



MOOLARBEN COAL PROJECT

S t a g e 2

Glossary

GLOSSARY

The glossary provides a brief summary of the definition of terms commonly used in this document, while every effort has been made to present accurate and up-to-date definitions, this glossary should be used as a resource, not as an authority, more detailed information on many of these terms is incorporated within this Environmental Assessment.

A

Acid rock drainage	Outflow of acidic (low pH) water resulting from the exposure of sulfide-bearing materials to air and water, usually due to mining activities.
Aerobic	Living or occurring only in the presence of oxygen, or in an environment abundant in oxygen.
Anaerobic	Living or active in the absence of free oxygen.
Application for the modification of Stage 1	The application to modify the Stage 1 Project Approval to allow Stage 1 and Stage 2 to operate as a single integrated mining complex (the MCP).
Axle pair	Used as a parameter by which traffic is counted at a given point. One axle pair equals one passenger car while 1.5 axle pairs indicates a 3-axle truck.

B

Biodiversity	The diversity of different species of plants, animals and micro-organisms, including the genes they contain, in the ecosystem of which they are a part.
Biosolids	A recyclable, primarily organic solid material produced by wastewater treatment.
Bore	A well, usually of less than 20 cm diameter, sunk into the ground and from which water is pumped out.

C

CHPP	The coal handling and preparation plant, as approved in Stage 1.
Clean coal technologies	Technologies that allow coal-based power or electricity generation to have improved environmental performance, through decreased emissions.
Clean water	Water that is diverted or conveyed around the disturbed mining areas.
Coal handling infrastructure	Roads, buildings, machines and other equipment used to transfer coal from one area of a mine or processing facility to another.
CPP	The coal processing plant which forms part of the CHPP approved in Stage 1.

D

Dense medium cyclone	A piece of equipment used to separate clean coal from waste material by means of centrifugal force, which separates the raw coal components according to density.
Dirty Water	Water that has come in contact with an operational or disturbed mining area that is typically of a poorer water quality than water from undisturbed areas or 'clean water'.

E

EA report	This report; the Environmental Assessment report prepared for the Stage 2 Major Project application and the application for the modification of the Stage 1 Project Approval, unless referred to as the Stage 1 EA or Stage 1 EA report.
Electrical Conductivity (EC)	An equivalent measure of salinity, with units measured in Semen (S), where 1000 $\mu\text{S}/\text{cm}$ equals 1 mS/cm equals 1 dS/m , seawater has an electrical conductivity of 54 mS/cm .
Environmental Assessment	An analysis of a development project, plan or program in which predictions are made as to the impact of that project, plan or program on the environment. As part of this process, measures to avoid, reduce, or offset the impacts are provided and the residual impacts after these measures are implemented are determined.
Ephemeral	Transitory or short-lived (i.e., flow within an ephemeral river or catchment will largely be seasonal or event-based).
Environmental Protection Licence	A licence required for primarily premise-based works and activities listed in Schedule 1 of the NSW <i>Protection of the Environment Operations Act 1997</i> which regulates all pollution (air pollution, water pollution, noise pollution and waste management) resulting from the work or activity.
Exploration Licence	A licence covering the surface and/or subsoil, which gives the holder an exclusive right to prospect on land for a specified group or groups of minerals.

F

Feral	Domesticated species that live in the wild.
Flocculant	A chemical used to cause the aggregation of small particles (flocculate), for example to precipitate solids such as sediment out of solution.
Fly rock	Material (rock and other debris) cast into the air as a result of blasting.

G

Goaf	That part of an underground mine from which the mineral has been partially or wholly removed.
Greenhouse gases	Gases present in the earth's atmosphere that reduce the loss of heat into space and therefore contribute to global temperature rise through the greenhouse effect.
Groundwater	All waters occurring below the land surface.

H

Haul roads	Roads used to transport ore and by-products.
------------	--

L

Level of Service	An index of the operational performance of traffic on a given traffic lane, carriageway, road or intersection, based on service measures such as delay, degree of saturation, density and speed during a given flow period.
Longwall mining	An efficient underground mining process in which a panel or block of coal (UG1 and UG2 up to 300m wide and several kilometers long) is completely removed.

STAGE 2**M**

Moolarben Coal Project (MCP)	The Moolarben Coal Project comprises Stage 1 and Stage 2 operating as a combined and integrated mining complex.
Mining complex	Or 'integrated mining complex'. See above.

N

National Estate	An item or place of natural, indigenous or historic significance within Australia, as listed on the Register of the National Estate, compiled by the Australian Heritage Commission.
Noxious	Physically harmful or destructive to living organisms.

O

Overburden	Material comprising weathered and fresh rock removed from above economic coal seams (NB: material between seams is known as interburden).
------------	---

P

Perennial	A flowering plant that generally lives for more than two growing seasons, as opposed to annuals, which die after one growing season.
pH	A measure of the concentration of hydrogen ions or essentially acidity / alkalinity, typically on a scale of 0 (highly acidic) to 14 (highly alkaline), where pH is 7 neutral. Rainwater has a pH of 6 - 7, while seawater has a pH of 7.8 to 8.3.
Product coal	Coal that has passed through the processing plant (or is of sufficient quality to bypass the processing plant).
Project approval	Permission granted by the relevant authority to proceed with a project under Part 3A of the NSW <i>Environmental Planning and Assessment Act 1979</i> .
Process water	Water that is used for, or comes in contact with, an end product.

R

Raw coal	ROM coal that has been crushed and sized but not washed.
Reject material	Material that has been rejected during processing and is largely a combination of carbonaceous shale, stone and high ash fines.
ROM coal	Coal that has been excavated from the ground but not been processed.
Runoff	That portion of precipitation (rain, hail and snow) that flows from a specific area across the land surface as water.

S

Soil ameliorant	A method of ameliorating acid soil to enhance plant growth.
Stage 1	The project approved by the Stage 1 Project Approval.
Stage 1 Main Infrastructure Area	The main infrastructure area for Stage 1, which includes the CHPP.
Stage 1 Project Approval	The project approval for Stage 1 granted by the NSW Minister for Planning on 6 September 2007 (as modified).
Stage 1 Project Area	The area shown in Plan 2 in Volume 2 of the Environmental

Stage 2	Assessment report for Stage 1. The project for which a major project application is being made, generally comprising one open cut coal mine, two underground coal mines and additional supporting infrastructure and surface facilities.
Stage 2 Major Project application	The Major Project application (08_0135) for project approval under Part 3A of the NSW <i>Environmental Planning and Assessment Act 1979</i> for Stage 2.
Stage 2 Project Area	The area shown in Plans 2 and 4 in Volume 2. All land within the project area is the subject of the Stage 2 Major Project application.
Stage 2 ROM Coal Facility	The main infrastructure area for Stage 2.
Support facilities	Bathhouses, offices and workshops, etc. proposed to be located east of the Stage 2 ROM coal facility.
Surface water	Water flowing over or within the landscape (e.g., runoff, streams, lakes etc.).
Surface water capture	Storage of surface water for attenuation purposes or for future use such as irrigation.

T

Tailing	A slurry of crushed or finely ground waste rock (or reject) removed from the coal during processing.
---------	--

V

Voluntary conservation agreement	A voluntary agreement between one or more landholders and the Minister of Environment for landowners to provide permanent protection for special features, such as ecological or heritage conservation, of those landholdings. These landholdings would be registered to the title of the land to ensure that the agreement and management requirements remain.
----------------------------------	---

W

Watertable	The upper surface of the soils saturated by groundwater in any particular area.
Wind rose	A circular diagram showing, for a specific location, the percentage of the time the wind is from each compass direction.