockpiled and used to feed the crusher in a coal handling and preparation plant.</p>	<p>Terrestrial</p> <p>Living or growing on the land.</p>
<p>Runoff</p> <p>A portion of precipitation (rain, hail and snow) that flows across the ground surface as water.</p>	<p>Total suspended particulates (TSP)</p> <p>Particulate matter suspended in solution of air.</p>
<p>Salinity</p> <p>The total content of dissolved solids in groundwater or surface water, commonly expressed as parts of dissolved solids per million parts of solution, or milligrams of dissolved solids per litre of solution (mg/L).</p>	<p>Total suspended solids (TSS)</p> <p>A common measure used to determine suspended solids concentrations in a waterbody and expressed in terms of mass per unit of volume (e.g. milligrams per litre).</p>
<p>Seepage</p> <p>Liquid or fluid such as water, seeping or flowing from beneath the ground to the surface.</p>	<p>Value-added</p> <p>The difference between the value of a firm's output and the cost of the inputs of raw materials, components or services brought in to produce that output.</p>
<p>Shaft</p> <p>A vertical entry to a coal seam or seams.</p>	<p>Ventilation Shaft</p> <p>An opening on the land surface down to the underground workings in which fresh air is introduced or ventilation air is exhausted.</p>
<p>Spontaneous combustion</p> <p>Self heating and ignition of a combustible material such as coal.</p>	
<p>Stratigraphic</p> <p>Stratigraphy – The branch of geology concerned with the origin, composition, sequence, and correlation of rock strata.</p>	
<p>Subsidence effect</p> <p>The deformation of the ground mass caused by underground mining, including all mining-induced ground movements such as vertical and horizontal displacements and curvature measured as tilts and strains.</p>	