

# NARRABRI MINE

# ENVIRONMENTAL MANAGEMENT STRATEGY



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# NARRABRI MINE ENVIRONMENTAL MANAGEMENT SYSTEM

Document owner:	Environmental Superintendent	
Document approver:	Manager HSE	
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Last revision date:	31 August 2022	

# WHC\_PLN\_NAR\_ENVIRONMENTAL MANAGEMENT STRATEGY

# Acronyms and abbreviations

Acronym	Description
CCC	Community Consultative Committee
CoC	Conditions of Consent (SSD 10269)
СМО	compliance management system
DPE	NSW Department of Planning and Environment
EIS	Stage 3 Project Environmental Impact Statement
EL	Exploration Lease
EMS	Environmental Management Strategy
EPA	The NSW Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
EPL	Environment Protection Licence under the POEO Act
GHGE	greenhouse gas emissions
GSC	Gunnedah Shire Council
IEA	Independent environmental audit
km	kilometre
MDB	Murray Darling Basin
Mining Act	Mining Act 1992
ML	mining lease
MLA	mining lease application
MNES	Matter of National Environmental Significance
Mt	million tonnes
Mtpa	million tonnes per annum
NCOPL	Narrabri Coal Operations Pty Ltd
NSC	Narrabri Shire Council
NSW	New South Wales
PA	Project Approval
PM	Particulate Matter
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
POEO Regulation	Protection of the Environment Operations (General) Regulation 2009
QA	quality assurance
QC	quality control
ROM	run of mine
SSD	State Significant Development
TARP	Trigger Action Response Plan
WAL	water access licence



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Acronym	Description
WHC	Whitehaven Coal Limited
WHS	Workplace Health and Safety
WM Act	Water Management Act 2000 (NSW)
WSP	water sharing plan



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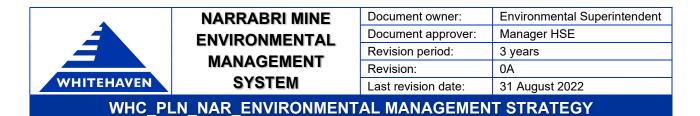


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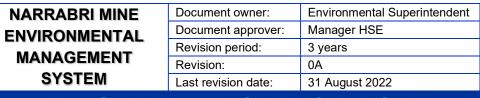
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# 1. Introduction

## 1.1 Background

The Narrabri Mine is an existing underground coal mining operation situated in the Gunnedah Coalfield, approximately 25 kilometres (**km**) southeast of Narrabri and approximately 60 km northwest of Gunnedah, within the Narrabri Shire Council (**NSC**) Local Government Area, in New South Wales (**NSW**).

The Narrabri Mine is operated by Narrabri Coal Operations Pty Ltd (**NCOPL**), on behalf of the Narrabri Mine Joint Venture, which consists of Whitehaven Coal Limited's (**WHC**) wholly owned subsidiaries Narrabri Coal Pty Ltd (70 per cent [%]) and Narrabri Coal Australia Pty Ltd (7.5%), Upper Horn Investments (Australia) Pty Ltd (7.5%), J-Power Australia Pty Limited (7.5%), Posco International Narrabri Investment Pty Ltd (5%) and Kores Narrabri Pty Limited (2.5%).

Stage 1 was approved in November 2007 (as PA 05\_0102) under Part 3A of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**). Development of Stage 1 included site establishment and the construction of coal processing infrastructure commencing in 2008, with production using continuous miner mining methods up to 2.5 million tonnes per annum (**Mtpa**) commencing in 2010.

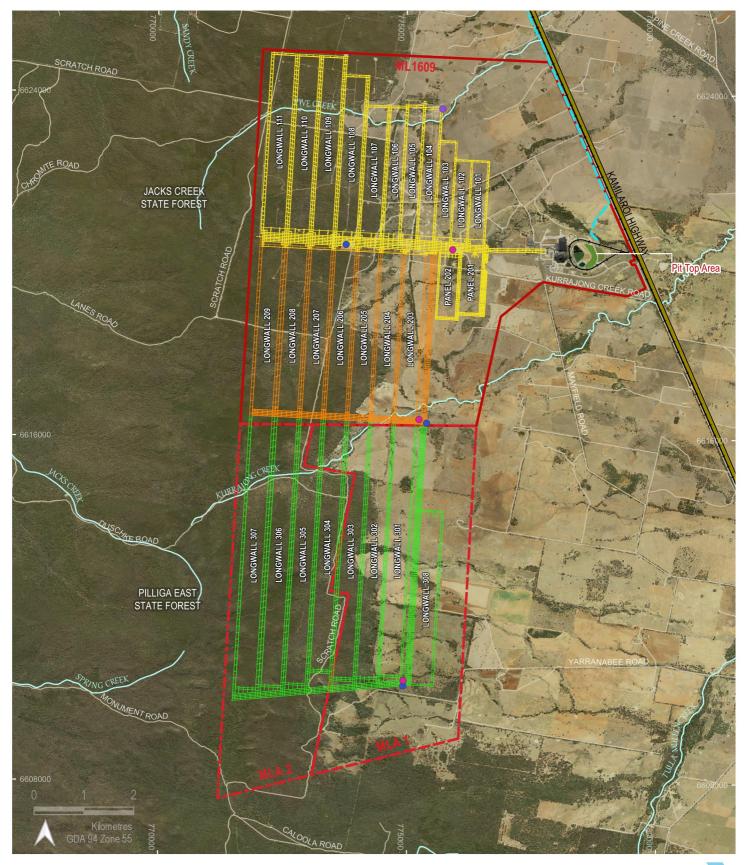
Project Approval 08\_0144 for Stage 2 of the Narrabri Mine was issued under Part 3A of the EP&A Act in 2010, which allowed the Narrabri Mine to convert to a longwall mining operation to extract coal from the Hoskissons Coal Seam. Project Approval 08\_0144 allowed for the production and processing of up to 11 Mtpa of Run of Mine (**ROM**) coal until July 2031. Approval under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) was granted on 21 January 2011 (**EPBC 2009/5003**) and the Narrabri Mine converted to a longwall mining operation within Mining Lease 1609, in 2012. Following the determination of Stage 2, PA 05\_0102 for Stage 1 was surrendered on 2 August 2011.

The Narrabri Underground Mine Stage 3 Extension Project (**Stage 3**) involves a southern extension to the previously approved Stage 2 mining area (approximately 609 ha of additional surface development footprint) to gain access to additional areas of coal reserves within Mining Lease Application (**MLA**) 1 and 2, an increase in the mine life to 2044, and the development of supporting surface infrastructure. Bord and pillar mining operations for panels LW 201 and LW 202 were previously approved as modification 7 (Mod 7) to PA 08\_0144.

The Stage 3 Extension Project State Significant Development (**SSD**) SSD 10269 was granted approval under section 4.38 of the EP&A Act on 1 April 2022, following the determination by the Independent Planning Commission. Approval under the EPBC Act (**EPBC 2019/8427**) is pending.

Under the Stage 3 Conditions of Consent (**CoC**), NCOPL is required to surrender PA 08\_0144 no more than 12 months from the date of commencement of the Stage 3 development in accordance with the *Environmental Planning and Assessment Regulation 2021* (**EP&A Regulation**). Until then, the CoC prevail to the extent of any inconsistency with the conditions of PA 08\_0144.

The Narrabri Mine underground mining layout is shown in Figure 1-1 and surface development footprint is shown in Figure 1-2.





#### LEGEND

- **ML1609**
- MLA1
- MLA2
- Namoi River pipeline (buried)
- Stage 2 underground mining layout
- Stage 3 200 series underground mining layout

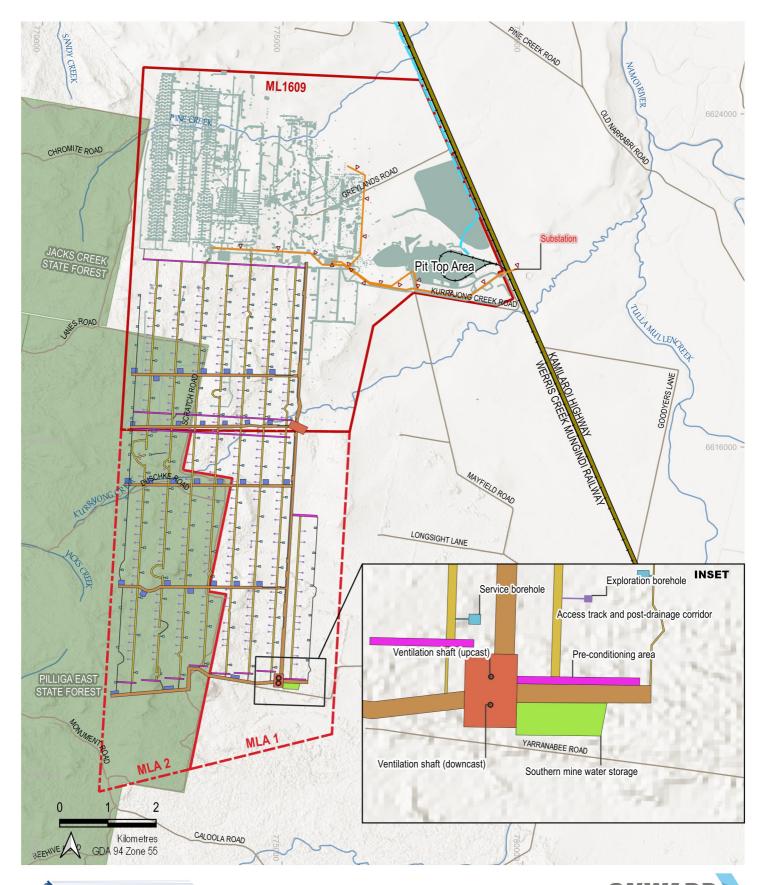
	Ventilation complex (downcast)
-	V / til - ti I /

- Ventilation complex (upcast)
- Ventilation complex (upcast decommissioned)
- 🗕 Highway
- Road
- Watercourse
- 🕂 Railway



#### NARRABRI MINE

FIGURE 1-1 Underground Mining Layout





#### LEGEND



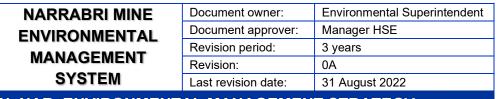
Stage 2 surface development Access track and post-drainage corridor Exploration borehole Pre-conditioning area Service borehole Service borehole and power reticulation Services corridor Southern mine water storage Ventilation complex



#### NARRABRI MINE

FIGURE 1-2 Surface Development Footprint





#### 1.2 Purpose and scope

This Environmental Management Strategy (**EMS**) has been developed in accordance with CoC E1. It identifies the statutory approvals that apply to the Narrabri Mine, including strategies, plans and programs required under Development Consent SSD 10269. It also provides the environmental management framework to effectively identify and control potential environmental impacts in order to achieve compliance with the applicable environmental legislation and regulatory requirements.

This EMS applies to all employees and contractors (including sub-contractors) associated with the development and operation of the Narrabri Mine. Service providers and suppliers may operate under their own EMS.

As required by CoC E3, NCOPL will implement the EMS as approved by the Planning Secretary. In accordance with CoC E2, NCOPL will not commence construction until this EMS is approved by the Planning Secretary.

## 1.3 Objectives

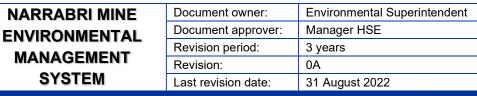
The objectives of this EMS are to:

- identify all applicable statutory requirements;
- provide a strategic framework for environmental management;
- set out the roles and responsibilities of all key personnel involved in environmental management;
- describe the key environmental processes and procedures to be implemented;
- describe, in general, how environmental performance will be monitored and managed;
- include reference to all environmental strategies, plans and programs;
- identify how to communicate environmental performance to the local community, stakeholders, government agencies and internal employees and contractors; and
- identify how to respond to complaints, non-compliances and emergencies and resolve any disputes should they occur.

#### 1.4 Access to information

In accordance with CoC E17(a)(iii), the EMS will be made publicly available on the WHC website following approval by the Department of Planning and Environment (**DPE**). Any subsequent revision of the EMS approved by the DPE will be made publicly available on the website, and the superseded version will be removed to ensure the information is kept up to date in accordance with CoC E17(b). A copy of this Plan will also be kept on the Narrabri Mine site server. Any printed copies of this Plan are uncontrolled.





# 2. Roles and responsibilities

All NCOPL employees and contractors (and their sub-contractors) are responsible for the environmental performance of their activities and for complying with all applicable statutory requirements. All personnel will be required to comply with the statutory approval requirements of the activities they undertake. Any potential environmental impacts from these activities will be managed in accordance with the relevant strategies, plans and programs outlined in this EMS.

Table 2-1 sets out the roles, responsibilities, authorities, and accountabilities of all key personnel involved in environmental management at Narrabri Mine.

#### Table 2-1 Roles and responsibilities

Role <sup>1</sup>	Responsibilities
General Manager	<ul> <li>provide adequate resources for NCOPL personnel to undertake the activities required by this EMS and its environmental management plans, strategies, and programs; and</li> </ul>
	<ul> <li>ensure that all employees, contractors (including sub-contractors), and service providers comply with all applicable environmental legislation, regulations, and approvals.</li> </ul>
Manager HSE	<ul> <li>ensure all contractors, sub-contractors and service-providers are appropriately qualified, competent, and licensed to undertake the required work and have a good environmental performance record; and</li> </ul>
	<ul> <li>ensure all operations are undertaken in accordance with the requirements of the approved EMS.</li> </ul>
Environmental Superintendent	<ul> <li>implement this EMS with support and guidance from the General Manager and Manager HSE;</li> </ul>
	<ul> <li>advise on matters identified in all approval, permit, licence and consent documents and ensure all operations are conducted in compliance with the conditions imposed on the approval, permit, licence and consent documents, and all other environmental obligations;</li> </ul>
	<ul> <li>communicate with statutory authorities and the community;</li> </ul>
	<ul> <li>manage the receipt and response to complaints;</li> </ul>
	<ul> <li>monitor environmental performance at the site including site rehabilitation;</li> </ul>
	<ul> <li>co-ordinate / implement environmental monitoring programs;</li> </ul>
	<ul> <li>conduct environmental reporting;</li> </ul>
	<ul> <li>conduct environmental risk assessments;</li> </ul>
	<ul> <li>keep abreast of new applicable developments in environmental research and technology as it applies to environmental management on mine sites;</li> </ul>
	<ul> <li>provide environmental awareness and training on environmental matters and post- induction education;</li> </ul>
	<ul> <li>conduct review of this EMS and associated environmental management plans, strategies, and programs; and</li> </ul>
	<ul> <li>authorise changes to this EMS and associated environmental management plans, strategies, and programs.</li> </ul>
Environmental Officers	<ul> <li>assist the Environmental Superintendent with implementation of the EMS and associated environmental management plans, strategies, and programs;</li> </ul>



# NARRABRI MINE ENVIRONMENTAL MANAGEMENT SYSTEM

Environmental Superintendent
Manager HSE
3 years
0A
31 August 2022

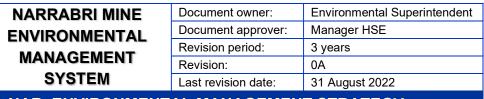
# WHC\_PLN\_NAR\_ENVIRONMENTAL MANAGEMENT STRATEGY

Role <sup>1</sup>	Responsibilities		
	conduct environmental monitoring;		
	<ul> <li>ensure all operations are conducted in compliance with the conditions imposed on the approval, permit, licence and consent documents, and all other environmental obligations; and</li> </ul>		
	<ul> <li>report incidents and any potential non-conformances relating to this EMS to the Environmental Superintendent.</li> </ul>		
Site Managers	<ul> <li>ensure activities under their control are undertaken in accordance with this EMS and associated environmental management plans, strategies, and programs; and</li> </ul>		
	<ul> <li>maintain an awareness of environmental issues and report incidents and any potential non-conformances relating to this EMS to the Environmental Superintendent.</li> </ul>		
Safety and Training Team	<ul> <li>maintain the Training Needs Analysis and Training Competency Matrices which records the name of the employee / contractor, required qualifications, and training undertaken; and</li> </ul>		
	<ul> <li>provide environmental awareness and training on environmental matters and post- induction education.</li> </ul>		
Employees and Contractors	<ul> <li>conduct all activities in accordance with this EMS and associated environmental management plans, strategies, and programs; and</li> </ul>		
Nafa	<ul> <li>maintain an awareness of environmental issues and report incidents and any potential non-conformances relating to this EMS to their supervisor/manager.</li> </ul>		

Note:

<sup>1</sup> or assigned to delegate as required





# 3. Statutory requirements

NCOPL conducts all activities in accordance with the applicable Commonwealth and NSW State environmental, planning, and natural resource legislation, and all conditions stipulated in the statutory approvals for the mine. Legislative and regulatory obligations are generally recognised through the imposition of conditions on the development consent, permits, licences, or leases. NCOPL maintains a register of the relevant environmental legislative and regulatory requirements which is regularly reviewed and maintained.

The following sections provide detail of the key legislation and associated statutory approvals for the Narrabri Mine.

# 3.1 Environmental Planning and Assessment Act 1979

The EP&A Act provides the statutory basis and framework for planning and environmental assessment in NSW. The EP&A Act includes provisions to ensure that the potential environmental impacts of a development are assessed and considered in the decision-making process. Stage 3 is permissible with development consent under the *State Environmental Planning Policy (Resources and Energy) 2021* and is identified as 'State Significant Development' under section 4.38 of the EP&A Act, and Clause 8 and Schedule 1 of the *State Environmental Planning Systems) 2021*.

## 3.1.1 **Project approval and development consent**

The Stage 3 Extension Project (SSD 10269) was approved on 1 April 2022. The Narrabri Mine also incorporates the development formerly authorised under PA 08\_0144, until such time as this development consent is surrendered, in accordance with CoC A16. In accordance with CoC A17, upon the commencement of development under SSD 10269 and before the surrender of PA 08\_0144, the CoC prevail to the extent of any inconsistencies with the conditions of PA 08\_0144.

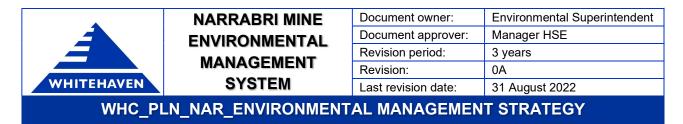
In accordance with CoC E5(b), Appendix A, Table A-1 provides a summary of the relevant CoC relating to the EMS and outlines the section of the EMS in which each of these conditions have been addressed.

In accordance with CoC E5(c), the relevant commitments or recommendations documented in the Stage 3 Environmental Impact Statement (**EIS**) (Resource Strategies 2020) have been integrated into the relevant strategy, plan or program required under the CoC, including those commitments or recommendations as amended or added to by the:

- Applicant's Submission Report submitted 31 May 2021;
- Applicant's Amendment Report submitted 31 May 2021;
- Applicant's final *Biodiversity Development Assessment Report* dated September 2021; and
- Applicant's Additional Information on GHGEs dated 15 October 2021 and 17 December 2021.

# 3.2 **Protection of the Environment Operations Act 1997**

The *Protection of the Environment Operations Act 1997* (**POEO Act**) regulates pollution through the control of an Environment Protection Licence (**EPL**). Activities requiring an EPL are listed in Schedule 1 of the POEO Act and include mining for coal, coal works and sewage treatment. NCOPL is the holder of EPL 12789 which



includes pollution limits and monitoring requirements, as well as a requirement to develop a Pollution Incidence Response Plan.

Under section 148 of the POEO Act, there is a duty to report pollution incidents causing or threatening material harm to the environment. Material harm includes on-site harm, as well as harm to the environment beyond the premises where the pollution incident occurred.

#### 3.2.1 Environment protection licence

NCOPL is the holder of EPL 12789. The EPL will be varied to reflect all Stage 3 related development and operational activities.

A copy of the EPL must be kept onsite at the Narrabri Mine in accordance with EPL Condition G1.1.

#### 3.3 Mining Act 1992

The *Mining Act 1992* (**Mining Act**) regulates the licensing, land access, and operations for coal mines operating in NSW. Under the Mining Act, all resource activities must be licensed, including exploration activities.

#### 3.3.1 Mining lease

NCOPL are the holder of Mining Lease 1609 (**ML 1609**) issued in January 2008. ML 1609 requires NCOPL to implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.

This EMS will be updated with any relevant conditions associated with future MLs, once these have been granted.

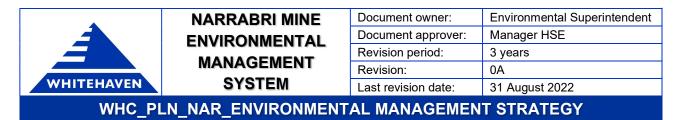
#### 3.4 Water management

#### 3.4.1 Water Act 1912

The *Water Act 1912* (**Water Act**) has historically been the primary legislation managing water resources in NSW. The Water Act governs access, trading and allocation of licences associated with both surface water and groundwater sources and is currently being progressively phased out and replaced by Water Sharing Plans (**WSPs**) under the *Water Management Act 2000* (**WM Act**). Existing licences under the Water Act are converted to water access licences (**WALs**) and to water supply works and use approvals under the WM Act. The elements to which the Water Act applies include extraction of water from a river, extraction of water from groundwater sources, aquifer interference [(less than 3 megalitres per year)] and diversion works of surface water runoff for capture (of a capacity less than basic landholder rights).

#### 3.4.2 Water Management Act 2000

The WM Act is progressively being implemented throughout NSW to manage water resources, superseding the Water Act. The aim of the WM Act is to ensure that water resources are conserved and properly managed for sustainable use benefiting both present and future generations. It is also intended to provide formal means



for the protection and enhancement of the environmental qualities of watercourses and their in-stream uses, as well as to provide for protection of catchment conditions. Fresh water sources throughout NSW are managed by WSPs under the WM Act. Key rules within WSPs specify when licence holders can access water and how water can be traded. The Narrabri Mine surface water and groundwater systems are regulated by WSPs under the WM Act.

#### 3.4.3 Water licenses

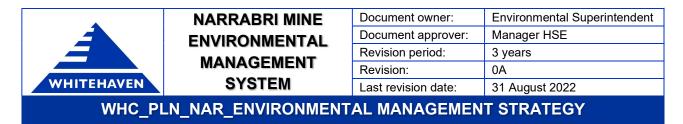
The WALs held by NCOPL for water take associated with the development are listed in Table 3-1. NCOPL will acquire additional WALs to address the requirements for Stage 3. This EMS will be updated to reflect the additional WALs once these have been obtained.

#### Table 3-1 Water licensing summary for the Narrabri Mine

Water Sharing Plan	Water source (Management Zone)	Licence category	WAL number	Nominated works
Groundwater				
NSW Murray-Darling Basin Porous Rock Groundwater	Gunnedah Oxley Basin MDB Groundwater Source	Aquifer	WAL 29549	90WA822539
Sources Order 2020			WAL 43017	-
NSW Great Artesian Basin Groundwater Sources 2020	GAB Southern Recharge Groundwater Source	Aquifer	WAL 15922	90WA822539
Namoi Alluvial Groundwater Sources Order 2020	Upper Namoi Zone 5 Groundwater Source	Aquifer	WAL 12833	90WA812891
			WAL 20131	
			WAL 12822	
	Lower Namoi Groundwater Source	Aquifer	-	-
Surface water				
Upper Namoi and Lower Namoi Regulated Water Sources 2016	Lower Namoi Regulated River Water Source	Regulated River (High Security)	WAL 6762	90CA802130
		Regulated River (General Security)	WAL 2671	
			WAL 2728	
			WAL 20152	

# 3.5 Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)

The EPBC Act defines developments that are likely to have a significant impact on a Matter of National Environmental Significance (**MNES**) as a "controlled action". A development that is, or may be, a controlled action is required to be referred to the Commonwealth Minister for the Environment (**Commonwealth Minister**) for a determination as to whether or not the action is a controlled action. Stage 3 (EPBC 2019/8427) was declared a controlled action on 30 September 2019. Therefore, the action requires approval under the



EPBC Act due to potential impacts on provisions under Part 3 of Chapter 2 of the EPBC Act which are assessed under the bilateral agreement between the Commonwealth and NSW Government.

#### 3.5.1 EPBC approval

Narrabri Mine is subject to EPBC 2009/5003 (Stage 2) issued under the EPBC Act, and will be subject to EPBC 2019/8427 (Stage 3) once granted. The EPBC approvals prescribe conditions for NCOPL to mitigate impacts upon EPBC Act listed threatened species and communities. EPBC 2009/5003 and EPBC 2019/8427 (once granted) will both be active for the life of mine.

#### 3.6 Forestry Act 2012

The *Forestry Act 2012* is an Act to provide for the dedication, management and use of State forests and other Crown-timber land for forestry and other purposes; to constitute the Forestry Corporation of New South Wales as a statutory State-owned corporation and to specify its objectives and functions.

#### 3.6.1 Forest permit

NCOPL were granted a Forest Permit by the Forestry Corporation of New South Wales for access and use arrangements for mineral exploration under exploration licence (EL 6243) and access to the State Forest to undertake mining related activities.

#### 3.7 Other applicable legislation

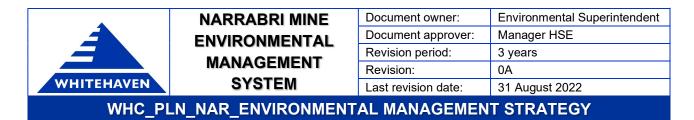
Additional legislation applicable to the Narrabri Mine includes:

- Biodiversity Conservation Act 2016
- Biosecurity Act 2015
- Dams Safety Act 2015
- National Parks and Wildlife Act 1974
- NSW Work Health and Safety (WHS) legislation:
  - Work Health and Safety Act 2011;
  - Work Health and Safety Regulation 2011;
  - Work Health and Safety (Mines and Petroleum Sites) Act 2013; and
  - Work Health and Safety (Mines and Petroleum Sites) Regulation 2022.

#### 3.8 Planning agreements

In accordance with CoC A18, within six months of the date of commencement of development, or other timeframe agreed by the Planning Secretary, NCOPL are required to enter into Planning Agreements with the NSC and the Gunnedah Shire Council (**GSC**) in accordance with:

• Subdivision 2 of Division 7.1 of Part 7 of the EP&A Act; and

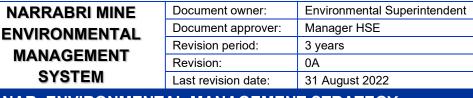


• the terms of NCOPLs offer in Appendix 5 of the CoC.

#### 3.9 Relevant codes, standards, policies and guidelines

The requirements and obligations in all guidelines, protocols, Australian Standards, codes or policies that are relevant to the Narrabri Mine are addressed in the individual strategy, plan or program. In accordance with CoC A31, references in the CoC to any guideline, protocol, Australian Standard, code or policy are to such guidelines, protocols, Standards, codes or policies in the form they are in as at the date of inclusion (or later update) in the condition. Consistent with the CoC, and without altering any limits or criteria in the development consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such guideline, protocol, Standard, code or policy, or replacement of them in accordance with CoC A32.





# 4. Implementation of the EMS

## 4.1 Environmental Management System

The Narrabri Mine Environmental Management System is guided by the WHC Health, Safety, Environment and Communities Policy (**the Policy**) (Appendix B). The Policy confirms NCOPL's commitment in conducting business to ensure the protection of the environment, community, and cultural heritage values of the area throughout all stages of exploration, development, operation, and closure.

## 4.2 Environmental management plans and strategies

Underpinning the WHC Environmental Management System are the environmental management plans and strategies. These plans and strategies have been developed to identify potential environmental impacts and specify how they will be managed to meet the requirements of the statutory approvals. Where appropriate, procedures or forms are also in place to support their implementation.

In accordance with CoC A21, and with the approval of the Planning Secretary, NCOPL may prepare and submit any strategy or plan required by the CoC on a staged basis or, combine any strategy or plan required by the CoC or adjoining mining consent or approval, in common ownership or management.

Where the CoC stipulates that a specific management plan or strategy requires consultation with an identified party, CoC A20 requires NCOPL to:

- consult with the relevant party prior to submitting the plan or strategy to DPE; and
- provide details of the consultation undertaken including the outcome of the consultation, matters resolved and unresolved, and details of any matters not resolved between the party consulted and NCOPL and how NCOPL has addressed the matters not resolved.

In accordance with CoC A23, if the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted under the relevant CoC.

Each management plan required by the CoC must be prepared in accordance with relevant guidelines and the requirements of CoC E5, and include:

- a summary of relevant background or baseline data;
- details of:
  - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
  - any relevant limits or performance measures and criteria; and
  - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
- any relevant commitments or recommendations identified in the document/s listed in condition A2(c);
- a description of the management measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;
- a program to monitor and report on the:



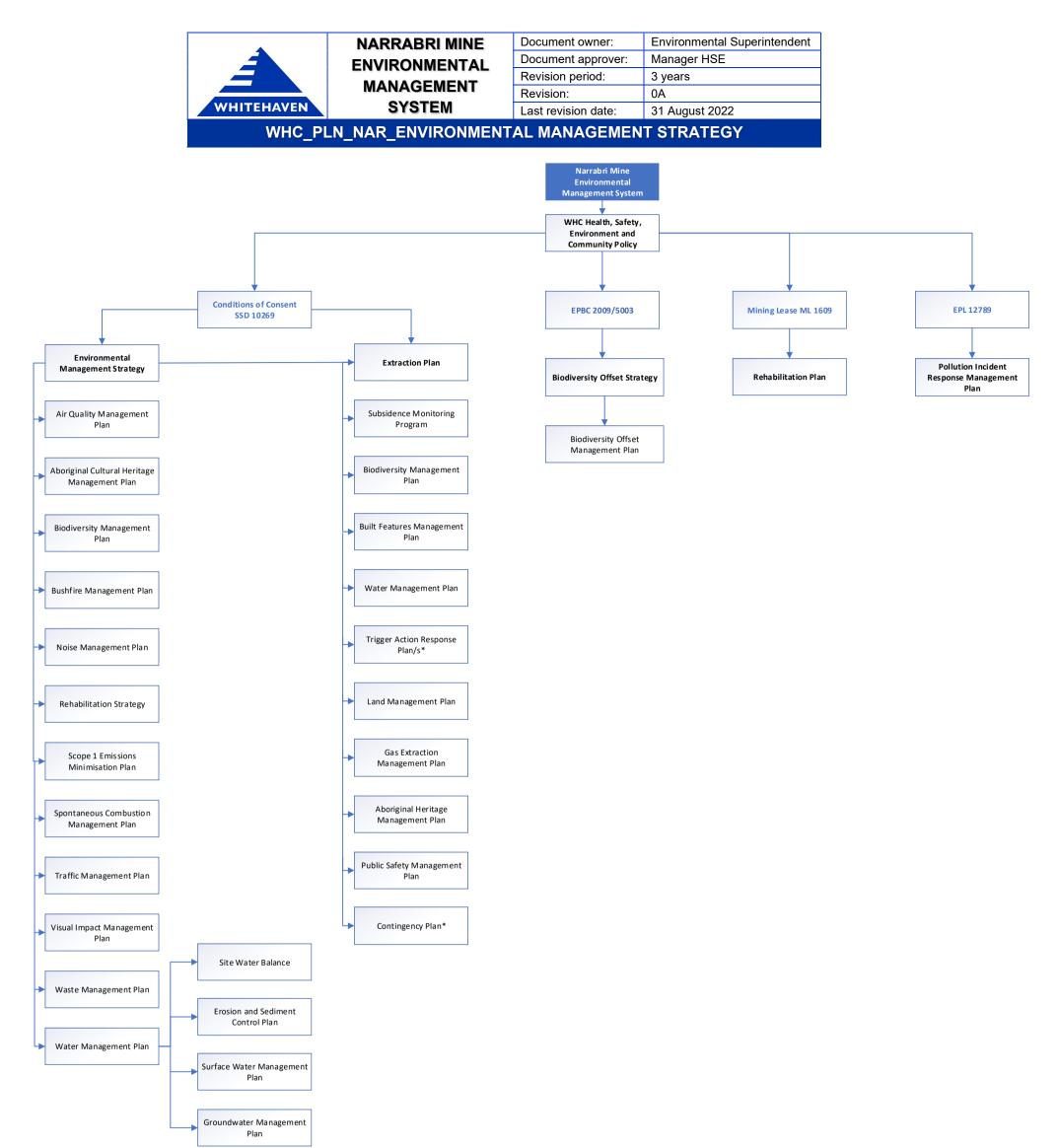
NARRABRI MINE	Document owner:	Environmental Superintendent	
	Document approver:	Manager HSE	
	Revision period:	3 years	
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- impacts and environmental performance of the development; and
- effectiveness of the management measures set out pursuant to paragraph (d);
- a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
- a program to investigate and implement ways to improve the environmental performance of the development over time;
- a protocol for managing and reporting any:

- incident, non-compliance or exceedance of any impact assessment criterion or performance criterion);
- complaint; or
- failure to comply with other statutory requirements;
- public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and
- a protocol for periodic review of the plan.

In accordance with CoC C8, prior to the commencement of second workings, NCOPL must develop an Extraction Plan (or Plans) for the area within the Approved Mine Plan to the satisfaction of the Planning Secretary. Each Extraction Plan (or Plans) will be developed in respect of the land, values and features that may be affected by the second workings only for the proposed longwalls to be mined.

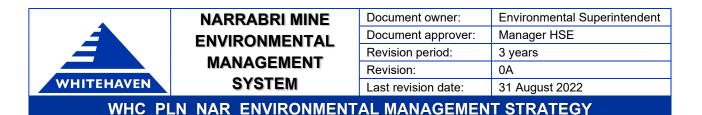
The framework of the Environmental Management System is provided in Figure 4-1. This framework reflects the requirements for the development of individual management plans or strategies under the relevant statutory approvals.



\*The Trigger Action Response Plan and the Contingency Plan required under the Extraction Plan may be detailed within each specific Extraction Plan sub plan to manage potential or actual exceedances of the relevant performance measure/s for that specific environmental aspect.

Figure 4-1 Narrabri Mine environmental management framework

Whitehaven Coal | Narrabri Coal Operations | Environmental Management Strategy | 31 August 2022 |



## 4.3 Environmental monitoring requirements

Each of the environmental management plans listed in Figure 4-1 are supported by a comprehensive environmental monitoring program. Monitoring results for most environmental monitoring aspects are reported on the Narrabri Mine website and on an annual basis in the Narrabri Mine Annual Review (refer to section 9.1) and the EPL Annual Return (refer to section 9.2). The Annual Review is made publicly available on the Narrabri Mine website. Table 4-1 provides a summary of the monitoring required under each individual management plan. Refer to the individual management plan for the full suite of monitoring requirements<sup>1</sup>.

#### Table 4-1 Environmental monitoring summary

Monitoring focus	Monitoring requirement	Corresponding management plan
Aboriginal cultural heritage	<ul> <li>cultural heritage monitors, as representatives of the Registered Aboriginal Parties, are required on site during disturbance activities (i.e. any soil disturbance work within 100 m of a watercourse or drainage line).</li> </ul>	Aboriginal Cultural Heritage Management Plan
	<ul> <li>annual audit of fencing around Aboriginal cultural heritage sites.</li> </ul>	
Air quality	<ul> <li>Particulate matter - PM<sub>10</sub>.</li> <li>Particulate matter - PM<sub>2.5</sub>.</li> <li>Particulates - deposited matter.</li> </ul>	Air Quality Management Plan
	<ul> <li>meteorological monitoring (temperature, humidity, rainfall and wind).</li> </ul>	
Biodiversity	Seasonally based monitoring program to monitor and report on the effectiveness of the management measures, and progress against the detailed performance indicators and completion criteria.	Biodiversity Managemen Plan
Bushfire	<ul> <li>monitor fuel loads.</li> <li>inspections of mobile equipment, fixed plant, buildings, and hazardous material storage areas.</li> </ul>	Bushfire Management Plan
Greenhouse gas emissions	Methane, Carbon Dioxide (CO <sub>2</sub> ), and Oxygen concentrations.	Scope 1 Emissions Minimisation Plan
Noise	<ul> <li>attended noise monitoring to determine compliance with the CoC.</li> </ul>	Noise Management Plan
	<ul> <li>real time noise monitoring in accordance with the NSW Noise Policy for Industry (EPA 2017).</li> </ul>	
	<ul> <li>predictive meteorological forecasting.</li> </ul>	
	<ul> <li>meteorological monitoring (temperature, humidity, rainfall and wind).</li> </ul>	

<sup>&</sup>lt;sup>1</sup> In accordance with CoC E15, any condition under the CoC that requires the carrying out of monitoring whether directly by way of a plan, strategy or program, is taken to be a condition requiring monitoring under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

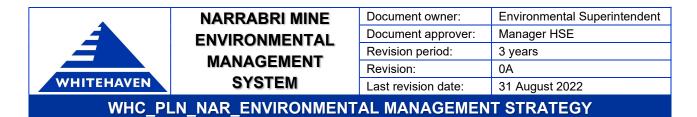


# NARRABRI MINE ENVIRONMENTAL MANAGEMENT SYSTEM

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Revision period:	3 years
Revision:	0A
Last revision date:	31 August 2022

# WHC\_PLN\_NAR\_ENVIRONMENTAL MANAGEMENT STRATEGY

Monitoring focus	Monitoring requirement	Corresponding management plan
Rehabilitation	<ul> <li>analogue site baseline monitoring.</li> </ul>	Rehabilitation
	<ul> <li>rehabilitation establishment monitoring.</li> </ul>	Management Plan
	<ul> <li>measuring performance against rehabilitation objectives and rehabilitation completion criteria.</li> </ul>	
Spontaneous combustion	<ul> <li>real time (telemetric) monitoring system of fixed-point gas monitoring sensors.</li> </ul>	Spontaneous Combustion Management Plan
	• tube bundles.	5
	• gas chromatograph.	
Subsidence	In accordance with the Subsidence Monitoring Program.	Extraction Plan
Traffic	<ul> <li>record keeping of coal transportation.</li> </ul>	Traffic Management Plan
	dilapidation surveys.	
Visual amenity	Visual inspections will be conducted following the development of new infrastructure that requires lighting to assess the measures detailed in the Visual Amenity Management Plan are implemented and comply with the applicable AS and/or guideline	Visual Amenity Management Plan
Waste	Monitor the effectiveness of waste minimisation and management measures.	Waste Management Pla
Water	Surface water:	Water Management Plar
	<ul> <li>mine water and sediment dam water quality.</li> </ul>	
	<ul> <li>treated water discharge volume and quality</li> </ul>	
	• watercourse water quality.	
	• stream flow.	
	Groundwater:	
	<ul> <li>water level and water quality – standpipes and Vibrating Wire Piezometers, including at private landholder bores with a &gt;2m predicted drawdown.</li> </ul>	
	Groundwater Dependent Ecosystems.	
	• groundwater model.	
	Erosion and Sediment Control:	
	<ul> <li>inspections of control devices following a rainfall event Sediment and erosion controls will be inspected following a rainfall event greater than 38.4 mm over any consecutive 5-day period.</li> </ul>	
	<ul> <li>downstream surface water quality.</li> </ul>	
	Site Water Balance:	
	<ul> <li>water storage level and volume.</li> </ul>	
	• water take.	



#### 4.4 Record keeping

NCOPL maintains records of all monitoring to ensure data is managed in a consistent, efficient, and effective manner. Data collected as part of the environmental monitoring program is stored and managed within NCOPL's environmental server and compliance management system (see section 7.7).

Monitoring data is subject to quality assurance (**QA**) and quality control (**QC**) protocols and procedures that ensure data is accurate and usable. Data is subjected to consistent validation and verification procedures. Any data that fails QA and QC procedures is rejected for future use.

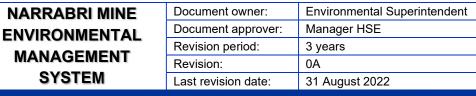
#### 4.5 Document control

This EMS will be maintained in accordance with the Narrabri Mine document control system as follows:

- the master copy will be maintained electronically on the mine server;
- where alterations to the EMS are required, such as following formal review (refer to section 9.5), the Environmental Superintendent will update the master copy and notify the relevant personnel; and
- the Environmental Superintendent or delegate will be the only person with access to the master copy for the purpose of making alterations. Copies of the EMS printed from the mine server must be considered to be uncontrolled copies.

The assigned persons will ensure this EMS and associated records are retained on file for a period of at least 5 years. The results of any monitoring or reporting must be recorded and kept in accordance with the requirements of the specific approval, license, or permit.





# 5. Risk management

#### 5.1 Environmental risk assessment

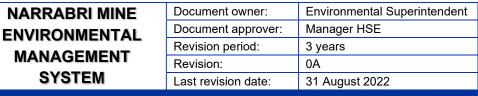
The WHC risk assessment process provides an opportunity for NCOPL personnel to identify risks to the environment and community, prioritise them, assess the suitability of controls and determine if any additional controls are required. The risk assessments are conducted in accordance with the WHC *Risk Management Standard* and include:

- Level 1 Safe Work Method Statement / Work Instruction;
- Level 2 Qualitative Risk Assessment;
- Level 3 Comprehensive Risk Assessment; and
- Broad Brush Risk Assessment.

#### 5.2 Change management

Implications of changes to operations and management are assessed against external and internal risk contexts and additional controls identified and implemented where required. A decision, change or event is significant if it could potentially have a material impact on the achievement of the EMS objectives. The Environmental Superintendent is responsible for maintaining the changes concerning the environment and community.





# 6. Communication

## 6.1 Internal and external communication

Internal communication of information related to this EMS will be undertaken through site-based forums (e.g. toolbox talks [refer to section 10]). Evidence of such undertakings will be recorded and retained.

Dissemination of information to the local community and relevant Government departments and agencies regarding the mine's progress and environmental management performance will be achieved by both formal (e.g. Annual Review, Community Consultative Committee [**CCC**]) and informal means (e.g. community newsletters). NCOPL may also utilise the local press to present feature articles on the mine's progress.

## 6.2 Community Consultative Committee

The CCC is an advisory committee comprising of an independent chair and appropriate representation from NCOPL, NSC and the local community. The CCC acts as a local focal point for the provision of information to, and receipt of comments from, community members. NCOPL representatives provide advice on the status of the mine's progress, environmental performance, and monitoring results, and any received complaints. The CCC meetings act as a forum for discussion of each of the above aspects or any other issue brought up by members of the community through the CCC representatives, or directly with the NCOPL.

In accordance with CoC A19, NCOPL will operate the CCC for the life of mine (or other timeframe agreed by the Planning Secretary) in accordance with the NSW Government's *Community Consultative Committee Guidelines: State Significant Projects* (2019).

# 6.3 Access to information

In accordance with CoC E17, NCOPL will make the following information and documents publicly available on its website:

- the EIS;
- all current statutory approvals for the development;
- all approved strategies, plans and programs required under the CoC;
- the proposed staging plans for the development if construction, mining operations or decommissioning is to be staged;
- minutes of CCC meetings;
- regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the CoC;
- a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of consent, or any approved plans and programs;
- a summary of the current phase and progress of the development;
- contact details to enquire about the development or to make a complaint;
- a complaints register, updated monthly;
- the Annual Reviews of the development;



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- audit reports prepared as part of any Independent Environmental Audit of the development and NCOPLs response to the recommendations in any audit report; and
- any other matter required by the Planning Secretary.

NCOPL will keep the above information up to date, to the satisfaction of the Planning Secretary.



# 7. Incident reporting and emergency response

#### 7.1 Response to emergencies

The Narrabri Mine Emergency Response Procedure, primarily developed in accordance with the NSW Work Health and Safety requirements, extends to environmental emergencies.

NCOPL have specific procedures for specific types of emergencies, which all incorporate the following three basic steps:

- 1. Protection of personnel as a first priority.
- 2. Notification of the emergency (internal and/or external).
- 3. Protection of the environment, plant, and equipment.

Initially steps (1) and (3) would use internal resources, with assistance from external resources called upon as and when necessary.

## 7.2 Incident notification

An incident is defined under the CoC as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

Material harm, as defined under the CoC, is harm to the environment that:

involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or

results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)

This definition excludes "harm" that is authorised under either the CoC or any other statutory approval (e.g., EPL).

In accordance with CoC E9, NCOPL will notify DPE and any other relevant agencies immediately as it becomes aware of an incident. Incident notification will be made in writing via the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

Notifications to the NSW Environment Protection Authority (**EPA**) will be made by contacting the Environment Line on 131 555 and written details of the notification will be provided within 7 days of the date on which the incident occurred.

## 7.3 Non-compliance

The CoC defines a non-compliance as *an occurrence, set of circumstances or development that is a breach of this consent.* For clarity, 'this consent' is referring to development consent SSD 10269.



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In accordance with CoC E4, where an exceedance of the relevant criteria or performance measures has occurred, NCOPL will, at the earliest opportunity, take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur. All reasonable and feasible options for remediation (where relevant) will be considered and a report submitted to the DPE describing those options and any preferred remediation measures or other course of action

In accordance with CoC E10, within seven days of becoming aware of a non-compliance, NCOPL will notify DPE of the non-compliance<sup>2</sup>. The notification will be made in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the CoC that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

NCOPL will implement any reasonable remediation measures as directed by the Planning Secretary, to the satisfaction of the Planning Secretary.

# 7.4 Independent Review

In accordance with CoC D7, if a landowner considers the Narrabri Mine to be exceeding any air quality or noise relevant criterion, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.

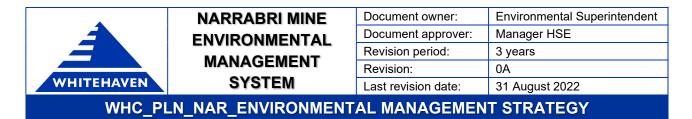
In accordance with CoC D8, the Planning Secretary will notify the landowner in writing if an independent review is not warranted. In accordance with CoC D9, if the Planning Secretary is satisfied that an independent review is warranted, NCOPL must within 3 months:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
  - (i) consult with the landowner to determine their concerns;
  - (ii) conduct monitoring to determine whether the development is complying with the relevant criteria in PART B of the CoC; and
  - (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with relevant criterion; and
- (b) give the Planning Secretary and landowner a copy of the independent review; and
- (c) comply with any written requests made by the Planning Secretary to implement and findings of the review

# 7.5 Land acquisition

If a written request for acquisition from a landowner is made, NCOPL will follow the process in accordance with CoC D10 to CoC D17.

<sup>&</sup>lt;sup>2</sup> A non-compliance which has been notified as an incident under section 7.2 does not need to be notified as a non-compliance under section 7.3.



## 7.6 Trigger action response plans

NCOPL will assess and manage any potential or actual exceedance of the performance criteria in accordance with the relevant Trigger Action Response Plan (**TARP**). Each TARP sets out the triggers and a set of actions which must be implemented when a trigger event occurs. Actions may include further monitoring and/or investigation to identify reasonable and feasible measures to ensure that the exceedance ceases and does not recur.

## 7.7 Compliance management system

NCOPL utilise a compliance management system<sup>3</sup> (**CMO**) to document legislative and statutory approval obligations and evidence of compliance. The CMO enables the scheduling of environmental management actions to maintain compliance.

<sup>&</sup>lt;sup>3</sup> Mitratech Compliance Manager (CMO)



# 8. Complaint management and dispute resolution

Any complaints received in relation to environmental management will be managed in accordance with the complaints management protocol as follows:

- publicly advertised telephone complaints line, 1800WHAVEN, will be in place to receive complaints.
- each complaint received will be recorded in a Complaints Register, which will include the following details:
  - date and time of complaint;
  - method by which a complaint was made;
  - personal details the complainant wishes to provide or, if no such details are provided, a note to that effect;
  - nature of the incident that led to the complaint;
  - action taken by NCOPL in relation to the complaint (i.e., any required remedial actions), including any follow-up contact with the complainant; and
  - if no action was taken, the reason why no action was taken.
- the Environmental Superintendent will be responsible for ensuring that an initial response is provided within 24 hours of receipt of a complaint (except in the event of complaints recorded when the mine is not operational or outside of usual business hours).
- once the identified measures are undertaken, the Environmental Superintendent will sign off on the relevant complaint within the Complaints Register.
- if necessary, follow-up monitoring will take place to confirm the source of the complaint is adequately mitigated.
- a summary of the complaints will be maintained by NCOPL and made available to the CCC, the complainant (on request) and on the WHC website. A summary of complaints received every 12 months will be provided in the Annual Review.

In the event that any complainant considers that NCOPL has not adequately addressed their concerns, the NCOPL representative will convene additional meetings with the complainant. If the complainant believes the matter remains unresolved, and no further agreement can be reached as to additional measures to be undertaken, then they may refer the matter to DPE.



# 9. Reporting and evaluation

## 9.1 Annual Review

NCOPL will review the performance of its EMS for the previous calendar year and report results within the Annual Review to the satisfaction of the Planning Secretary and in accordance with CoC E11.

The Annual Review, as required under CoC E12, will be submitted to DPE, the IAPUM (via DPE as Secretariat), NSC and GSC, and other regulatory agencies and made available to the CCC and any interested person upon request. The Annual Review will also be made publicly available on the WHC website. It will:

- describe the development (including any rehabilitation) that was carried out in the previous year, and the development that is proposed to be carried out over the current year;
- include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the:
  - relevant statutory requirements, limits or performance measures/criteria;
  - requirements of any project plan or program required under the CoC;
  - monitoring results of previous years; and
  - relevant predictions documented in the EIS;
- identify any non-compliance or incidents and describe what actions were or are being taken to rectify the non-compliance and avoid reoccurrence;
- evaluate and report on:
  - the effectiveness of the noise and air quality management systems; and
  - compliance with the performance measures, criteria and operating conditions of the CoC;
- include an addendum report on Scope 1 and Scope 2 greenhouse gas emissions (GHGE), which reports:
  - annual methane and annual total CO<sub>2</sub>-e emissions (both categorised by source) and emissions intensity (based on ROM coal production);
  - overall annual emissions intensity, benchmarked against representative industry sectors and the predictions in the EIS, and performance measures in Table 3 of the CoC; and
  - measures undertaken to minimise Scope 1 and Scope 2 GHGE, including actions under CoC B19, and estimated reductions in CO<sub>2</sub>-e as a result of measures implemented;
- identify any trends in the monitoring data over the life of the development;
- identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.

The Annual Review will be prepared in accordance with the *Post-approval requirements for State significant mining developments Annual Review Guideline* (October 2015).



## 9.2 EPL Annual Return

In accordance with Condition R1 of EPL 12789, NCOPL will submit an Annual Return to the EPA within 60 days after the end of the reporting period (anniversary date). The Annual Return is to include the following:

- Statement of Compliance
- Monitoring and Complaints Summary
- Statement of Compliance Licence Conditions
- Statement of Compliance Load based Fee
- Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan
- Statement of Compliance Requirement to Publish Pollution Monitoring Data
- Statement of Compliance Environmental Management Systems and Practices.

# 9.3 EPBC compliance reporting

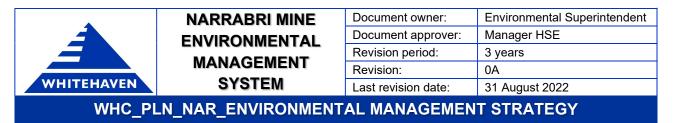
Condition 8 of EPBC 2009/5003 requires NCOPL to provide a report to the Commonwealth Department demonstrating compliance with the conditions of the approval over the previous 12 months, within three months of every 12-month anniversary of commencement of the action. The report must include details of how the plans required by the conditions of the approval have been implemented. Annual reports must be provided until the Minister is satisfied that NCOPL has complied with all conditions of the approval.

# 9.4 Independent Environmental Audit

Within one year of commencement of the development, and every three years thereafter (unless the Planning Secretary directs otherwise), NCOPL will commission an Independent Environmental Audit (**IEA**) of the development, to be conducted in accordance with CoC E13 and CoC E14. The IEA must:

- be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;
- be carried out in consultation with the relevant agencies and the CCC;
- assess the environmental performance of the development and whether it is complying with the relevant requirements of the CoC, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals [i.e. relevant statutory approvals]);
- review the adequacy of any approved strategy, plan or program required under the relevant statutory approvals;
- recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the relevant statutory approvals; and
- be conducted and reported to the satisfaction of the Planning Secretary.

Within three months of commencing an IEA, or other timeframe agreed by the Planning Secretary, NCOPL must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the



implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.

In accordance with CoC E15, any condition under the CoC that requires an environmental audit, whether directly by way of a plan, strategy or program, is taken to be a condition requiring an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

#### 9.4.1 Government department audits

NCOPL will maintain regular communication with relevant Government departments and agencies. Visits by the EPA, the Resource Regulator and DPE may occur from time to time for inspections of the mine site. NCOPL'S performance will be documented, together with the provision of reports or information as requested.

#### 9.5 EMS review and evaluation

In accordance with CoC E7, NCOPL will review the suitability of the EMS within three months of the:

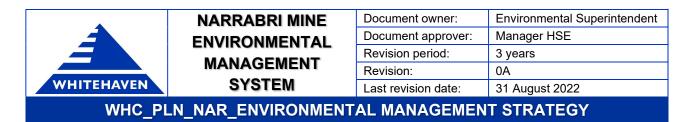
- submission of an incident report under CoC E9 or E10;
- submission of an Annual Review under CoC E11;
- submission of an IEA under CoC E13;
- approval of any modification of the CoC (unless the conditions require otherwise); or
- notification of a change in development phase under CoC A14.

In accordance with CoC A14, NCOPL will notify the Department in writing at least two weeks prior to the date of commencement of each of the following development phases:

- physical commencement of the development;
- construction;
- mining operations;
- extraction of ROM coal;
- land clearance for each of the Development Footprint Disturbance Phases specified in Table 7 of the CoC (including confirmation of the retirement of all applicable biodiversity credits);
- any period of suspension of ROM coal extraction and/or processing (i.e. care and maintenance);
- cessation of mining operations (i.e. mine closure); and
- decommissioning.

As required by CoC E8, if the review under CoC E7 determines that the EMS requires revision to either improve the environmental performance of the development, cater for a modification, or comply with a direction, the revised document will be submitted to the Planning Secretary for approval within six weeks of the review. The revision status of this EMS is indicated in section 13.

A dedicated review register will be maintained which will provide the details of the review of all relevant strategies, plans and programs that need to be reviewed as required by CoC E7.



In addition to the formal means of monitoring the performance of this EMS, every person who performs a function defined by this EMS has a responsibility to monitor the performance of this EMS and to bring to the attention of the Environmental Superintendent any non-conformance, deviation, or potential improvement of which they may become aware.

# 9.6 Corrective Action Plan

Where review of the EMS and associated environmental management plans, strategies and programs identifies the need for corrective action to be taken, the Environmental Superintendent will implement a corrective action plan. Preparation of the plan may require the assistance of internal and external specialists. Details on the corrective action plan will be included in the relevant Annual Review and Annual Return and forwarded to the relevant Government agencies in the instance where there is a non-compliance with statutory approval conditions as detailed in section 7.3.

#### 9.7 Improvement measures

In accordance with CoC E5(g), all environmental management plans required by the CoC must include a program to investigate and implement ways to improve the environmental performance of the development over time; and CoC E5(j) states that all environmental management plans required under the CoC are to include a protocol for periodic review. The protocol for review of this EMS is set out by CoC E7, E8 and E11, which have been addressed in section 9.5.

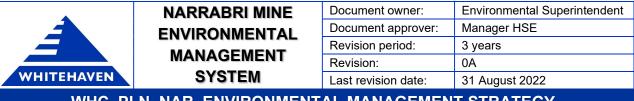
#### 9.8 Adaptive management

CoC E4 requires NCOPL to assess and manage risks to ensure that there are no exceedances of the CoC criteria and performance measures. As discussed in section 7.3, any exceedance of these criteria or performance measures constitutes a breach of the consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria or performance measures has occurred, NCOPL must, at the earliest opportunity:

- take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur (refer to section 7.6);
- consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- implement reasonable remediation measures as directed by the Planning Secretary.

The above actions must be to the satisfaction of the Planning Secretary.



# **10. Training, awareness and competence**

To ensure this EMS is effectively implemented for the life of mine, each level of management is responsible for ensuring that all personnel reporting to them are aware of its requirements.

All training, competency assessment, and maintenance of training records in relation to this EMS will be conducted in line with WHC training requirements.

## 10.1 Site induction

Prior to starting work at Narrabri Mine, all personnel and contractors will undertake a site-specific induction covering key environmental management aspects. This is done to ensure all personnel involved in the development are aware of the requirements of the EMS, and to ensure the implementation of environmental management measures. Short-term visitors to site for purposes such as deliveries or equipment servicing will be always accompanied by inducted person.

The Narrabri Mine site induction process includes the Narrabri Environmental Management Plans package.

#### 10.2 Pre-start meeting

Daily pre-start meetings with site personnel will occur throughout the life of mine and will generally take place before the commencement of work each day (or shift) or where changes occur during a shift. The pre-start meeting is a tool for informing shift personnel of the day's activities. Safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination with other activities, hazards and risks and other information that may be relevant to the day's activities are discussed.

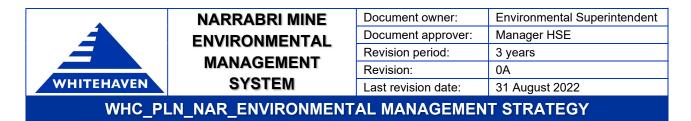
The environmental component of pre-starts will be determined by the relevant environmental personnel and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities.

#### 10.3 Toolbox talks

Toolbox talks will be used to raise awareness and educate personnel on issues related to environmental risk. Topics for discussion may include:

- vegetation clearing and protection;
- erosion, sedimentation and soil management;
- noise and air quality management;
- management of identified cultural heritage items; and
- emergency procedures.

A record will be made of all present in toolbox meetings and the items discussed.

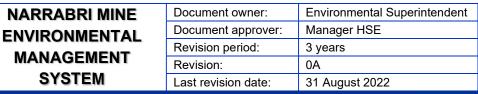


#### 10.4 Environmental awareness training

All environmental personnel will be trained appropriately to ensure that the implementation of the EMS is conducted efficiently. In addition to the site induction, toolbox talks, and prestart meetings, specific employees and contractors may be provided with additional environmental awareness and management training related to field activities relevant to their roles (e.g. training in the design and the implementation of erosion and sedimentation controls). Targeted environmental awareness training may also be provided to individuals or groups with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact.

The Safety and Training department, in consultation with the Environmental Superintendent, is responsible for coordinating the environmental training program in line with WHC training requirements.





# **11. References**

Australian Government Department of Agriculture, Water and the Environment (March 2021). Variation of Conditions Attached to Approval Narrabri Coal Mine, Stage 2 Longwall Project, Narrabri, NSW (EPBC 2009/5003)

Forestry Corporation of NSW. Forest Permit Level 2

- NSW Environment Protection Authority (March 2020). Environment Protection Licence 12879
- NSW Department of Planning and Environment (2010). Project Approval 08\_0144 Consolidated Consent
- NSW Independent Planning Commission (April 2022). *Development Consent SSD 10269, Narrabri Underground Mine Stage 3 Extension Project.*
- NSW Government (October 2015) Post-approval requirements for State significant mining developments Annual Review Guidelines

NSW Government (January 2019) Community Consultative Committee Guideline State Significant Projects

NSW Minister for Mineral Resources (January 2008). Mining Lease No 1609

Resource Strategies Pty Ltd (October 2020) Narrabri Underground Mine Stage 3 Extension Project – Environmental Impact Statement. Prepared for Narrabri Coal Operations Pty Ltd.



Document owner:	Environmental Superintendent	
Document approver:	Manager HSE	
Revision period:	3 years	
Revision:	0A	
Last revision date:	31 August 2022	

WHC\_PLN\_NAR\_ENVIRONMENTAL MANAGEMENT STRATEGY

# 12. Glossary

Term	Definition <sup>4</sup>
Adaptive management	Adaptive management includes monitoring subsidence impacts and subsidence effects and based on the results, modifying the mining plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and designated ranges and in compliance with the CoC.
Analogue	a monitoring site comparable to another.
Annual review	The review required by CoC E11.
Applicant	Narrabri Coal Operations Pty Ltd.
Conditions of Consent (CoC)	SSD 10269 issued under s4.38 of the EP&A Act.
Construction	The carrying out of all physical works to enable mining operations to be carried out and decommissioning, including erection of buildings, infrastructure and other works and demolition, but not including pre-construction activities.
Date of commencement of the development	The date notified to the Department by the Applicant under CoC A14(a).
Decommissioning	The permanent cessation of active use of the mine, including demolition of buildings, infrastructure and other works.
Department	The NSW Department of Planning and Environment (DPE).
Development	The Stage 3 development described in the Stage 3 EIS as modified by the CoC.
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.
Environmental consequences	The environmental consequences of subsidence impacts, including damage to built features; loss of surface water flows to the subsurface; loss of standing pools; slope changes to streams; adverse water quality impacts; development of iron bacterial mats; cliff falls; rock falls; landslides; damage to Aboriginal heritage sites; impacts on aquatic ecology; and ponding.
Environmental Impact Statement	The Environmental Impact Statement titled Narrabri Underground Mine Stage 3 Extension project – Environmental Impact Statement, prepared by Resource Strategies Pty Ltd on behalf of the Applicant and dated October 2020, as amended or added to by the Applicant's Submissions Report submitted 31 May 2021, the Applicant's Amendment Report submitted 31 May 2021, the Applicant's final Biodiversity Development Assessment Report dated September 2021, and the Applicant's Additional Information on GHGEs dated 15 October 2021 and 17 December 2021.
Groundwater	Water contained in the interconnected pore spaces and voids of the saturated zone of sediments and rocks.
IAPUM	Independent Advisory Panel for Underground Mining, or similar independent panel established by the Department or NSW Government.
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.
Longwall	A form of underground coal mining where a long wall of coal is mined in a single slice.
Material harm	Material harm to the environment is defined in the CoC (SSD 10269).
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development.

<sup>&</sup>lt;sup>4</sup> The majority of the definitions are as provided in Development Consent SSD 10269.



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Term	Definition <sup>4</sup>
Mining Operations	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material; and includes underground development necessary for mining operations to be carried out (such as installation and use of electricity, water, communications and other services and infrastructure).
Mitigation	Activities associated with reducing the impacts of the development.
Narrabri Mine	The development approved under the CoC, together with the development approved under project approval 05_0102 and project approval 08_0144.
Non-compliance	An occurrence, set of circumstances or development that is a breach of the conditions of the statutory approvals.
Planning Secretary	Planning Secretary under the EP&A Act, or nominee.
Pollution incident	Has the same meaning as in the POEO Act.
Rehabilitation	The restoration of land disturbed by the development to ensure it is safe, stable and non-polluting over the short, medium and long term.
Second workings	The extraction of coal from underground workings by longwall, miniwall, pillar extraction, pillar splitting or pillar reduction methods.
Stage 2	Narrabri Mine Stage 2 approved under project approval 08_0144.
Stage 3	Narrabri Underground Mine Stage 3 Extension Project approved under development consent SSD 10269.
Subsidence	The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts.
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
the Policy	Whitehaven Coal Limited's <i>Health, Safety, Environment and Communities Policy</i> .
Watercourse	A river, creek or other stream, including a stream in the form of an anabranch or tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events: In a natural channel, whether artificially modified or not, or in an artificial channel that has changed the course of the stream. It also includes weirs, lakes and dams.
Water sharing plan	Legislated plans under the <i>Water Management Act 2000</i> that establish rules for sharing water between the environment and water users. Water licences are issued to water users in accordance with water sharing plans.



NARRABRI MINE	Document owner:	Environmental Superintendent
ENVIRONMENTAL	Document approver:	Manager HSE
	Revision period:	3 years
MANAGEMENT	Revision:	0A
SYSTEM	Last revision date:	31 August 2022

# 13. Review history

Revision	Comments	Author	Authorised by	Date
0A	Approved by Department of Planning and Environment on 23 December 2022	Onward Consulting	Manager HSE	31 August 2022



Shane Rily Environmental Superintendent Narrabri Coal Operations Pty Ltd 10 Kurrajong Creek Road Baan Baa, NSW, 2390

23/12/2022

#### Subject: Environmental Management Strategy for Narrabri Coal Stage 3 (SSD-10269)

Dear Mr. Rily,

I refer to your submission, requesting review and approval of the Environmental Management Strategy for the Narrabri Coal Stage 3 project. I also acknowledge your response to the Department's review comments and request for additional information.

The Department has carefully reviewed the document and is satisfied that it meets the requirements of the relevant conditions in Development Consent (SSD-10269).

Accordingly, as nominee of the Planning Secretary, I approve the Environmental Management Strategy (Rev 0A, dated 31 August 2022).

Please ensure you make the document publicly available on the project website at the earliest convenience.

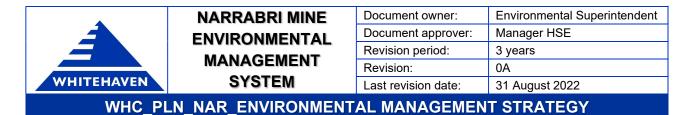
If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely

Stephen O'Donoghue Director Resource Assessments <u>As nominee of the Planning Secretary</u>



# **Appendix A Compliance conditions relevant to this EMS**



## Table A-1 SSD 10269 consent conditions directly relevant to this EMS

Condition	Requirement	Document reference
Obligation to	minimise harm to the environment	
A1.	In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	Section 4 Section 5 Section 7.3 Section 9.8
Notification of	f commencement	
A14.	<ul> <li>The date of commencement of each of the following phases of the development must be notified to the department in writing, at least two weeks before that date: <ul> <li>(a) physical commencement of the development;</li> <li>(b) construction;</li> <li>(c) mining operations;</li> <li>(d) extraction of ROM coal;</li> <li>(e) land clearance for each of the Development Footprint Disturbance Phases specified in Table 7 (including confirmation of the retirement of all applicable biodiversity credits);</li> <li>(f) any period of suspension of ROM coal extraction and/or processing (i.e. care and maintenance);</li> <li>(g) cessation of mining operations (i.e. mine closure); and</li> <li>(h) decommissioning.</li> </ul> </li> </ul>	Section 9.5
Surrender of S	Stage 2 Consent	
A16.	Within 12 months of the date of commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender development consent 08_0144 for the Narrabri Coal Project - Stage 2, in accordance with the EP&A Regulation.	Section 3.1.1
A17.	Upon the commencement of development under this consent and before the surrender of development consent 08_0144 as required under condition A16, the conditions of this consent prevail to the extent of any inconsistencies with the conditions of development consent 08_0144.	
Planning Agre	ement	
A18.	<ul> <li>Within six months of the date of commencement of development, or other timeframe agreed by the Planning Secretary, the Applicant must enter into Planning Agreements with the NSC and the GSC in accordance with:</li> <li>(a) Subdivision 2 of Division 7.1 of Part 7 of the EP&amp;A Act; and</li> <li>(b) the terms of the Applicant's offer in Appendix 5.</li> </ul>	Section 3.8
Community C	onsultative Committee	
A19.	The Applicant must continue to operate the Narrabri Mine Community Consultative         Committee (CCC) established under development consent 08_0144. The CCC must         be operated in accordance with the Department's Community Consultative         Committee Guidelines: Stage Significant Projects (2019). The CCC must continue to         operate during the life of the development, or other timeframe agreed by the         Planning Secretary.         Notes:         • The CCC is an advisory committee only	Section 6.2
	<ul> <li>In accordance with the Guidelines., the Committee should comprise an independent chair and appropriate representation from the Applicant, NSC and the local</li> </ul>	



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Condition	Requirement	Document reference
A20.	Where conditions of this consent require consultation with an identified party, the	Section 4.2
	Applicant must: a) consult with the relevant party prior to submitting the subject document;	
	and b) provide details to the Department of the consultation undertaken including:	
	<ul> <li>i) the outcome of that consultation, matters resolved and unresolved;</li> </ul>	
	and	
	<ul> <li>details of any matters not resolved between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.</li> </ul>	
Staging, com	bining and updating strategies, plans or programs	
A21.	With the approval of the Planning Secretary, the Applicant may:	
	<ul> <li>a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);</li> </ul>	Section 4.2
	<ul> <li>b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);</li> </ul>	
	<ul> <li>c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development); and</li> </ul>	
	d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by an adjoining mining consent or approval, in common ownership or management.	
A23.	If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without the consultation being undertaken with all parties required to be consulted in the relevant condition in this consent.	
Compliance		1
A30.	The Applicant must ensure that all of its employees, contractors (and their sub- contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Section 2 Section 10
Applicability	of Guidelines	
A31.	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) in the condition.	Section 3.9
A32.	However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or replacement of them.	
Extraction Pla	an	
C8.	The Applicant must prepare an Extraction Plan (or Plans) for all second workings within the area of the Approved Mine Plan to the satisfaction of the Planning Secretary. Each Extractio Plan must:	Section 4.2
Independent	Review	
D7.	If a landowner considers the development to be exceeding any air quality or noise relevant criterion in PART B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.	Section 7.4





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Condition	Requirement	Document reference
D8.	If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.	
D9.	If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must:	
	<ul> <li>a) Commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:</li> </ul>	
	i) Consult with the landowner to determine their concerns;	
	ii) Conduct monitoring to determine whether the development is complying with the relevant criteria in PART B; and	
	iii) If the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with relevant criterion; and	
	<ul> <li>b) Give the Planning Secretary and landowner a copy of the independent review; and</li> </ul>	
	<ul> <li>c) Comply with any written requests made by the Planning Secretary to implement and findings of the review</li> </ul>	
Land Acquisit	lion	
D10.	Within 3 months of receiving a written request for acquisition from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowners based on:	Section 7.5
	<ul> <li>a) The current market values of the landowner's interest in the land at the data of this written request, as if the land was unaffected by the development, having regard to the:</li> </ul>	
	<ul> <li>Existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> </ul>	
	<ul> <li>Presence of improvements on the land and/or any approved building structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise and/or air quality mitigation measures in condition D2;</li> </ul>	
	b) The reasonable costs associated with:	
	<ul> <li>Relocating within the Narrabri or Gunnedah local government areas, or to any other local government area determined by the Planning Secretary; and</li> </ul>	
	<ul> <li>Obtaining independent legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and</li> </ul>	
	<ul> <li>c) Reasonable compensation for any disturbance caused by the land acquisition process</li> </ul>	
D11.	If, within two months of the binding written offer being made under condition D10, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.	
D12.	Upon receiving such a request, the Planning Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:	



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Condition	Requirement		
	a) Consider submissions from both parties;		
	<ul> <li>b) Determine a fair and reasonable acquisition price for the land and/or terms upon which the land is to be acquired, having regard to the matters referred to in condition D10;</li> </ul>		
	c) Prepare a detailed report setting out the reasons for any determination; and		
	d) Provide a copy of the report to both parties.	_	
D13.	Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.		
D14.	However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, either party may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in condition D10, the independent valuer's determination and any other relevant submissions.		
D15.	Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary's determination.		
D16.	If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.		
D17.	The Applicant must pay all reasonable costs associated with the land acquisition process described in conditions D10 to D16 inclusive, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.		
Environmenta	al Management Strategy		
E1.	The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:		
	<ul> <li>a) provide the strategic framework for environmental management of the development;</li> </ul>	Section 4	
		Section 3	
	b) identify the statutory approvals that apply to the development;	Section 5	
	<ul> <li>b) identify the statutory approvals that apply to the development;</li> <li>c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> </ul>	Section 2	
	c) set out the role, responsibility, authority and accountability of all key personnel		
	<ul> <li>c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> </ul>	Section 2 Section 6 Section 9.1 Section 9.2	
	<ul> <li>c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>d) set out the procedures to be implemented to: <ul> <li>i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> </ul> </li> </ul>	Section 2 Section 6 Section 9.1 Section 9.2 Section 9.3	
	<ul> <li>c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>d) set out the procedures to be implemented to: <ul> <li>i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>ii) receive record, handle and respond to complaints;</li> </ul> </li> </ul>	Section 2 Section 6 Section 9.1 Section 9.2 Section 9.3 Section 8	
	<ul> <li>c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>d) set out the procedures to be implemented to: <ul> <li>i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> </ul> </li> </ul>	Section 2 Section 6 Section 9.1 Section 9.2 Section 9.3	
	<ul> <li>c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>d) set out the procedures to be implemented to: <ul> <li>i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>ii) receive record, handle and respond to complaints;</li> </ul> </li> </ul>	Section 2 Section 6 Section 9.1 Section 9.2 Section 9.3 Section 8 Section 7.4 Section 7.5	



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Condition	Requirement		
		Section 7.3	
		Section 7.6	
	e) include:		
	i) references to any strategies, plans and programs approved under the conditions of this consent; and	Section 4.2	
	<ul> <li>a clear plan depicting all the monitoring to be carried out under the conditions of this consent.</li> </ul>	Section 4.3	
Ξ2.	The Applicant must not commence construction until the Environmental Management Strategy is approved by the Planning Secretary	Section 1.2	
Ξ3.	The Applicant must implement the Environmental Management Strategy as approved by the Planning Secretary.		
Adaptive man	agement	1	
E4.	The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:	Section 5	
	a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;	Section 7.3 Section 7.6	
	<ul> <li>b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li> </ul>	Section 9.8	
	c) implement reasonable remediation measures as directed by the Planning Secretary.		
	To the satisfaction of the Planning Secretary.		
Management I	Plan requirements		
Ξ5.	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:		
	a) summary of relevant background or baseline data;	Section 1.1	
	b) details of:		
	<ul> <li>i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> </ul>	Section 3	
	ii) any relevant limits or performance measures and criteria; and	Refer to individual management plans	
	<ul> <li>iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul>	Refer to individual management plans	
	<ul> <li>c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);</li> </ul>	Section 3.1.1	
	<ul> <li>a description of the management measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;</li> </ul>	Refer to individual management plans	



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Condition	Requirement	Document reference
	e) a program to monitor and report on the:	
	i) impacts and environmental performance of the development; and	Section 4.3
	<ul><li>ii) effectiveness of the management measures set out pursuant to paragraph (d);</li></ul>	Refer to individual management plans
	<ul> <li>a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</li> </ul>	Section 7.6
	<ul> <li>g) a program to investigate and implement ways to improve the environmental performance of the development over time;</li> </ul>	Section 9.5
	h) a protocol for managing and reporting any:	
	<ul> <li>incident, non-compliance or exceedance of any impact assessment criterion or performance criterion;</li> </ul>	Section 7.2 Section 7.3
	ii) complaint; or	Section 8
	iii) failure to comply with other statutory requirements;	Section 7.3
	<ul> <li>i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and</li> </ul>	Section 6.3
	j) a protocol for periodic review of the plan.	Section 9.5
Ξ6.	The Applicant must ensure that management plans prepared for the development are consistent with the conditions of this consent and any EPL issued for the site.	Section 3.1.1 Section 3.2.1
Revision of stra	itegies, plans and programs	1
Ξ7.	Within three months of the:	Section 9.5
	a) submission of an incident report under condition E9 or E10;	-
	b) submission of an Annual Review under condition E11;	-
	c) submission of an Independent Environmental Audit under condition E13;	
	<ul> <li>approval of any modification of the conditions of this consent (unless the conditions require otherwise); or</li> </ul>	
	e) notification of a change in development phase under condition A14,	
	the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.	
E8.	If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.	
	<b>Note</b> : This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.	
Incident notific	ation	
E9.	The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Section 7.2



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Condition	Requirement	Document reference
E10.	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the noncompliance. The Notification must be in writing via the Department's Major Projects Website And identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance	Section 7.3
	Note: A non-compliance which has been notified as an incident does not need to also be	
Annual Review	notified as a non-compliance.	
E11.	By the end of March in each year after the commencement of the development, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;	Section 9.1
	<ul> <li>(b) include a comprehensive review of the monitoring results and complaints record of the development over the previous calendar year, including a comparison of these results against the:         <ul> <li>(i) relevant statutory requirements, limits or performance</li> </ul> </li> </ul>	
	<ul> <li>measures/criteria;</li> <li>(ii) requirements of any plan or program required under this consent;</li> <li>(iii) monitoring results of previous years; and</li> <li>(iv) relevant predictions in the document/s listed in condition A2(c);</li> <li>(c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to</li> </ul>	
	<ul> <li>rectify the non-compliance and avoid reoccurrence;</li> <li>(d) evaluate and report on:         <ul> <li>(i) the effectiveness of the noise and air quality management systems; and</li> <li>(ii) compliance with the performance measures, criteria and operating</li> </ul> </li> </ul>	
	<ul> <li>conditions of this consent;</li> <li>(e) include an addendum report on Scope 1 and Scope 2 GHGE, which reports:         <ul> <li>(i) annual methane and annual total CO<sub>2-e</sub> emissions (both categorised by source) and emissions intensity (based on ROM coal production);</li> </ul> </li> </ul>	
	<ul> <li>(ii) overall annual emissions intensity, benchmarked against representative industry sectors and the predictions in the EIS, and performance measures in Table 3; and</li> <li>(iii) measures undertaken to minimise Scope 1 and Scope 2 GHGE, including actions under condition B19, and estimated reductions in CO<sub>2-e</sub> as a result of measures implemented;</li> </ul>	
	<ul> <li>(f) identify any trends in the monitoring data over the life of the development;</li> <li>(g) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</li> <li>(h) describe what measures will be implemented over the next calendar year to</li> </ul>	
	improve the environmental performance of the development.	
E12.	Copies of the Annual Review must be submitted to the IAPUM (via the Department as Secretariat), NSC and GSC and regulatory agencies and made available to the CCC and any interested person upon request.	Section 9.1





Document owner:	Environmental Superintendent
Document approver:	Manager HSE
Revision period:	3 years
Revision:	0A
Last revision date:	31 August 2022

Condition	Requirement	Document reference
E13.	Within one year of commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development.	
E14.	Within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.	
	<b>Note</b> : The audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Planning Secretary.	
Monitoring an	d environmental audits	
E15.	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit. <b>Note:</b> For the purpose of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented	Section 9.4
A	evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.	
Access to info		
E17.	Before the commencement of construction until the completion of all rehabilitation required under this consent, the Applicant must:	
	<ul> <li>a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:</li> </ul>	Section 6.3
	<li>(i) the documents referred to in condition A2(c) of this consent;</li>	
	ii) (ii) all current statutory approvals for the development;	
	<li>iii) (iii) all approved strategies, plans and programs required under the conditions of this consent;</li>	
	<ul> <li>iv) (iv) the proposed staging plans for the development if construction, mining operations or decommissioning is to be staged;</li> </ul>	
	v) (v) minutes of CCC meetings;	
	<ul> <li>vi) (vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;</li> </ul>	
	<ul> <li>vii) (vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li> </ul>	
	viii)(viii) a summary of the current phase and progress of the development;	
	ix) (ix) contact details to enquire about the development or to make a complaint;	
	x) (x) a complaints register, updated monthly;	
	xi) (xi) the Annual Reviews of the development;	
	<ul> <li>xii) (xii) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report;</li> </ul>	
	xiii)(xiii) any other matter required by the Planning Secretary; and	

	NARRABRI MINE	Document owner:	Environmental Superintendent	
	ENVIRONMENTAL	Document approver:	Manager HSE	
	MANAGEMENT	Revision period:	3 years	
		Revision:	0A	
WHITEHAVEN	SYSTEM	Last revision date:	31 August 2022	
WHC_PLN_NAR_ENVIRONMENTAL MANAGEMENT STRATEGY				

Condition	Requirement	Document reference
	<ul> <li>keep such information up to date, to the satisfaction of the Planning Secretary.</li> </ul>	



	NARRABRI MINE	Document owner:	Environmental Superintendent
	ENVIRONMENTAL	Document approver:	Manager HSE
		Revision period:	3 years
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HAVEN	SYSTEM	Last revision date:	31 August 2022
WHC_PLN_NAR_ENVIRONMENTAL MANAGEMENT STRATEGY			

Appendix B WHC Health, Safety, Environment and **Communities Policy** 



Last Revision Date: 8/01/2020

Document Owner:

GM HSEC

# WHC-POLICY-HEALTH, SAFETY, ENVIRONMENT & COMMUNITIES

Whitehaven Coal intends to conduct business in a way that maintains a safe and healthy workplace for its workers, visitors and the surrounding community, and protects the environmental, community and cultural heritage values of the area throughout all stages of exploration, development, operation, closure and associated activities.

Whitehaven Coal aims to:

- Achieve zero workplace injuries and illnesses.
- Achieve zero environmental incidents.
- Maintain mutually beneficial relationships with the communities which host our operations.

Whitehaven Coal will strive to achieve these goals by:

- Considering health, safety, environment and community (HSEC) matters when planning and undertaking work activities.
- Consulting and communicating HSEC matters in a fair and effective manner.
- Having processes in place for identifying and eliminating or minimising HSEC risks and impacts and sharing and applying learnings' in a timely manner.
- Working to continuously improve HSEC performance.
- Providing an effective injury management and return to work program for workers.
- Complying with applicable HSEC legal and other requirements.
- Providing workers with necessary HSEC information, instruction, training and supervision to enable effective performance of their work.
- Utilising HSEC resources and processes to implement and maintain the requirements of this Policy and associated management systems.

Responsibilities of Workers:

- Workers have a responsibility to comply with applicable legislation, this policy and associated management systems. No work is to be undertaken without a clear understanding of a safe method that minimises the risk of injury or illness, plant or equipment damage, environmental, community or cultural harm.
- Workers must present for work in a fit and healthy state, take reasonable care for their own health and safety and have an obligation to take reasonable care for the health and safety of others.
- Workers must report any workplace incidents or injuries to their supervisors in a timely manner.
- Workers must also comply with any reasonable instruction given by Whitehaven Coal.

This policy applies to all workers and visitors at sites managed by Whitehaven Coal and its subsidiaries. Disciplinary action may be taken for a breach of this policy or associated management systems.

Date: 8/01/2020

Paul Flynn Managing Director & CEO