

Stratford Extension Project Environmental Impact Statement

SECTION 9

ABBREVIATIONS, ACRONYMS AND GLOSSARY



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9 ABBREVIATIONS, ACRONYMS AND GLOSSARY

9.1 ABBREVIATIONS AND ACRONYMS

AEMC	Applied Environmental Management Consultants	AWS	automatic weather station
AEMR	Annual Environmental Management Report	bcm	bank cubic metres
AGL	AGL Gloucester LE Pty Ltd	BoM	Commonwealth Bureau of Meteorology
AH&P	Agricultural, Horticultural & Pastoral	BRNOC	Bowens Road North Open Cut
AHD	Australian Height Datum	BRN EIS	<i>Bowens Road North Project Environmental Impact Statement</i>
AHIMS	Aboriginal Heritage Information Management System	CCC	Community Consultative Committee
Al	Aluminium	Cd	Cadmium
ANFO	ammonium nitrate and fuel oil	CHPP	Coal Handling and Preparation Plant
ANZEC	Australian and New Zealand Environment Council	cm	centimetre
ANZECC	Australian and New Zealand Environment and Conservation Council	CMA	Catchment Management Authority
Approved Methods	<i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i> (DEC, 2005)	Co	Cobalt
AQGHGMP	Air Quality and Greenhouse Gas Management Plan	CO ₂ -e	carbon dioxide equivalent
ARI	average recurrence interval	Commonwealth Minister	Commonwealth Minister for Sustainability, Environment, Water, Population and Communities
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand	CPDP	Conceptual Project Development Plan
ARTC	Australian Rail Track Corporation	CSG	coal seam gas
As	arsenic	CSIRO	Commonwealth Scientific and Industrial Research Organisation
AS	Australian Standard	dB	decibel
AUSRIVAS	Australian River Assessment System	dba	A-weighted decibel
AUTH	Exploration Authorisation	dBL	linear decibel
		DCCEE	Commonwealth Department of Climate Change and Energy Efficiency
		DCM	Duralie Coal Mine
		DCPL	Duralie Coal Pty Ltd
		DEC	NSW Department of Environment and Conservation (now OEH)
		DECC	NSW Department of Environment and Climate Change (now OEH)

DECCW	NSW Department of Environment, Climate Change and Water (now OEH and NOW)	EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act, 1999</i>
DGRs	Director-General's Requirements	EPBC Regulations	Commonwealth <i>Environment Protection and Biodiversity Conservation Regulations 2000</i>
DITR	Commonwealth Department of Industry, Tourism and Resources	EPL	Environment Protection Licence
DoP	NSW Department of Planning (now DP&I)	ERA	Environmental Risk Assessment
DP&I	NSW Department of Planning and Infrastructure	ESD	ecologically sustainable development
DPI	NSW Department of Primary Industries	<i>et al.</i>	and others
DPI-MR	NSW Department of Primary Industries – Mineral Resources (now DRE)	Fe	Iron
DRE	NSW Division of Resources and Energy (within the DTIRIS)	g/m ² /month	grams per square metre per month
DSC	NSW Dams Safety Committee	GBFMC	Gloucester Bush Fire Management Committee
DTIRIS	NSW Department of Trade and Investment, Regional Infrastructure and Services	GCL	Gloucester Coal Ltd
DWE	NSW Department of Water and Energy (now DECCW and NOW)	GHG Protocol	Greenhouse Gas Protocol (WBCSD and WRI, 2004)
EC	Electrical Conductivity	Gloucester BFMC area	Gloucester Bush Fire Management Plan area
EEO	Energy Efficiency Opportunities	Gloucester LEP	<i>Gloucester Local Environmental Plan, 2010</i>
EEO Act	Commonwealth <i>Energy Efficiency Opportunities Act, 2006</i>	GRL	Gloucester Resources Limited
e.g.	example	GSC	Gloucester Shire Council
EGi	Environmental Geochemistry International Pty Ltd	H	horizontal
EIS	Environmental Impact Statement	ha	hectare
EL	Exploration Licence	HVAS	high volume air sampler
EP&A Act	NSW <i>Environmental Planning and Assessment Act, 1979</i>	ICOMOS	International Council on Monuments and Sites
EP&A Regulation	NSW <i>Environmental Planning and Assessment Regulation, 2000</i>	IEA	International Energy Agency
EPA	NSW Environment Protection Authority	i.e.	that is
		IIA	Invertebrate Identification Australasia
		INP	NSW <i>Industrial Noise Policy (EPA, 2000)</i>

kg	kilogram	MRRT	Minerals Resources Rent Tax
km	kilometre	MSDS	Material Safety Data Sheet
km ²	square kilometre	Mt	million tonnes
km/hr	kilometre per hour	Mt CO ₂ -e	million tonnes of carbon dioxide equivalent
kV	kilovolt	Mtpa	million tonnes per annum
L	litre	NAF	non-acid forming
L _{Aeq}	equivalent continuous noise level	NEPM	National Environmental Protection Measure
LALC	Local Aboriginal Land Council	NGA Factors	<i>National Greenhouse Accounts Factors July 2011 (DCCEE, 2011)</i>
L _{AN}	noise exceedance level	NGER Act	<i>National Greenhouse and Energy Reporting Act, 2007</i>
LEP	Local Environmental Plan	NGERS	National Greenhouse and Energy Report System
LFA	Landform Function Analysis	NHMRC	National Health and Medical Research Council
LGA	Local Government Area	Ni	Nickel
m	metre	NOW	NSW Office of Water
M	million	NO _x	nitrogen oxide
m ³	cubic metre	NPC	Newcastle Port Corporation
m/s	metres per second	NPI	National Pollutant Inventory
Mbcm	million bank cubic metre	NSESD	National Strategy for Ecologically Sustainable Development (Commonwealth of Australia, 1992)
mg/L	milligram per litre	NSW	New South Wales
MIC	Maximum Instantaneous Charge	NTS Corp	Native Title Services Corporation Limited
ML	Mining Lease	NTU	nephelometric turbidity unit
ML	megalitre	OEH	NSW Office of Environment and Heritage
ML/annum	megalitre per annum	OEH EPRG Coffs Harbour	Coffs Harbour OEH Environment Protection and Regulation, Country, Culture and Heritage Group Office
ML/day	megalitre per day		
MLA	Mining Lease Application		
mm	millimetre		
mm/s	millimetre per second		
Mn	Manganese		
MOP	Mining Operations Plan		
MREMP	Mining, Rehabilitation and Environmental Management Process		

OSR	Options Selection Report	SEPP 33	<i>State Environmental Planning Policy No. 33 (Hazardous and Offensive Development)</i>
PAD	potential archaeological deposit		
PAF	potentially acid forming	SEPP 44	<i>State Environmental Planning Policy No. 44 (Koala Habitat Protection)</i>
PAF-LC	potentially acid forming – low capacity		
P&C	Parents and Citizens	SEWPaC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities
PEL	Petroleum Exploration Licence		
PFM	Planning Focus Meeting	State and Regional Development SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
PHA	Preliminary Hazard Analysis		
PM _{2.5}	particulate matter less than 2.5 micrometres in size	t	tonne
PM ₁₀	particulate matter less than 10 micrometres in size	t CO ₂ -e/t	tonnes per carbon dioxide equivalent
PoEO Act	NSW <i>Protection of the Environment Operations Act, 1997</i>	tph	tonnes per hour
		TDS	total dissolved solids
PPL	Petroleum Production Lease	TEM	transient electromagnetic
PRP	Pollution Reduction Program	TEOM	Tapered Element Oscillating Microbalance
PVS	Peak Vector Sum		
REMP	Rehabilitation and Environmental Management Plan	the Best Practice Report	<i>NSW Coal Mining Benchmarking Study: International Best Practice Measures to Prevent and/or Minimise Emissions of Particulate Matter from Coal Mining (Katestone Environmental, 2011)</i>
RFS	NSW Rural Fire Service		
RMS	NSW Roads and Maritime Services	the Minister	NSW Minister for Planning and Infrastructure
RNP	<i>NSW Road Noise Policy (EPA, 2011)</i>	the Project	Stratford Extension Project
ROM	run-of-mine	the Stratford Coal EIS	<i>Stratford Coal Project Environmental Impact Statement</i>
RSC	Residual Sodium Carbonate		
RTA	NSW Roads and Traffic Authority	the Water Sharing Plan	<i>Water Sharing Plan for the Lower North Coast Unregulated and Alluvial Water Sources 2009</i>
SAR	Sodium Adsorption Ratio	TSC Act	<i>NSW Threatened Species Conservation Act, 1995</i>
SCM	Stratford Coal Mine		
SCPL	Stratford Coal Pty Ltd	TSP	total suspended particulate
SEPP	State Environmental Planning Policy	TSS	total suspended solid

Upper Hunter DSRLUP	<i>Draft Strategic Regional Land Use Plan – Upper Hunter</i>	Average recurrence interval (ARI)	The expected value or average value of the periods between exceedances of a given event magnitude. A term used in water engineering. Also known as “return period”.
U/S	Upstream		
V	vertical		
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		
XQ	extra quiet		
Yancoal	Yancoal Australia Limited	Baseflow	The discharge of sub-surface water into a stream (i.e. groundwater seepages).
Zn	Zinc		
µm	micrometre		
µg/m ³	microgram per cubic metre	Batter	An engineered slope of soil or rock fill on either side upslope or downslope of a road, embankment or waste rock storage; the sloping banks of cut earth separating different levels in an open pit.
µS/cm	microSiemen per centimetre		
%	percent		
°C	degrees Celsius		

9.2 GLOSSARY

Alluvial	A general term for clay, silt, sand and gravel transported by water and deposited on the bed of a floodplain, river or stream.	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.
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.	Bund	An earth, rock or concrete wall or mound constructed to restrict the inflow or outflow of liquids or noise.
Amenity	Useful and enjoyable quality.	Catchment	The entire land area from which water (e.g. rainfall) drains to a specific watercourse or water body.
Aquatic	Living in or on water, or concerning water.	Confluence	A body of water formed by the flowing together of two or more watercourses.
Aquifer	A sub-surface rock formation containing water in recoverable quantities.	Cross-section	A two-dimensional diagram of an object presented as if the object had been cut across its length.

dB	Decibel; unit used to express sound intensity.	Greenhouse gases	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.
dBA	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.	Groundwater	All waters occurring below the land surface; the upper surface of the soils saturated by groundwater in any particular area is called the watertable.
dBL	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.	Habitat	The particular local environment occupied by an organism.
Decommissioning	Removal or reuse of infrastructure.	Hardstand areas	Flat or gently sloping surface that has been engineered such that it is suitable for trafficking by vehicles and/or location of infrastructure.
Drawdown	The localised lowering of groundwater level.	Hydraulic gradient	The change in static head (i.e. elevation and pressure) per unit of distance in a given direction. (Units: dimensionless).
Ecologically Sustainable Development (ESD)	Development that improves the quality of life, in a way that maintains the ecological processes on which life depends.	<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.
Ecosystem	An interacting system of animals, plants, other organisms and non-living parts of the environment.	Interburden	Rock material that separates two economically viable coal seams.
Electrical Conductivity (EC)	The ability of a substance (either solid, liquid or gas) to transmit electricity.	Inter-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 future generations.
Emission	The discharge of a substance (e.g. dust) into the environment.		
Final void	A completed (mined-out) open pit.		

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.	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.
LA10	The noise exceeded by 10% of the measurement period. Commonly referred to as the average maximum.	Rehabilitation	The restoration of a landscape and especially the vegetation following its disturbance.
LAeq	The equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.	Remnant Vegetation	Native vegetation remaining after widespread clearing has taken place.
Mitigation	Measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.	Riparian	Pertaining to, or situated on, the bank of a body of water, especially a watercourse such as a river.
Permeability	The ability of a rock or soil to allow fluid to pass through it.	Run-of-mine (ROM)	Raw coal produced at the Stratford Mining Complex.
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).	Runoff	A portion of precipitation (rain, hail and snow) that flows across the ground surface as water.
Population	A group of individuals of one species in an area.	Salinity	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).
Rating Background Level (RBL)	The overall single-figure sound background level representing each assessment period (day/evening/night) over the whole monitoring period, and is the level used for assessment purposes.	Seepage	Liquid or fluid such as water, seeping or flowing from beneath the ground to the surface.
		Stakeholder	Any individual, group or organisation that can affect, be affected by, or perceive itself to be affected by the behaviour of a company or an organisation.

Subsoil	Soils that underlie the top layer of soil, typically having lower levels of organic matter and associated micro-organisms than in topsoil.
Terrestrial	Living or growing on the land.
Topsoil	The upper or top layer of soil, that typical has higher levels of organic matter and associated micro-organisms.
Total suspended particulate matter (TSP)	The mass of all particulate matter suspended in a solution (e.g. the air).
Total suspended solids (TSS)	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).
Tributary	A smaller watercourse, which discharges into a larger watercourse.
Value-added	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.
Waste rock	Uneconomic rock extracted from the ground during mining operation to gain access to the coal.