

Ravensworth South Coal Mine Modification

Environmental Management Strategy

21-Feb-2024

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Environmental Management Strategy

Client: AGL Macquarie Pty Ltd

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Prepared by

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Glossary of terms and abbreviations

Abbreviation	Definition
AECOM	AECOM Australia Pty Ltd
AGL	AGL Energy Limited
AGLM	AGL Macquarie Pty Ltd as the proponent of the Project
CEMP	Construction Environmental Management Plan
DPE	NSW Department of Planning and Environment
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EP&A Regulation	Environmental Planning and Assessment Regulation 2021 (NSW)
EPA	NSW Environment Protection Authority
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ERA	Environmental Risk Assessment
FRNSW	Fire and Rescue New South Wales
GWh	Gigawatt hours
HSE	Health, Safety and Environment
HSEMS	Health, Safety and Environmental Management System
LEP	Local Environmental Plan
LGA	Local Government Area
ML	Mining Lease
MOP	Ravensworth Mining Operations Plan for Ravensworth Ash Disposal Area (Rehabilitation Management Plan) dated 20 June 2016. The MOP has since been superseded by the RMP (2022).
PIRMP	Pollution Incident Response Management Plan
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
Roads Act	Roads Act 1993 (NSW)
RMP	Ravensworth Ash Disposal Area Rehabilitation Management Plan 2022
RSCM	Ravensworth South Coal Mine
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the NSW Department of Planning and Environment
SEPP	State Environmental Planning Policy
SSD	State Significant Development
TISEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021 (NSW)

1.0 Introduction

AECOM Australia Pty Ltd (AECOM) was commissioned by AGL Macquarie Pty Ltd (AGLM) to prepare an Environmental Management Strategy (EMS) associated with modification DA86/51-Mod 1, to change the operational management of Void 5 at the Ravensworth South Coal Mine (RSCM).

DA86/51-Mod 1 is approved under section 4.55(2) of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

1.1 Background

RSCM is owned and operated by AGLM. RSCM ceased operations in 2000 which left a number of voids from the incomplete filling of the mined area with overburden, which included Void 5. The rehabilitation of Void 5 commenced in 2014.

Void 5 and the rehabilitated area surrounding Void 5 reside within AGLM landholdings, and has previously been managed by AGLM in accordance with the following:

- *Ravensworth South - Final Void Rehabilitation Plan* dated 1 May 2012 (Approved Void 5 Rehabilitation Plan) approved under condition 2 of DA 86/51
- *Ravensworth Mining Operations Plan for Ravensworth Ash Disposal Area* (Rehabilitation Management Plan) dated 20 June 2016 (MOP) approved under the conditions of mining leases 1484 and 1485
- Environment Protection Licence 779 (EPL 779).

The original intent of the design of the ash disposal system was to transfer fly ash as a dense phase slurry to Void 5 via two slurry lines from the Ravensworth Plant at Bayswater Power Station. Decant water from the slurry was to be collected at a localised low point of the impoundment and is then pumped back to “Void 4” at Ravensworth No. 2 Mine, which is located directly north of RSCM. From Void 4, water would then be pumped back to the Bayswater Power Station for reuse in accordance with a separate consent, DA 144/93.

Hydrogeological investigations of the Void 5 decant basin identified that previous underground mining activity was resulting in water loss into the Ravensworth Underground mine workings. Water from Void 5's decant basin was flowing to the underlying Ravensworth Underground Mine and towards the Ravensworth Open Cut North Pit and the Narama Void.

AGLM engaged Jacobs to prepare the *Ravensworth South Mine - Rehabilitation Amendment Modification Report* (Jacobs, 2022) (Modification Report) to support the application to modify DA 86/51 (DA86/51-Mod-1). The application was submitted to the Department of Planning and Environment (DPE) on 20 May 2022 to make a number of changes to the rehabilitation arrangements previously approved for Void 5 under the Approved Void 5 Rehabilitation Plan (as augmented by the Ravensworth Void 5 Ash Emplacement Management Plan (Aurecon, 2015) (AEMP), MOP and EPL 779) to:

- reflect updated estimates of the amount of coal ash available for emplacement in Void 5, including in light of the fact that AGLM has committed to closing Bayswater Power Station (Bayswater) by no later than 2033
- reflect the further understanding of the hydrogeological conditions of Void 5
- facilitate the final rehabilitated landform within Void 5 to ensure it remains free draining and aligns with adjoining mining projects
- make further provision for the capping and rehabilitation of Void 5 by authorising the establishment of mine spoil borrow pits and the stockpiling of mine spoil or alternative capping materials from suitable offsite sources.

The modification, DA86/51-Mod-1, hereafter referred to as Mod-1, sought to:

- change the ash emplacement methodology within Void 5
- remove redundant pumping infrastructure with Void 5

- provide for the receipt, stockpiling and use of capping material, including mine spoil or alternative capping materials that has been classified as Excavated Natural Material under the *Protection of the Environment Operations (Waste) Regulation 2014* for Void 5
- clear vegetation to enable ongoing ash deposition in the Void 5 north arm
- introduce flexible options for the Void 5 final landform to ensure it remains free draining and is aligned with neighbouring final mining landforms
- update the boundary of DA 86/51 to reflect current land tenure and rehabilitation requirements.

DPE exhibited the modification application from 16 June 2022 until 2 July 2022 and received one public submission in support of the modification.

DPE approved Mod-1 subject to revised conditions under section 4.55(2) of the EP&A Act. As part of the revised conditions, AGLM is required to engage a suitably qualified and experienced person to develop an Environmental Management Strategy (EMS) (Condition C1 of DA 86/51 Mod-1).

Figure 1 shows the Ravensworth South approval boundary site map.

1.2 Site details

The site identification details are summarised in Table 1.

Table 1 Site identification details

Item	Description
Owner	The owner of the RSCM is AGLM. The total area of AGLM landholding is approximately 10,000 hectares, including Liddell Power Station, the Ravensworth rehabilitation area, Lake Liddell and surrounding buffer lands.
Site Address	The RSCM, within which Void 5 is located at 74 Lemington Road Ravensworth 2320 and is situated in the Upper Hunter Valley, off the New England Highway, approximately 18 km north-west of Singleton and 30 km south-east of Muswellbrook.
Title Identification relevant for Mod-1	Part of Lot 10 DP 1204457
Current land use zoning	The Site is on land zoned RU1 – Primary Production.
Surrounding land use	The site is bounded by Ravensworth Operations, an open cut coal mine, to the north, south and west, and New England Highway and Glendell Open Cut Mine to the East. The nearest sensitive receivers are mining-affiliated rural residential properties located approximately 1 km to the southeast of Lemington Road. The nearest non-mining affiliated residential properties are located approximately 3 km south-east around Camberwell.

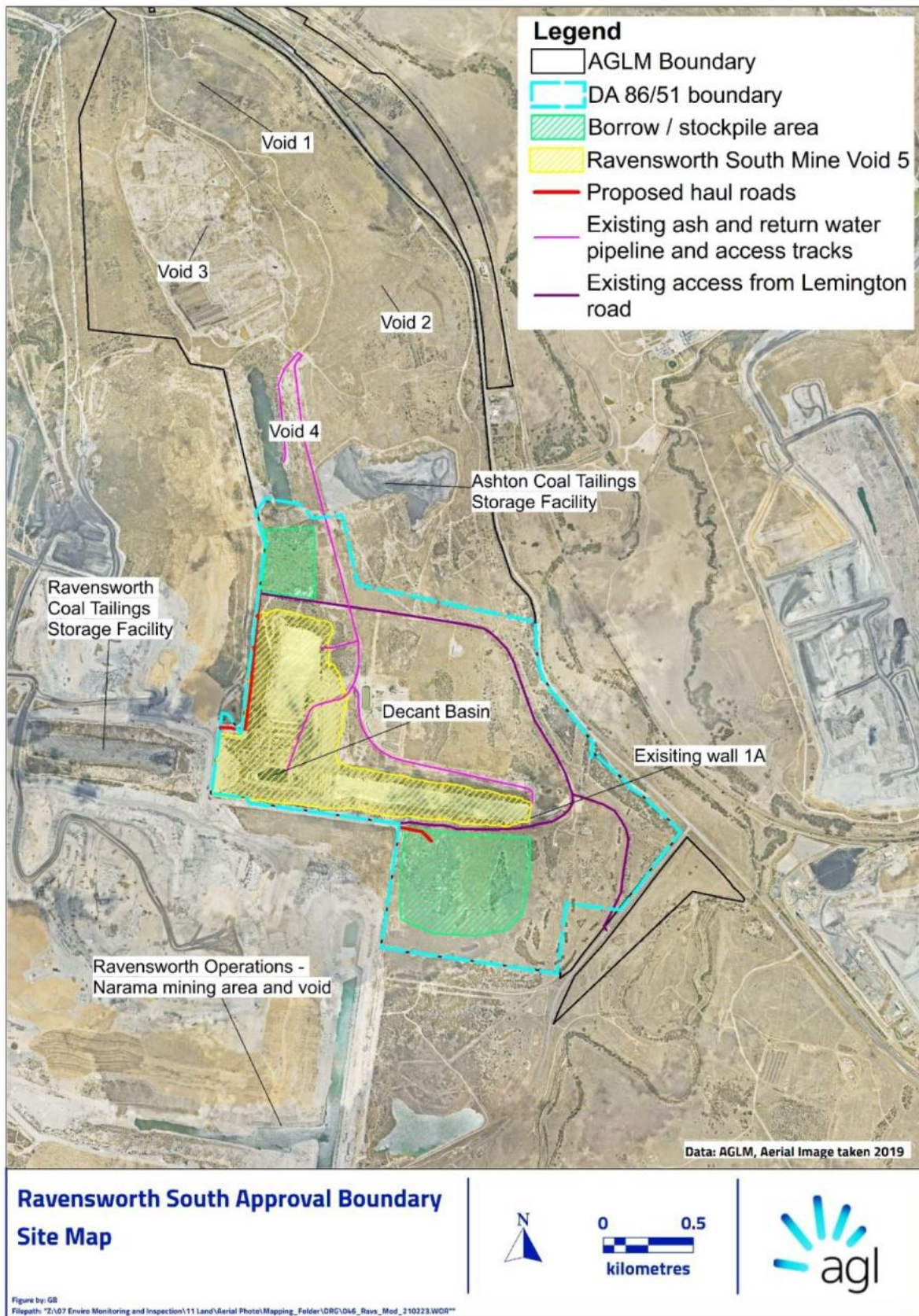


Figure 1 Ravensworth South approval boundary site map (Source: NSW Government of Planning and Environment - Notice of Modification)

1.3 Project description

1.3.1 Project overview

Mod-1 will include the following:

- the removal of redundant pumping infrastructure from Void 5 to allow ash disposal in the area below the current internal terraces
- receiving, stockpiling and use of mine spoil or alternative materials for use in rehabilitation and capping of Void 5
- construction and operation of borrow pits to win mine spoil for capping of Void 5 and Void 4 following completion of ash disposal
- clearing vegetation to the west of the north arm of the void to enable ongoing ash deposition in Void 5
- updating the proposed final landform associated with the eastern wall of the eastern arm of Void 5 to include works comprising a 5 m downstream raising, if required.

1.3.2 Site description and access

RSCM is located on AGLM landholdings within the Singleton Local Government Area (LGA), approximately 22 kilometres (km) southeast of Muswellbrook, 20 km northwest of Singleton, and approximately 80 km northwest of Newcastle in NSW.

The site is bounded by Ravensworth Operations, an open cut coal mine, to the north, south and west, and New England Highway and Glendell Open Cut Mine and Ashton Coal to the East. The nearest sensitive receivers are mining affiliated rural residential properties located approximately 1 km to the southeast of Lemington Road. The nearest non-mining affiliated residential properties are located approximately 3 km south-east around Camberwell.

1.4 Scope

This EMS applies to activities carried out during the works associated with Mod-1. It incorporates all relevant requirements of the development consent, licences, permits, and approvals required for Mod-1.

1.5 Purpose

The EMS has been prepared to provide a strategic framework for the environmental management of Mod-1. The EMS describes how Mod-1 will comply with all relevant statutory requirements, manage potential environmental impacts, and ensure appropriate controls are in place to minimise and prevent risks to the environment. It identifies key personnel roles and responsibilities, and procedures for project communications and complaints handling.

Implementation of the EMS will help to ensure potential environmental impacts are minimised and Mod-1 complies with the development consent and the conditions of that consent. The EMS will provide contractors and subcontractors the guidance needed to mitigate environmental risks and meet or exceed environmental obligations.

1.6 Relevant approvals and conditions

1.6.1 Project approvals and licences

Mod-1 is approved under section 4.55(2)(a) of the EP&A Act by DA86/51 Mod-1, 19 April 2023.

RSCM operates under Environment Protection Licence 779 issued under the *Protection of the Environment Operations Act 1997* (POEO Act).

1.6.2 Development consent conditions

This EMS has been prepared in accordance with condition C1 of DA86/51 Mod-1, providing a strategic framework for environmental management of the project. The requirements of condition C1 and where these have been addressed within this EMS are outlined in Table 2. All other relevant conditions, and

how these have been captured, are outlined in Table 3.

Table 2 Relevant conditions of the Development Consent

Condition	Section/reference
C1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	This document
(a) be submitted for approval within 6 months of the approval of Mod 1;	The EMS is to be submitted for approval before 19 October 2023.
(b) provide the strategic framework for environmental management of the development;	Section 3.0
(c) identify the statutory approvals that apply to the development;	Section 1.6
(d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 3.3
(e) set out the procedures to be implemented to	
– (i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Section 4.0
– (ii) receive record, handle and respond to complaints;	Section 4.3
– (iii) resolve any disputes that may arise during the course of the development;	Section 4.3
– (iv) respond to any non-compliance and any incident;	Section 8.0
– (v) respond to emergencies; and	Section 3.5
(f) include: – (i) references to any strategies, plans and programs approved under the conditions of this consent; and	Section 5.0
– (ii) a clear plan depicting all the monitoring to be carried out under the conditions of this consent.	Section 7.0

Table 3 Other relevant conditions of the Development Consent (not addressed in another management plan)

Category	Condition	Compliance Requirement	Section / Reference
Terms of Consent			
Terms of Consent	A2	The development may only be carried out: (a) in compliance with the conditions of the consent (DA 86/51-Mod1); (b) in accordance with all written directions of the Planning Secretary; (c) generally in accordance with the EIS and Modification Report (Mod 1); and (d) generally in accordance with the Development Layout in Figure 1.	This EMS
Limits of Consent			
Identification of Approved Disturbance Area	A8	Within three months of approval of Mod 1, or approval of any subsequent modification to this consent, the Applicant must provide to the Department a survey plan of the boundaries of the approved disturbance areas.	A survey plan will be prepared separate to this EMS
Compliance			
Compliance	A15	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	This EMS
Noise			
Noise Operating Conditions	B1	The Applicant must: (a) take all reasonable steps to minimise noise from operational activities, including low frequency noise and other audible characteristics, as well as road noise associated with the development; (b) implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas; and (c) take all reasonable steps to minimise the noise impacts of the development in noise sensitive areas during the evening and night.	Section 6.0
Blasting			
Blasting	B2	The Applicant must not carry out blasting on the site.	Blasting is not required for Mod-1
Air Quality and Greenhouse Gas			
Odour	B3	The Applicant must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.	Section 6.0

Category	Condition	Compliance Requirement	Section / Reference				
Air Quality Operating Conditions	B4	<p>The Applicant must:</p> <p>(a) take all reasonable steps to:</p> <p>(i) minimise odour, fume and particulate matter (including PM10 and PM2.5) emissions of the development, paying particular attention to minimising wheel-generated haul road emissions;</p> <p>(ii) eliminate or minimise the risk of spontaneous combustion;</p> <p>(iii) minimise any visible off-site air pollution generated by the development; and</p> <p>(iv) minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;</p> <p>(b) ensure that all 'non-road' mobile diesel equipment used in undertaking the development minimise diesel emissions to the greatest extent practicable; and</p> <p>(c) make all reasonable efforts to co-ordinate air quality management on the site with the air quality management at nearby mines to minimise cumulative air quality impacts.</p>	Section 6.0				
Water							
Water Supply	B5	<p>The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of the development to match its available water supply.</p> <p>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain all necessary water licences for the development, including during rehabilitation and post mine closure.</p>	Water Management Plan				
Water Discharges	B6	<p>The Applicant must ensure that all surface discharges from the site comply with:</p> <p>(a) discharge limits (both volume and quality) set for the development in any EPL; or</p> <p>(b) relevant provisions of the POEO Act and <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i>.</p>	Water Management Plan				
Water Management Performance Measures	B7	<p>The Applicant must ensure that the development complies with the performance measures in [Table 1].</p> <p><i>[Table 1] Water management performance measures</i></p> <table border="1"> <thead> <tr> <th>Feature</th> <th>Performance Measure</th> </tr> </thead> <tbody> <tr> <td>Water management - General</td> <td> <ul style="list-style-type: none"> • Maintain separation between clean, dirty (i.e., sediment-laden) and mine water management systems • Minimise the use of clean and potable water on the site • Maximise water recycling, reuse and sharing opportunities • Design, install, operate and maintain water management systems in a proper and efficient manner • Minimise risks to the receiving environment and downstream water users </td> </tr> </tbody> </table>	Feature	Performance Measure	Water management - General	<ul style="list-style-type: none"> • Maintain separation between clean, dirty (i.e., sediment-laden) and mine water management systems • Minimise the use of clean and potable water on the site • Maximise water recycling, reuse and sharing opportunities • Design, install, operate and maintain water management systems in a proper and efficient manner • Minimise risks to the receiving environment and downstream water users 	Water Management Plan
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		<table border="1"> <tr> <td data-bbox="622 389 913 635">Erosion and sediment control works</td> <td data-bbox="913 389 1816 635"> <ul style="list-style-type: none"> • Design, install and maintain erosion and sediment controls in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction including Volume 1: Blue Book</i> (Landcom, 2004), <i>Volume 2C: Unsealed Roads</i> (DECC,2008), and <i>Volume 2E: Mines and Quarries</i> (DECC, 2008) • Design, install and maintain any new infrastructure within 40 metres of watercourses in in accordance with the guidance series for <i>Controlled Activities on Waterfront Land</i> (DPI Water, 2012) </td> </tr> <tr> <td data-bbox="622 635 913 794">Sediment dams</td> <td data-bbox="913 635 1816 794"> <ul style="list-style-type: none"> • Design, install and maintain sediment dams in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom, 2004) and <i>2E Mines and Quarries</i> (DECC, 2008) and the requirements under the POEO Act or <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i> </td> </tr> <tr> <td data-bbox="622 794 913 912">Mine water storages</td> <td data-bbox="913 794 1816 912"> <ul style="list-style-type: none"> • Design, install and maintain mine water storage infrastructure to avoid unlicensed or uncontrolled discharge of mine water • New storages designed to contain the 100 year ARI storm event and minimise permeability </td> </tr> </table>	Erosion and sediment control works	<ul style="list-style-type: none"> • Design, install and maintain erosion and sediment controls in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction including Volume 1: Blue Book</i> (Landcom, 2004), <i>Volume 2C: Unsealed Roads</i> (DECC,2008), and <i>Volume 2E: Mines and Quarries</i> (DECC, 2008) • Design, install and maintain any new infrastructure within 40 metres of watercourses in in accordance with the guidance series for <i>Controlled Activities on Waterfront Land</i> (DPI Water, 2012) 	Sediment dams	<ul style="list-style-type: none"> • Design, install and maintain sediment dams in accordance with the guidance series <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> (Landcom, 2004) and <i>2E Mines and Quarries</i> (DECC, 2008) and the requirements under the POEO Act or <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i> 	Mine water storages	<ul style="list-style-type: none"> • Design, install and maintain mine water storage infrastructure to avoid unlicensed or uncontrolled discharge of mine water • New storages designed to contain the 100 year ARI storm event and minimise permeability 	
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Water Management Plan	B8	<p>The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <ol style="list-style-type: none"> be submitted for approval within 6 months of the approval of Mod 1; be prepared by a suitably qualified and experienced person/s; be prepared in consultation with DPE Water; describe the measures to be implemented to ensure that the Applicant complies with the water management performance measures (see Table 1); build on existing monitoring programs, where practicable; include a: <ol style="list-style-type: none"> Erosion and Sediment Control Plan that: <ul style="list-style-type: none"> • is consistent with the requirements of <i>Managing Urban Stormwater: Soils and Construction - Volume 1: Blue Book</i> (Landcom, 2004) and <i>Volume 2E: Mines and Quarries</i> (DECC, 2008); • identifies activities that could cause soil erosion, generate sediment or affect flooding; • describes measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk; • describes the location, function, and capacity of erosion and sediment control structures and flood management structures; and 	Water Management Plan						

Category	Condition	Compliance Requirement	Section / Reference															
		<ul style="list-style-type: none"> • describes what measures would be implemented to maintain (and if necessary decommission) the structures over time; (ii) Surface Water Management Plan that includes: <ul style="list-style-type: none"> • a detailed description of the surface water management system; • details of the water licensing requirements for all water storages (i.e. exempt, harvestable rights or licenced); • surface water performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts (or trends) associated with the development, for: <ul style="list-style-type: none"> – downstream surface water flows and quality; – stream and riparian vegetation health; and – post-mining water pollution from rehabilitated areas of the site; • a program to monitor and evaluate: <ul style="list-style-type: none"> – compliance with the relevant performance measures listed in Table 1; – controlled and uncontrolled discharges and seepage/leachate from the site; and – the effectiveness of the surface water management system and the measures in the Erosion and Sediment Control Plan; and • a trigger action response plan to respond to any exceedances of the relevant performance measures or performance criteria, and repair, mitigate and/or offset any adverse surface water impacts of the development. 																
Biodiversity																		
Biodiversity Credits Required	B9	<p>Prior to disturbance of native vegetation within the disturbance areas listed in [Table 2] (as shown on Figure 2), the Applicant must retire the biodiversity credits specified in [Table 2] below. The retirement of credits must be carried out in accordance with the Biodiversity Offsets Scheme of the BC Act.</p> <p><i>[Table 2] Biodiversity credit requirement</i></p> <table border="1" data-bbox="622 1147 1816 1420"> <thead> <tr> <th data-bbox="622 1147 1077 1273">Credit Type</th> <th data-bbox="1077 1147 1263 1273">Central Disturbance Area Credits</th> <th data-bbox="1263 1147 1449 1273">Southern Disturbance Area Credits</th> <th data-bbox="1449 1147 1632 1273">Northern Disturbance Area Credits</th> <th data-bbox="1632 1147 1816 1273">Total Credits</th> </tr> </thead> <tbody> <tr> <td data-bbox="622 1273 1077 1321">Ecosystem Credits</td> <td data-bbox="1077 1273 1263 1321"></td> <td data-bbox="1263 1273 1449 1321"></td> <td data-bbox="1449 1273 1632 1321"></td> <td data-bbox="1632 1273 1816 1321"></td> </tr> <tr> <td data-bbox="622 1321 1077 1420">PCT 1601: Spotted Gum – Narrow-leaved Ironbark – Red Ironbark shrub – grass open forest of the</td> <td data-bbox="1077 1321 1263 1420">46</td> <td data-bbox="1263 1321 1449 1420">130</td> <td data-bbox="1449 1321 1632 1420">25</td> <td data-bbox="1632 1321 1816 1420">201</td> </tr> </tbody> </table>	Credit Type	Central Disturbance Area Credits	Southern Disturbance Area Credits	Northern Disturbance Area Credits	Total Credits	Ecosystem Credits					PCT 1601: Spotted Gum – Narrow-leaved Ironbark – Red Ironbark shrub – grass open forest of the	46	130	25	201	Section 6.0
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Species Credits																		
Southern Myotis (<i>Myotis Macropus</i>)	21	0	0	21														
	B10	With the agreement of the Planning Secretary, the Applicant may carry over surplus retired credits to satisfy the credit requirements of a later stage. This may occur, for example, where approved clearing for an earlier stage was not undertaken, but the impact has already been offset																
	B11	With the agreement of the Planning Secretary, biodiversity credits associated with any undisturbed areas agreed under condition B10 as not to be subject to any surface disturbance may be removed from the total credit obligations in [Table 3].																
Heritage																		
Protection of Aboriginal Heritage	B12	If suspected human remains are discovered on the site, then all work surrounding the area must cease, and the area must be secured. The Applicant must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.	Section 6.0															
	B13	If any previously unknown Aboriginal object is discovered on the site, or suspected to be on the site: (a) all work in the immediate vicinity of the object or place must cease immediately; (b) a 10 metre buffer area around the object or place must be cordoned off; and (c) Heritage NSW must be contacted immediately.	Section 6.0															
	B14	Work in the immediate vicinity may only recommence if: (a) the potential Aboriginal object is confirmed by Heritage NSW, in consultation with the Registered Aboriginal Parties, not to be an Aboriginal object or Aboriginal Place; or (b) the Planning Secretary is satisfied with the measures to be implemented in respect of the Aboriginal object or Aboriginal place and makes a written direction in that regard.	Section 6.0															
	B15	The Applicant must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas are properly recorded, and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.	Section 6.0															
Visual Amenity and Lighting	B16	The Applicant must: (a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development;	Section 6															

Category	Condition	Compliance Requirement	Section / Reference
		<p>(b) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure;</p> <p>(c) ensure no mobile lighting rigs shine directly above the void wall and other mobile lighting rigs do not shine directly above the horizontal (except where required for emergency safety purposes);</p> <p>(d) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting;</p> <p>(e) ensure that the visual appearance of any new buildings, structures, facilities or works (including paint colours and specifications) constructed following approval of Mod 1 are aimed at blending as far as possible with the surrounding landscape.</p>	
Hazards			
Waste	B17	<p>The Applicant must:</p> <p>(a) take all reasonable steps to minimise the waste generated by the development;</p> <p>(b) classify all waste generated at the site in accordance with the Waste Classification Guidelines (EPA, 2014); and</p> <p>(c) dispose of all waste generated at the site to an appropriately licensed waste facility.</p>	Section 6.0
	B18	<p>Apart from the coal ash being emplaced as part of the emplacement activities and except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the Protection of the Environment Operations (Waste) Regulation 2014, the Applicant must not receive any waste at the site for storage, treatment, processing, reprocessing or disposal.</p>	Section 6.0
Dangerous goods	B19	<p>The Applicant must ensure that the storage, handling, and transport of:</p> <p>(a) dangerous goods is carried out in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code; and</p> <p>(b) explosives are managed in accordance with the requirements of the Resources Regulator</p>	Section 6.0
Bushfire Management	B20	<p>The Applicant must:</p> <p>(a) ensure that the development:</p> <p>(i) provides for asset protection in accordance with the relevant requirements in the Planning for Bushfire Protection (RFS, 2006) guideline; and</p> <p>(ii) ensure that there is suitable equipment to respond to any fires on the site; and</p> <p>(b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.</p>	Section 6.0
Rehabilitation			

Category	Condition	Compliance Requirement	Section / Reference
Rehabilitation Strategy	B22	<p>The Applicant must prepare a Rehabilitation Strategy for all land disturbed by the development to the satisfaction of the Planning Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be submitted for approval within 6 months of the approval of Mod 1; (b) be prepared by a suitably qualified and experienced person/s; (c) be prepared in consultation with the Resources Regulator and Council; (d) build upon the Rehabilitation Objectives in [Table 3], describe the overall rehabilitation outcomes for the site, and address all aspects of rehabilitation including final landform, post-mining land use/s and water management; (e) align with strategic rehabilitation and mine closure objectives and address the principles of the <i>Strategic Framework for Mine Closure</i> (ANZMEC and MCA, 2000); (f) describe how the Applicant will ensure that surface water from the free-draining final landform will not result in downstream water quality impacts; (g) include details of target vegetation communities and species to be established within the proposed revegetation areas; (h) investigate opportunities to refine and improve the final landform outcomes over time; (i) include a risks and opportunities assessment and risk register; (j) include a post-mining land use strategy to investigate and facilitate post-mining beneficial land uses for the site, that: <ul style="list-style-type: none"> (i) align with regional and local strategic land use planning objectives and outcomes; (ii) support a sustainable future for the local community; (iii) utilise existing mining infrastructure, where practicable; and (iv) avoid disturbing self-sustaining native ecosystems, where practicable; (k) include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes; (l) investigate ways to minimise adverse socio-economic effects associated with rehabilitation; and (m) include a program to periodically review and update this strategy at least every three years. 	A Rehabilitation Strategy for Mod-1 will be prepared separate to this EMS
Reporting and Auditing			
Incident Notification	C7	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 3.5

Category	Condition	Compliance Requirement	Section / Reference
Non-compliance Notification	C8	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. 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 8.1
Independent Environmental Audit	C9	Within one year of approval of Mod 1, 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. The audit must: <ul style="list-style-type: none"> (a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary; (b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary; (c) be carried out in consultation with the relevant agencies; (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and mining leases for the development (including any assessment, strategy, plan or program required under these approvals); (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent; (f) recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and (g) be conducted and reported to the satisfaction of the Planning Secretary. 	Section 7.3
	C10	Within three months of commencing an Independent Environmental Audit 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.	
	C11	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or 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	Section 7.0

Category	Condition	Compliance Requirement	Section / Reference
Monitoring and Environmental Audits		conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.	
	C12	For the purposes 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 evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.	

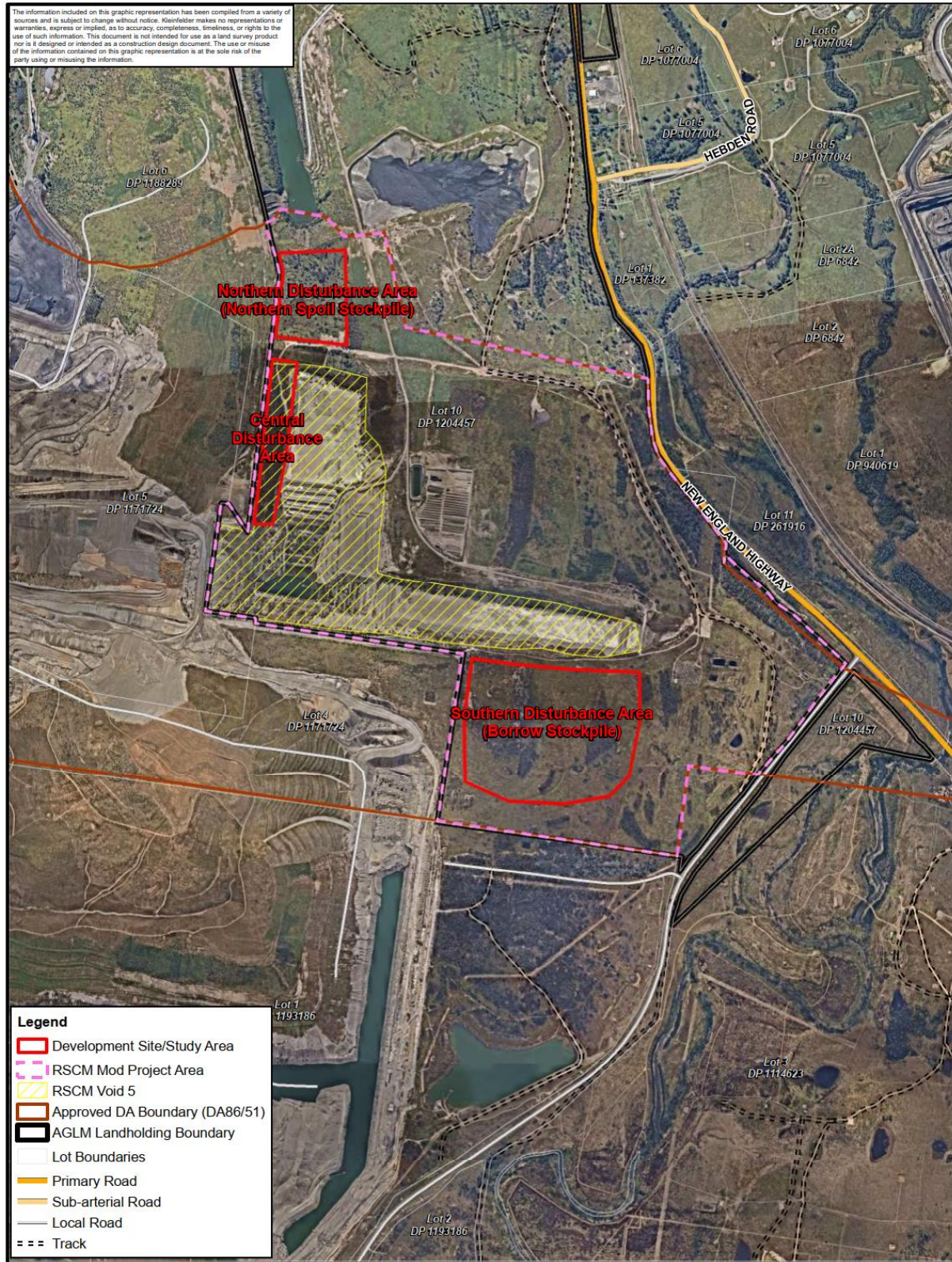


Figure 2 Biodiversity Offset Stages (Source: NSW Government of Planning and Environment - Notice of Modification)

2.0 Legislation and guidelines

This section identifies the environmental legislative requirements relevant to Mod-1. It lists legislation applicable to the site as well as relevant permits or licences held or required to be held.

2.1 EP&A Act and Regulation

The EP&A Act and the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) provide the framework for environmental planning in NSW. They provide for the establishment of Environmental Planning Instruments (EPIs) including Local Environmental Plans (LEPs) and State Environmental Planning Policies (SEPPs), which set out specific environmental planning requirements for local government areas (LGAs) and the State (either generally or in certain areas), respectively. The applicable EPIs and the EP&A Regulations determine the relevant planning approval pathway and the associated environmental assessment requirements for a proposed development.

2.1.1 Environmental planning instruments

The RSCM is within the Singleton LGA and within the application area of the Singleton Local Environment Plan 2013 (Singleton LEP). Void 5 and the surrounding rehabilitation areas within AGLM's landholding are not mapped as subject to heritage conservation, flood planning or riparian land and watercourses provisions of the Singleton LEP. Void 5 and the surrounding rehabilitation areas within AGLM's landholding are zoned as RU1 Primary Production.

The objectives of the RU1 zone are to encourage sustainable primary industry production by maintaining and enhancing the natural resource base and to encourage diversity in primary industry enterprises and systems appropriate for the area. RSCM, an open cut mine (defined as including the rehabilitation of land affected by mining) remains permissible with consent on land zoned as RU1 Primary Production.

2.1.2 Development consent

Development consent for Mod-1 was granted by the Minister for Planning on 19 April 2023 under Section 4.55(2) of the EP&A Act, subject to conditions. As outlined in Condition C1 of development consent (DA 86/51-Mod-1), AGLM is required to prepare an Environmental Management Strategy for Mod-1.

The development consent conditions, Modification Report, Response to Submissions Report and other plans required under the conditions of the development consent, act as the guiding documents for the development of this EMS and for environmental planning compliance at RSCM.

2.2 Protection of the Environment Operations Act 1997

The POEO Act is the principal legislation established to protect, restore, and enhance the quality of the environment in NSW and reduce potential risks associated with pollution with regards to human health and degradation of the environment. The POEO Act also establishes an environment protection licencing system for certain activities that are generally large-scale, industrial development, referred to as 'scheduled activities'. Scheduled activities are those defined in Schedule 1 of the POEO Act.

Mod-1 is located within the premises subject to the EPL and will continue to be regulated in accordance with the existing conditions of EPL 779. No modification is required to the EPL conditions to enable Mod-1.

2.3 Other legislation and guidelines

The RSCM Project will be conducted in a manner consistent with the legislative requirements and guidance set out in the documents below:

- *Biodiversity Conservation Act 2016*
- *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
- *Heritage Act 1977*

- *Mining Act 1992*
- *National Parks and Wildlife Act 1974*
- *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*
- *Protection of the Environment Operations (Waste) Regulation 2014*
- *Dams Safety Regulation 2019*
- *Coal Mine Subsidence Compensation Act 2017*
- *Rural Fires Act 1997*
- *Roads Act 1993*
- *Water Act 1912*
- *Water Management Act 2000*

Further details of legislation relevant to the Project is provided in Appendix A.

2.4 Approvals, permits and licences

AGLM is responsible for obtaining the necessary approvals, permits and licences required for this Project, as provided in Table 4. AGLM must comply with the requirements of these approvals, permits and licences, where applicable.

Table 4 Approvals, permits and licences required for Mod-1

Approval/ licence/ permit	Legislation	Status
Development consent	EP&A Act	The RSCM was approved under the EP&A Act prior to the EPBC Act coming into effect
Environment Protection Licence modification	POEO Act	Existing conditions of EPL 779 provide a robust platform for monitoring and management of environmental issues associated with the modification
Mining Lease	Mining Act	AGLM shares ML 1484 and ML 1485 with Glencore. AGLM is only responsible for the portions of these MLs that cover AGLM owned land. There are no changes to ML 1484 and ML 1485 required as a result of Mod 1.

3.0 Environmental management framework

3.1 Environmental management system

AGLM operates and maintains a Health, Safety and Environmental Management System (HSEMS) which supports continual operations on site. The HSEMS is a 'demonstrated equivalent' to the ISO 14001:2015 standard as determined by the NSW Environment Protection Authority (EPA).

The HSEMS provides the overall framework for health, safety and environmental management and includes a range of supporting standards, guidelines, procedures, and tools to implement it. Implementation of the HSEMS during planning and carrying out of works ensures that relevant health, safety and environmental factors are considered, and hazards and risks are avoided, eliminated or minimised to an acceptable level.

3.1.1 AGL health, safety and environment policy

AGL operates under its Health, Safety and Environment (HSE) Policy (February 2023) that commits to conducting business in a way that prevents harm to people, customers and the community, and minimises AGL's impact on the environment. The HSE Policy applies to all AGL and AGLM employees,

contractors, products, services and joint ventures under AGL’s operational control. Specifically, the HSE Policy states that AGL will:

1. *Visibly lead our people to promote a strong HSE culture across all aspects of our business, taking care in every action to minimise harm to people and the environment.*
2. *Demonstrate integrity always through prioritization of HSE considerations in the way we work in order to meet or exceed the requirements of our compliance obligations.*
3. *Deliver our best by proactively identifying, effectively controlling and monitoring, and ensuring awareness of, the HSE risks that have the potential to harm people and the environment.*
4. *Consult and work collaboratively with our employees, contractors and the community on HSE issues. Better together.*
5. *Shape tomorrow by setting, measuring, and reviewing our objectives, priorities and targets to demonstrate proactive processes are in place to continuously reduce HSE risk exposure and improve HSE performance.*
6. *Support employees who are injured at work to return to safe and sustainable work as soon as possible, and make reasonable adjustments, where appropriate, for non – work related injuries and illnesses.*

The HSEMS sets out how this HSE Policy is implemented.

3.1.2 Supporting documents

The HSEMS is supported by a series of standards, procedures and plans that set out the actions and controls to achieve the objectives of the HSEMS. These are listed in Table 5.

Table 5 Supporting documents

Supporting Documents
Standards
AGL-HSE-STD-009.01 – Land Standard
AGL-HSE-STD-009.02 – Groundwater Standard
AGL-HSE-STD-009.03 – Surface Water Standard
AGL-HSE-STD-009.04 – Air Emissions Standard
AGL-HSE-STD-009.05 – Noise Emissions Standard
AGL-HSE-STD-009.06 – Biodiversity Standard
AGL-HSE-STD-009.07 – Waste Standard
AGL-HSE-STD-009.08 – Cultural Heritage Standard
AGL-HSE-STD-009.09 – Greenhouse Gas Emissions Standard
Plans
AGL-HSE-PLN-009.01 – Land Management Plan
AGL-HSE-PLN-009.02 – Water Management Plan
AGL-HSE-PLN-009.04 – Air Quality Greenhouse Gas and Noise Management Plan
AGL-HSE-PLN-009.07 – Waste Management Plan
AGL-HSE-PLN-010.01 – Emergency Management Plan
AGL-HSE-PLN-010.02 – Pollution Incident Response Management Plan

3.2 Contractor environmental management system requirements

Any contractor or sub-contractor engaged to provide services for AGLM is required to have an organisational Environmental Management System or may operate under AGL’s HSEMS. If a contractor has their own Environmental Management System, it must meet or exceed the minimum requirements set out in AGL’s HSEMS.

3.3 Roles and responsibilities

This section outlines the key roles and responsibilities for both AGLM and its contractors and sub-contractors working on this Project.

3.3.1 AGLM key personnel

AGLM's key personnel will be responsible for the management of contractors and sub-contractors and will each have the respective responsibilities provided in Table 6 below.

Table 6 AGLM roles and responsibilities

Role	Responsibilities
General Manager	<ul style="list-style-type: none"> Accountable for all environmental matters regarding AGLM operations Monitor and improve environmental performance Renew operating licences Comply with all licence conditions and regulatory reporting requirements Provide adequate resources for the implementation of this EMS
Senior Leader – Ash Management	<ul style="list-style-type: none"> Review environmental management programs including the establishment of environmental objectives and targets Ensure all appropriate approvals have been obtained prior to commencing works Ensuring that all staff or contractors under their control are aware of environmental compliance issues and environmental controls listed in this EMS Order Stop-work for an activity that may cause environmental harm Ensure employees are equipped with sufficient skills to meet the objective of competent delivery of the project
Senior Civil Engineer – Ash Management	<ul style="list-style-type: none"> Oversee project implementation Overall responsibility for the RSCM site Develop environmental management programs including the establishment of environmental objectives and targets Secure all appropriate approvals prior to commencing works Ensuring that all staff or contractors under their control are aware of environmental compliance issues and environmental controls listed in this EMS Order Stop-work for an activity that may cause environmental harm Promote continual improvement and provide support as required
Works Co-Ordinator	<ul style="list-style-type: none"> Participate in awareness and environment training Ensuring that all staff or contractors under their control are aware of environmental compliance issues and environmental controls listed in this EMS Assist in overseeing project implementation Assist the Environment Advisor with investigations into non-compliances, incidents or complaints Report and raise any issues that arise that may have an environmental impact Promote continual improvement and provide support as required

Role	Responsibilities
Environment Manager	<ul style="list-style-type: none"> Oversee the implementation of this EMS Notify regulatory authorities and affected stakeholders of incidents or non-compliances in accordance with this EMS Order Stop-work for an activity that may cause environmental harm Coordinate ongoing consultation with stakeholders Coordinate periodic reviews of this EMS Facilitate training of all employees and contractors in accordance with this EMS Undertake internal environmental audits and facilitate independent audits
Environment Advisor	<ul style="list-style-type: none"> Assist the Environment Manager as required in the implementation of this EMS Ensure this EMS achieves its intended outcomes Ensure effective internal and external communication programs are in place Provide training to all relevant personnel Order Stop-work for an activity that may cause environmental harm Coordinate investigations of environmental related non-compliances, incidents, or complaints Coordinate the management of records required under this EMS Review and action environmental inspection and audit findings Monitor environmental aspects, particularly in relation to waste management and construction and access works
All personnel	<ul style="list-style-type: none"> Undertake works in accordance with this EMS Participate in awareness and environment training immediately report and raise any issues that arise that may have an environmental impact

3.3.2 Contractor key personnel

The contractor key personnel will include service providers engaged by AGLM for Mod-1 and any sub-contracted personnel. Table 7 outlines the contractor key personnel and responsibilities.

Table 7 Contractor roles and responsibilities

Role	Responsibilities
HSE Advisor	<ul style="list-style-type: none"> Initiate and support any external independent environmental audit program by liaising and providing required information Communicate environmental performance to the AGLM Environment Manager/Advisor Assist in the management and investigation of environmental non-compliances, incidents or complaints Manage the contractor's environmental management plan Provide necessary technical input Co-ordinate environmental compliance Assist in developing environmental objectives and targets and environmental management programs Identify environmental incidents Report and raise any issues that arise that may have an environmental impact

Role	Responsibilities
Site Superintendent	<ul style="list-style-type: none"> • Ensure that environmental considerations are integrated into all business functions where practical • Monitor and improve environmental performance • Comply with all environmental requirements and regulatory and other reporting requirements • Ensure appropriate licences are held by sub-contractors (i.e., waste) where necessary • Participate in awareness and environment training • Report and raise any issues that arise that may have an environmental impact
Contractor staff / Subcontractors	<ul style="list-style-type: none"> • Undertake works in accordance with this EMS • Participate in awareness and environment training • Report and raise any issues that arise that may have an environmental impact

3.4 Training and awareness

AGLM has established environmental training and induction program for all personnel who perform tasks with the potential to cause environmental harm. The Environment Training Procedure (AGLM-HSE-PRO-008.05) outlines the process to providing training and awareness to all personnel and contractors operating for or on behalf of AGLM.

Online training is available to all personnel and contractors through an online learning system – Empower. The Environment Manager is responsible for developing and updating modules related to environmental aspects and impacts, as well as changes in legislation, policy or Health, Safety and the Environment Management System.

Contractors are to work with the Environment Manager to determine the environmental competency and training required for all contractor staff and sub-contractors and are responsible for ensuring training is conducted prior to carrying out work. A record of all contractor training is handled by AGLM's training department.

3.4.1 Ravensworth South Coal Mine general site inductions

All AGLM employees and contractors are required to complete general inductions prior to attending any operational site. Personnel must also provide relevant licences and qualifications prior to carrying out work. The following inductions are required for all personnel:

- AGL Full Induction All Sites
- AGLM Ravensworth Site Induction.

Inductions are delivered through an online platform – RapidGlobal. Site-specific inductions are also provided on an as-required basis for some areas that have additional requirements.

3.4.2 Training and competence

Environmental issues will be discussed at daily pre-start meetings and weekly 'toolbox' talks. Pre-start meetings will be conducted prior to commencing works each day when work is planned to raise potential safety and environmental issues, discuss works to be carried out and familiarise with the emergency response procedures.

'Toolbox' talks will be one method of raising awareness and educating personnel on issues related to all aspects of construction including environmental issues. The toolbox talks are used to ensure environmental awareness continues throughout construction.

Additional training requirements will be assessed and implemented as required. Attendance is mandatory and will be recorded. All records will be maintained.

The Contractor Site Superintendent will be responsible for ensuring that all construction personnel are appropriately qualified and experienced to undertake the specific tasks to which they are assigned and/or are responsible for

3.4.3 Other training, induction, and awareness programs

All environmental management plans and strategies will include details on specific training, induction and awareness programs that are required for each stage of development. This should include:

- Purpose of the training, induction, and awareness program
- Training needs determination
- Frequency of training
- Person responsible for delivering the training.

3.5 Incident and emergency management

3.5.1 Incidents

AGL maintains an HSE *Incident, Near Miss and Hazard Management Procedure* as part of the HSEMS (AGL-HSE-PRO-012.1), outlining the procedure for identification, reporting and investigation of HSE incidents, near misses, hazards and regulatory issues. This procedure applies to all employees, contractors and their sub-contractors working for or on behalf of, AGLM.

Incidents, near misses, and hazards involving a Contractor(s) must be entered into myHSE by the Contractor or by the responsible Contract Manager or delegate, if the Contractor does not have access to the application.

An environmental incident is an unplanned event that causes or has potential to cause harm to the environment. Environmental incidents include but are not limited to:

- Spills of chemicals including oils and fuels
- Unintended damage to native vegetation
- Injury to wildlife
- Dust and noise impacts on the surrounding community.

It is the responsibility of all personnel working on Mod-1 to report and raise any issues that arise that may have an environmental impact. Should there be a concern that conditions of this EMS are not being met and unauthorised impacts are occurring to the environment, the following steps will be undertaken:

1. Site Manager and Environment Manager are to be notified
2. If the incident causes or threatens to cause material harm, Environment Manager will notify DPE [and any other relevant stakeholders] as required under condition C7
3. An investigation will be undertaken
4. AGLM provide DPE and [and any other relevant stakeholders] with a written notification within 7 days as required by condition C8 that describes:
 - the nature of the non-compliance concern
 - the date and time of the incident
 - the likely cause of the incident
 - actions that have been taken
 - proposed measures to address the incident.

DPE must be notified in writing via the Major Projects portal immediately after the AGLM becomes aware of an incident. The notification must identify the development (including the application number and the name of the development) and set out the location and nature of the incident.

3.5.2 Emergency response

AGLM currently maintains a site-wide Emergency Response Plan. Any environmental emergency or incident will be notified to the Environment Manager and Project Manager who will notify the relevant

emergency services or regulatory authorities where applicable. Table 8 below identifies emergency contacts relevant to Mod-1.

Contractor management plans will include an emergency response plan that will detail the procedure during an emergency.

An emergency response plan should include:

- Contact details for emergency services, including those in Table 8 and any others as relevant
- The location of on-site information on hazardous materials, including safety data sheets and spill containment materials
- Procedures to minimise environmental damage and to control an environmental incident or emergency
- A process for communication during an emergency
- A process for reviewing environmental incident and emergency planning, preparedness and response procedures following an environmental incident or emergency.

Communication protocols with AGLM must be included. These will detail when notification should occur, what details are to be communicated and how offsite communication should be managed (e.g., media, regulators and general public interactions).

Table 8 Emergency contacts

Contact	Name / type of emergency	Primary contact
EPA Pollution Line	Environmental incident notification	131 555 (hotline) or (02) 4908 6800 (Newcastle office)
Fire Brigade	Emergency	000
	NSW Rural Fire Service	02) 6575 1200 (Hunter Valley office) 02) 8741 5555 (Headquarters)
Police	Emergency	000
	Muswellbrook Police Station	(02) 6542 6999
Ambulance	Life threatening situations	000
	Non-life-threatening situations	131 233
State Emergency Service	Assistance during flood and storm emergencies	132 500
NSW Poisons Information Centre	Bites, stings and poisons	131 126
WIRES wildlife rescue	Injured wildlife	1300 094 737

3.5.3 Pollution Incident Response Management Plan

AGLM maintains a Pollution Incident Response Management Plan (AGL-HSE-PLN-010.02) (PIRMP) in that meets Condition O4 of EPL 799. The PIRMP provides a detailed description of the action to be taken, immediately after a pollution incident, to reduce or control any pollution. It addresses the environmental, human, and life safety aspects of pollution incidents within the EPL. The PIRMP applies to all employees, contractors, their subcontractors, and visitors to AGLM sites.

Protocols within the PRIMP must be implemented in the event of any pollution incident, which links to the Emergency Management Plan (AGL-HSE-PLN-010.01), and Incident, Near Miss and Hazard Management Procedure, and Obligations to Notify Regulatory Authorities (AGL-HSE-GUI-012.1).

The key pollution hazards related to Mod-1 include spills, leaks, and emissions resulting in air, water, or land contamination. Relevant to the EPL, the PIRMP would guide the process to be undertaken in the event of any pollution incident.

4.0 Community and stakeholder consultation

4.1 Overview

AGLM procedure Environment Communications (AGL-HSE-PRO-008.06) describes the protocols for external communications to and from relevant stakeholders and interested parties. This procedure applies to all employees and contractors operating for or on behalf of AGLM, including under Mod-1. AGLM will tailor consultation, cooperation and coordination of relevant environmental aspects and ensure that the relevant key stakeholder considerations are incorporated into Mod-1. It also ensures that general public enquiries and complaints are handled and responded to appropriately.

AGLM's Community Engagement Strategy enables community members to submit feedback through multiple channels. AGLM also has a dedicated online forum, email address and a 24/7 contact number to ensure community members can provide feedback and raise any issues through a method that they are comfortable with.

AGLM has developed a Community Complaints Framework to ensure that feedback and complaints are managed in a uniform way. The most common feedback methods are outlined in Table 9.

Table 9 Community and stakeholder feedback methods

Feedback method	Details
Online Community Engagement Forum	The AGL website includes an AGL Community Engagement Forum with specific groups for each of AGL's assets and current projects.
24-hour Enquiries and Complaints Hotline	An Enquiries and Complaints Hotline is available for all stakeholders to contact with questions and is available 24/7. 1800 039 600
Email	The AGL Community email address allows stakeholders to provide feedback or ask questions. AGLCommunity@agl.com.au

4.2 Stakeholder consultation

4.2.1 Community consultation

The Environment Communication Procedure (AGLM-HSE-PRO-008.06) provides the management of external communications to and from relevant stakeholders and or Interested Parties.

AGLM maintains a community reference group known as the AGL Macquarie Community Dialogue Group (CDG) which meets quarterly. Membership of this group includes representatives from the surrounding community interest groups, Muswellbrook Shire Council, Singleton Council and Upper Hunter Shire Council, local business chambers and local Indigenous stakeholder groups. Mod-1 will be discussed with the CDG as required. Interested parties can register for receiving regular project updates by sending an email to: AGLCommunity@agl.com.au.

No concerns have been brought forward by the community on Mod-1 to date. Quarterly meetings will continue to be held with the CDG, and all concerns and complaints will be addressed at the meeting, and written responses will be provided to the group within one week.

4.2.2 Government authority consultation

Throughout the planning phase of Mod-1, AGLM consulted with various government authorities and agencies, and will continue to do so during construction and operation as required.

A summary of agencies who provided comments throughout the planning phase is provided below:

- Resources Regulator
- Department of Planning and Environment
- Glencore & subsidiary companies

- Singleton Council
- DPE Biodiversity Conservation Division
- Environment Protection Authority
- DPE Water
- Ashton Coal Operations (ACO).

4.2.3 Indigenous stakeholder engagement

As described in Section 4.2.1, the CDG's membership includes representatives from local Indigenous stakeholder groups.

4.3 Complaints handling

AGLM's Community Complaints and Feedback Policy outlines AGLM's commitment to the effective management of complaints and resolution of disputes for all existing and planned projects. AGLM aim to come to an early resolution on all feedback for complaints. Personnel and contractors are to direct all community complaints to the Environment Manager, and a response is to be provided to the complainant as soon as practicable and recorded in the Community Complaints Register AGL-HSE-REG-008.09.2. Community complaints can be made through the following channels:

AGL Complaints and Enquiries Hotline: 1800 039 600

Email: AGLCommunity@agl.com.au

Mail: AGL Community Complaints and Enquiries, Locked Bag 14120 MCMC, Melbourne VIC 8001

If feedback is received onsite, or directly to a Contractor, the Contractor's environmental representative will not respond to complaints from the public or other stakeholders but will immediately (or as soon as practicable) forward details of complaints onto the AGLM Environment Manager, who will assign a Case Manager from the Government and Community Relations Team. The Case Manager will contact the complainant or enquirer and make a preliminary assessment (level of feedback required) of the type of feedback needed to resolve the issue. For urgent feedback, the Case Manager will work with AGLM team members with a target resolution time of 24-hours. AGLM target feedback to the complainant or enquirer within five days for standard feedback, and 30 days for complex feedback.

Where the complainant or enquirer does not consider their feedback resolved, AGLM will escalate the issue to the Senior Manager of Government & Community Relations, who will act as the Case Manager and will respond to urgent, standard, and complex feedback. Where required, the Case Manager may consult with and bring in an independent third-party (e.g., technical expert, mediator) to assist with the investigation or resolution. If this does not lead to resolution, the complainant or enquirer may refer the matter to an independent external body (e.g., NSW Land and Water Commissioner, State Planning Departments, Tribunals and Courts), and AGLM will cooperate with the requirements and processes dictated by the external body.

Contractors will support AGLM in investigating and addressing complaints. Contractors must include a complaint and enquiry management procedure within their management plans or strategies, which should outline actions to be taken when a complaint or enquiry is received, and the roles and responsibilities of the core team requirement to implement the procedure.

4.4 Development Consent consultation requirements

Development consent DA86/51-Mod-1 specifies certain plans and other documentation that require consultation prior to approval by the Planning Secretary. These plans are summarised in Table 10 below.

Where consultation is required, each document will clearly outline the consultation requirements and provide details of communication with the relevant party, the outcomes, and where they are addressed in that document.

Table 10 EMS consultation requirements of the development consent

Condition	Plan / Other document	Party required to be consulted	Application
B8	Water Management Plan (AECOM, 2023)	DPE Water	Applies to Mod-1
B12	Suspected human remains	NSW Police Force and Heritage NSW	Applies to Mod-1
B13 and B14	Aboriginal heritage unexpected finds	Heritage NSW and Registered Aboriginal Parties	Applies to Mod-1
B15	Aboriginal Heritage Information Management System (AHIMS) Register	Heritage NSW	Applies to Mod-1
B22	Rehabilitation Strategy	Resources Regulator Singleton Council	Applies to Mod-1

Ongoing consultation

Water Management Plan

A draft Water Management Plan (AECOM, 2023) (WMP) was submitted to DPE Water for review on 19 September 2023. A response was received on 12 October 2023. A copy of the consultation is provided in the appendix of the WMP.

Rehabilitation Strategy

A draft of the Rehabilitation Strategy was submitted to the Resources Regulator and Singleton Council for review on 12 September 2023. A copy of the consultation is provided in the appendix of the Rehabilitation Strategy.

5.0 Related management plans and procedures

5.1 Void 5 rehabilitation plan

Void 5 was previously managed under *Ravensworth South - Final Void Rehabilitation Plan* dated 1 May 2012 (Approved Void 5 Rehabilitation Plan) approved under condition 2 of DA 86/51. This is superseded by Mod-1.

5.2 Ravensworth mining operations plan/ Rehabilitation Management Plan

RSCM was previously managed in accordance with *Ravensworth Mining Operations Plan for Ravensworth Ash Disposal Area Rehabilitation Management Plan* dated 20 June 2016 (MOP) and approved under the conditions of mining leases 1484 and 1485. The MOP was replaced in 2022 by the *Ravensworth Ash Disposal Area Rehabilitation Management Plan (2022) (RMP)*.

5.3 Water management plan

A WMP is required to be submitted within six months of the approval of Mod-1 in accordance with Condition B8 of DA 86/51 Mod-1. The WMP has been prepared separately to this EMS as a standalone document. For water management matters, the WMP should be read in conjunction with this EMS.

5.4 Rehabilitation Strategy

A rehabilitation strategy is required to be within six months of the approval of Mod-1 in accordance with Condition B22 of DA 86/51 Mod-1. The Rehabilitation Strategy has been prepared separately to this EMS as a standalone document.

6.0 Other environment management measures

The management measures provided in Table 11 include other requirements from the Modification Report and development consent DA86/51-Mod-1 which have not been captured under other management plans for the RSCM Project.

Table 11 Environmental management measures (Modification Report/Mod-1)

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Groundwater	Modification Report	GW	To manage groundwater impacts, the following will be implemented: <ul style="list-style-type: none"> On-going monitoring of the RSCM monitoring bores to assess potential trends in water level and quality; and Adoption of the recommendations provided in the Void 5 Water Loss Investigation - Seepage Investigation Report (Jacobs, 2018) for the installation of additional monitoring bores.	Contractor	Construction, operation, rehabilitation
Air Quality	Modification Report	AQ1	During loading and unloading of materials, the following actions will be undertaken: <ul style="list-style-type: none"> Minimising drop heights; and Reviewing and where necessary modifying or suspending activities during dry and windy weather and elevated background air quality conditions	Contractor	Construction, operation, rehabilitation
Air Quality	Modification Report	AQ2	To manage wind erosion from Void 5 cap, borrow pit areas and haulage roads the following will be carried out: <ul style="list-style-type: none"> Watering stockpiles and exposed surfaces; and Progressive rehabilitation of exposed surfaces (as feasible) 	Contractor	Construction, operation, rehabilitation
Air Quality	Modification Report	AQ3	While hauling materials, the following will be undertaken: <ul style="list-style-type: none"> Regular watering of unsealed haulage routes; and Regular inspection and removal of debris from plant and equipment to avoid the tracking of materials onto the adjacent road network. 	Contractor	Construction, operation, rehabilitation
Air Quality	Modification Report	AQ4	The following will be undertaken to manage exhaust emissions from plant and equipment: <ul style="list-style-type: none"> Inspecting all plant and equipment before it is used on-site Ensuring that all vehicles, plant, and equipment are operated in a proper and efficient manner Switching off all vehicles, plant and equipment when not in use for extended periods, and Avoiding the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable 	Contractor	Construction, operation, rehabilitation

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Noise and Vibration	Modification Report	NV1	The RMP will be updated to address the management of noise associated with the modified activities.	AGLM	Pre-construction of borrow pits
Noise and Vibration	Modification Report	AEMP Section 8.4	Earthmoving activities will be confined to daylight hours.	Contractor	Construction, operation, rehabilitation
Noise and Vibration	Modification Report	Other Measures Proposed	<ul style="list-style-type: none"> Implement training to induct staff on noise sensitivities, as well as regular toolbox talks Review and modify operations as required Select low-noise plant and equipment. Ensure equipment mufflers operate in a proper and efficient manner; and Co-operate with surrounding operations to minimise cumulative noise levels at surrounding sensitive receivers 	Contractor	Pre-construction of borrow pits, Construction, operation, rehabilitation
Biodiversity	Modification Report	B1	<p>To reduce the direct impacts of the clearing of native vegetation, the following measures will be implemented</p> <ul style="list-style-type: none"> Avoid and minimise clearing impacts to native vegetation where possible Clearly delineate the boundaries of the project footprint to prevent any unnecessary clearing beyond its extent Ensure vehicle and equipment parking areas and stockpile areas are identified and positioned to avoid areas containing ecological value Appropriate signage such as 'no go zone' or 'environmental protection area' should be installed, and Identify and communicate the location of any 'no go zones' in site inductions 	Contractor	Prior to native vegetation clearing, construction, operation, rehabilitation

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Biodiversity	Modification Report	B2	<p>Measures to mitigate impacts from the removal of hollow-bearing trees/habitat trees include:</p> <ul style="list-style-type: none"> • limit removal of trees to that required within the project footprint where possible • A pre-clearing protocol will be implemented during clearing works which will include <ul style="list-style-type: none"> - Pre-clearance surveys to determine if any inhabiting fauna are present, and - The presence of a suitably qualified and trained fauna handler during habitat tree clearing (including trees containing nests) to rescue and relocate displaced fauna • Appropriate exclusion fencing around any trees and woodland that are to be retained within the Mod-1 will be erected, considering allowance for Tree Protection Zones in accordance with AS4970 (Standards Australia, 2009). 	AGLM	Prior to native vegetation clearing
Biodiversity	Modification Report	B3	<p>Measures to prevent impacts to surface and groundwater quality due to sediment run-off and/or contaminant runoff include:</p> <ul style="list-style-type: none"> • Source controls such as sediment fences, mulching and jute matting will be utilised where appropriate. • Site-based vehicles will carry spill kits • Erosion and sediment control will be required for the development in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) prior to the commencement of construction, and • Limiting the use of pesticides in the project footprint where possible to avoid contamination of nearby watercourses/wetland areas. 	Contractor	Prior to disturbance of borrow pit areas
Biodiversity	Modification Report	B4	To prevent vehicle collision with fauna, speed limits within the development site will be limited to 40 km/hr. This limit will be clearly signed at all entry points to the site.	Contractor	Construction, operation, rehabilitation

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Biodiversity	Modification Report	B5	<ul style="list-style-type: none"> To prevent the transfer of weeds and pathogens to and from site, vehicles must be cleaned appropriately before arrival on site to help prevent the spread of the fungal pathogens <i>Phytophthora cinnamomi</i> and Myrtle Rust (<i>Puccinia psidii</i>); and As most of the site contains exotic species (including some high-threat weeds), excavated topsoil must be managed appropriately to limit the risk of transferring invasive species into surrounding vegetation. 	Contractor	Construction, operation, rehabilitation
Biodiversity	Modification Report	B6	<p>Measures to mitigate impacts on flora and fauna from noise, vibration, waste, light and air pollution will include the following:</p> <ul style="list-style-type: none"> Enforce 'carry-in, carry-out' policy regarding rubbish and waste materials generated on-site during construction to avoid waste materials entering adjacent vegetation Restriction of public access and associated impacts from domestic pets, waste dumping and damage to adjoining vegetation must be enforced pre, during and post construction; Fence sensitive areas to delineate 'no go' zones Levels of lighting that will accompany the access road will be reduced to a minimal level to reduce any adverse effects upon the essential behavioural patterns of light-sensitive fauna Lighting should comply with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting Noise minimisation practices in accordance with mitigation measures outlined above, and Dust control measures in accordance with the mitigation measures outlined above 	Contractor	Construction, operation, rehabilitation
Biodiversity	Modification Report	B7	A Biodiversity Offset Strategy would be developed and approved by DPE prior to commencement of any disturbance works	AGLM	Prior to clearing of native vegetation
Visual	Modification Report	V1	AGLM will seek to minimise disturbance associated with the Mod-1 by, for example, retaining existing mature vegetation and limiting areas of disturbance (where possible) in order to limit the visual impacts.	Contractor	Construction, operation, rehabilitation

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Visual	Modification Report	V2	<ul style="list-style-type: none"> Stockpiles will be stabilised to prevent erosion by wind and water and avoid the development of dust plumes adversely impacting air and visual quality On completion of the work disturbed areas will be stabilised and rehabilitated; and The final landform design would consider visual implications. 	Contractor	Construction, operation, rehabilitation
Visual Amenity and Lighting	Modification Report	V3	AGLM would continue to maintain screening plantings within their landholding in accordance with the requirements of the RMP	AGLM	Construction, operation, rehabilitation
Visual Amenity and Lighting	DA 86/51-Mod1	B16	<p>AGLM must:</p> <p>(a) take all reasonable steps to minimise the visual and off-site lighting impacts of the development</p> <p>(b) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure</p> <p>(c) ensure no mobile lighting rigs shine directly above the void wall and other mobile lighting rigs do not shine directly above the horizontal (except where required for emergency safety purposes)</p> <p>(d) ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting</p> <p>(e) ensure that the visual appearance of any new buildings, structures, facilities or works (including paint colours and specifications) constructed following approval of Mod 1 are aimed at blending as far as possible with the surrounding landscape.</p>	Contractor	Construction, operation, rehabilitation
Protection of Aboriginal Heritage	DA 86/51-Mod1	B12	If suspected human remains are discovered on the site, then all work surrounding the area must cease, and the area must be secured. AGLM must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.	Contractor	Construction, operation, rehabilitation

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Protection of Aboriginal Heritage	DA 86/51-Mod1	B13	If any previously unknown Aboriginal object is discovered on the site, or suspected to be on the site: (a) all work in the immediate vicinity of the object or place must cease immediately (b) a 10-metre buffer area around the object or place must be cordoned off; and (c) Heritage NSW must be contacted immediately.	Contractor	Construction, operation, rehabilitation
Protection of Aboriginal Heritage	DA 86/51-Mod1	B14	Work in the immediate vicinity may only recommence if: (a) the potential Aboriginal object is confirmed by Heritage NSW, in consultation with the Registered Aboriginal Parties, not to be an Aboriginal object or Aboriginal Place; or (b) the Planning Secretary is satisfied with the measures to be implemented in respect of the Aboriginal object or Aboriginal place and makes a written direction in that regard.	Contractor	Construction, operation, rehabilitation
Protection of Aboriginal Heritage	DA 86/51-Mod1	B15	AGLM must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas are properly recorded, and those records are kept up to date, in the Aboriginal Heritage Information Management System (AHIMS) Register.	AGLM	Construction, operation, rehabilitation
Waste	DA 86/51-Mod1	B17	AGLM must: (a) take all reasonable steps to minimise the waste generated by the development; (b) classify all waste generated at the site in accordance with the Waste Classification Guidelines (EPA, 2014); and (c) dispose of all waste generated at the site to an appropriately licensed waste facility.	Contractor	Construction, operation, rehabilitation
Waste	DA 86/51-Mod1	B18	Apart from the coal ash being emplaced as part of the emplacement activities and except as expressly permitted in an applicable EPL, specific resource recovery order or exemption under the Protection of the Environment Operations (Waste) Regulation 2014, AGLM must not receive any waste at the site for storage, treatment, processing, reprocessing or disposal.	Contractor	Construction, operation, rehabilitation

Topic	Source	Reference	Environmental management measures	Responsibility	Timing
Dangerous goods	DA 86/51-Mod1	B19	AGLM must ensure that the storage, handling, and transport of: (a) dangerous goods is carried out in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code; and (b) explosives are managed in accordance with the requirements of the Resources Regulator	Contractor	Construction, operation, rehabilitation
Bushfire Management	DA 86/51-Mod1	B20	AGLM must: (a) ensure that the development: (i) provides for asset protection in accordance with the relevant requirements in the Planning for Bushfire Protection (RFS, 2006) guideline; and (ii) ensure that there is suitable equipment to respond to any fires on the site; and (b) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.	AGLM	Construction, operation, rehabilitation

7.0 Monitoring and auditing

The Project Manager will ensure the environmental aspects associated with Mod-1 are consistently monitored and any deviation from planning control programs are identified and corrected in an effective manner.

7.1 Monitoring

Monitoring associated with Mod-1 and the surrounding rehabilitation areas within AGLM's landholding would continue to be undertaken in accordance with the requirements of EPL 779 and the RMP, with results publicly reported where required. The Site Superintendent will undertake weekly and/or daily site inspections of the Mod-1 area when project activities are occurring using an inspection checklist to evaluate the effectiveness of the environmental controls and to ensure ongoing compliance with the requirements of this EMS and any other relevant plan.

Specific monitoring measures described within related management plans will be incorporated into the inspection program and inspection checklists where relevant. Reference should be made to the Water Management Plan for Mod-1 (AECOM, 2023). Inspections of the area will also be undertaken within 24 hours following significant rainfall events during construction and operation of the borrow pits.

AGLM-HSE-FRM-008.10.1 provides information on the responsibilities and scheduling of environmental monitoring tasks for required environmental aspects. Once operational, monitoring would be carried out in accordance with the existing monitoring arrangements.

7.2 Internal auditing

The HSEMS is internally audited annually as part of the AGL Group Operations Audit Program to assess legal compliance and the effectiveness of the system on site. Audits are conducted against ISO 14001, and audit criteria, scope, frequency, and methods are approved by the Environment Manager. The Internal Audit Checklist AGLM-HSE-FRM-008.08.3 specifies the audit requirements, including staff interviews, observations, and a review of records and documentation. All non-conformances identified are to be recorded and reviewed to ensure action is taken.

Contractors are required to prepare a Compliance Register for the work they are conducting and to support the internal audits.

7.3 Independent auditing

Independent (external) environmental audits are required for Mod-1. Conditions C9-C10 of Development consent DA 86/51-Mod1 outline the requirements for independent environmental audits. Independent audits must be carried out in accordance with the requirements outlined in the Independent Audit Post Approval Requirements (Department of Planning, Industry and Environment (DPIE), 2020). Monitoring locations are shown in Figure 3 and Figure 4.

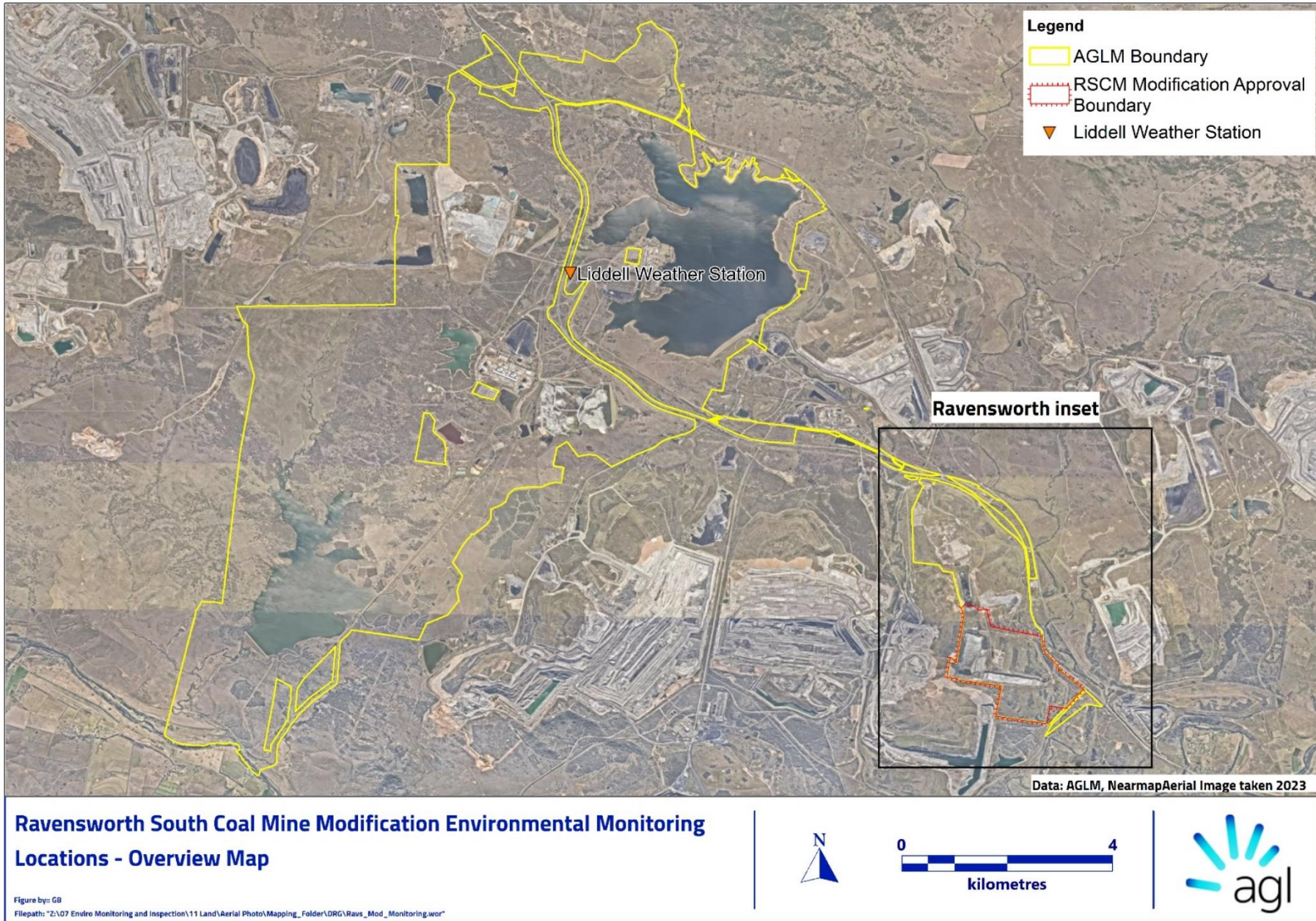


Figure 3 Environmental monitoring locations - overview

Revision D – 21-Feb-2024

Prepared for – AGL Macquarie Pty Ltd – ABN: 18 167 859 494

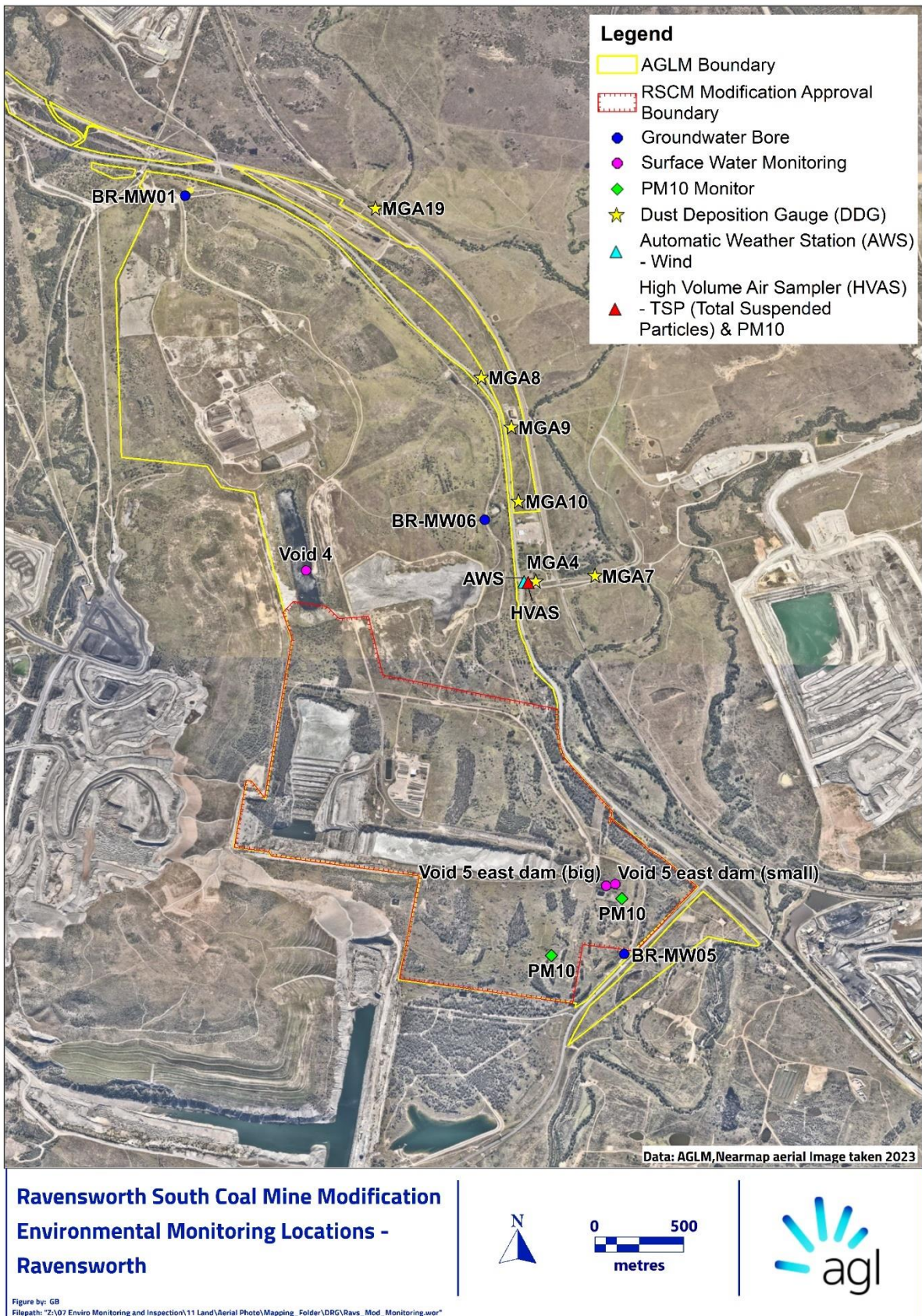


Figure 4 Environmental monitoring locations

8.0 Compliance and reporting

8.1 Non-compliance notification

Condition C8 of DA86/51-Mod1 species within seven days of becoming aware of a non-compliance, AGLM must notify the Department of the non-compliance. 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.

8.2 Compliance register

AGLM will develop a register or table of environmental compliance requirements to assist with monitoring and recording compliance with requirements. The register will:

- Provide an identification number for each compliance requirement
- Identify the requirements in all conditions of consent that must be complied with during the planning and conduct of works under the contract
- Detail the monitoring methods to be used to assess compliance with each compliance requirement
- Detail the type of data or evidence that is to be collected to assess whether compliance has been achieved.

8.3 Corrective and preventative actions

A corrective and preventative action process must be implemented immediately following the identification of a non-compliance or non-conformance and the notification process outlined in Section 8.1.

9.0 Continual improvement and review

This EMS and all other associated plans will be regularly reviewed as part of a continual improvement process to ensure they remain current and relevant to the RSCM Project.

In accordance with condition C5 of Mod-1, the EMS and other associated plans will be reviewed within three months of:

- the submission of an incident report required under condition C7 or C8 of Mod-1
- the submission of an Independent Environmental Audit under condition C9 of Mod-1
- the approval or modification to the conditions of consent of Mod-1.

Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

Other triggers for WMP review may include:

- major change in the methodology
- findings and recommendations of site inspections, and
- changes in environmental legislation and/or policies.

10.0 References

AECOM (2023) *Ravensworth South Coal Mine Modification, Water Management Plan*.

ANZG (2018) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, Australian and New Zealand Governments and Australian state and territory governments (ANZG) Canberra, Act, Australia.

DECCW (2006) *NSW Water Quality and River Flow Objectives*, Department of Environment, Climate Change and Water, NSW Government, Sydney.

Landcom (2004) *Managing Urban Stormwater: Soils and Construction – Volume 1* (also known as the Blue Book), Landcom, Sydney.

Jacobs (2022) Ravensworth South Mine Modification – Groundwater Assessment (IS349200 | 4), Jacobs Group (Australia) Pty Ltd, Newcastle West, 24 March 2022.

(Modification Report) Ravensworth South Mine – Rehabilitation Amendment Modification Report (IS349200-NP-Rpt-001 | D), Jacobs Group (Australia) Pty Ltd, Newcastle West, 20 May 2022.

DPE (2023) AGL Ravensworth South Modification 1 – Landform Amendment, Department of Planning and Environment, NSW Government, Sydney, April 2023.

DPE (2020) *Independent Audit Post Approval Requirements*, Department of Planning and Environment, NSW Government, Sydney.

DPE (2020) *Compliance Reporting Post Approval Requirements*, Department of Planning and Environment, NSW Government, Sydney.

Appendix A

Legislative summary

Appendix A Legislative summary

Legislation	Relevance to the Project
Biodiversity Conservation Act 2016	Section 7.17(2) of the BC Act provides that, typically a biodiversity development assessment report (BDAR) is required to be prepared for applications for the modification of a development consent where impacts to biodiversity values are likely to be increased. AGLM has confirmed through consultation with the Biodiversity, Conservation and Science Group (BCS) of DPE that a BDAR is required for Mod-1.
Heritage Act 1977	No known heritage items are located in or around Void 5, including the area of Mod-1. Therefore, Mod-1 is not expected to impact on any known heritage items.
National Parks and Wildlife Act 1974	Mod-1 footprint has been completely disturbed by the mining process and backfilled with mine spoil associated with the original approval. There is considered no potential for Aboriginal heritage items to be present. Accordingly, Mod-1 would not represent a risk of harm to Aboriginal places or objects.
State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP)	The Planning Systems SEPP incorporates the provisions of the former State Environmental Planning Policy (State and Regional Development) 2011, State Environmental Planning Policy (Aboriginal Land) 2019 and the State Environmental Planning Policy (Concurrences and Consents) 2018. The SEPPs have been consolidated to align with the new planning principles thematic framework developed by the Department of Planning and Environment (DPE).
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Mod-1 area is zoned wholly as RU1 Primary Production within the Singleton Council LGA. Accordingly, clause 3.3 of the Biodiversity and Conservation SEPP provides that Chapter 3 will generally apply to the assessment of impacts upon this land. However, this Chapter only applies to developments where Council are the consent authority. As such, no further assessment in accordance with Chapter 3 of the Biodiversity and Conservation SEPP is required.
Protection of the Environment Operations Act 1997	Void 5 is located within the premises subject to the EPL and will continue to be regulated in accordance with the existing conditions on the EPL. No modification is required to the EPL conditions to enable Mod-1.
Dams Safety Act 2015	The Void 5 Dam wall is constructed from waste rock placed across the eastern end of Void 5. Void 5 Dam is a declared dam under the Dams Safety Regulation 2019 administered by Dam Safety NSW. As part of the Dam Safety NSW's requirements, it is necessary to establish the Consequence Category for any prescribed dam. This is required by the DSNSW so that it can determine design requirements as well as set an appropriate level of ongoing surveillance. The Consequence Category of the dam is reviewed at five-yearly intervals within comprehensive surveillance reports, which are submitted to the DSNSW. The Consequence Category for the dam would be reviewed to consider the works proposed as part of Mod-1.
Rural Fires Act 1997	Mod-1 is not for a special fire protection purpose and does not require a bushfires safety authority under section 100B of the Rural Fires Act.
Coal Mine Subsidence Compensation Act 2017	Mod-1 is sited upon land mapped as a mine subsidence district. No new structures are proposed as part of Mod-1. However, changes to approved dam walls may be required. If this is the case, approval under section 21 of the CMS Act would be sought for any new infrastructure within this area.
Roads Act 1993	Mod-1 would not involve any works that would trigger the requirement to obtain consent under section 138 of the Roads Act.

Legislation	Relevance to the Project
Water Act 1912 and Water Management Act 2000	Mod-1 would not alter AGLM's overall water requirements, with all necessary water to be drawn from within existing entitlements. AGLM currently holds a number of water access licences (WAL) under the WM Act, associated with the ongoing operation of Bayswater. Mod-1 does not involve groundwater abstraction and any required harvesting of surface water is covered by existing entitlements. A new WAL or modification to existing WALs would not be required. Implications for groundwater are assessed in Section 6.2. Mod-1 does not involve new works in waterfront land.

Appendix B

Regulator consultation

Department of Planning, Housing and Infrastructure



Our ref: DA86-51-PA-7

Matthew Parkinson
Manager Environment and Approvals
AGL MACQUARIE PTY LIMITED
New England Highway
Muswellbrook New South Wales 2333

7 February 2024

Subject: Ravensworth South/No.2 - Environmental Management Strategy

Dear Mr Parkinson

Reference is made to your post approval matter, DA86-51-PA-8, Environmental Management Strategy, submitted as required by Schedule 2, Condition C1 of DA 86/51-Mod 1 to the NSW Department of Planning, Housing and Infrastructure (the Department) on 18 October 2023.

The Department has reviewed the Environmental Management Strategy and considers more information is required to satisfy the condition of consent. Under the provisions of Schedule 2, Condition C1 of the consent, I, as nominee of the Planning Secretary, request that an amended Environmental Management Strategy be submitted as a response to this request for information (RFI-67419258) addressing the points raised in attached review table by 23 February 2024 (or as otherwise agreed by the Planning Secretary).

Should you wish to discuss the matter further, please contact Kiera Plumridge, (Environmental Assessment Officer) on 02 8836 0060 or kiera.plumridge@dpie.nsw.gov.au, or email compliance@planning.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read "Joe Fittell".

Joe Fittell
Team Leader
Resource Assessments

As nominee of the Planning Secretary

**Ravensworth South Coal Mine (DA86/51-Mod 1)
Post Approval Review**



Document: "Ravensworth South Coal Mine Modification Environmental Management Strategy" prepared by AECOM

Revision: Revision C – 18-Oct-2023

Reviewed: KP – 25/1/24

Condition C1 – Environmental Management Strategy	Sufficient (Yes/No/Partial)	Document Reference and Comment	Action Required	Company Response (21-Feb-2024)
C1. The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	-			
(a) be submitted for approval within 6 months of the approval of Mod 1;	Yes	Notice of Modification dated 19 April 2023, and Ravensworth South Coal Mine Modification Environmental Management Strategy (AECOM, 2023) Revision C as submitted dated 18 October 2023 which is 6 months and meets this requirement.	N/A	
(b) provide the strategic framework for environmental management of the development;	Yes	Ravensworth South Coal Mine Modification Environmental Management Strategy (AECOM, 2023) Revision C as submitted dated 18 October 2023 provides strategic framework for the environmental management of Mod-1 as noted in Section 1.5.	N/A	
(c) identify the statutory approvals that apply to the development;	Partial	Section 2 includes detail on how the Modification adheres to and meets requirements of the EP&A Act and EP&A Regulation, relevant EPIS, the development consent (with Section 1.6 specifying relevant development consent conditions and project approvals and licences); the POEO Act; other relevant legislation and guidelines (with further legislative summary detailed in Appendix A); and relevant approvals, permits, and licences.	Condition B8 not included in Table 3 (Section 1.6.2) or Table 11 (Section 8).	Table 3 updated to include Condition B8. As stated in section 6.0, Table 11 lists management measures requirements from the Modification Report and development consent DA86/51-Mod-1 which have <i>NOT</i> been captured under other management plans for the RSCM Project. Condition B6 is captured under the Water Management Plan and therefore is not listed in this table.
(d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Yes	Section 3.3 includes detail of all relevant roles and responsibilities of both AGLM and contractor key personnel.	N/A	
(e) set out the procedures to be implemented to:	-			
(i) keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Yes	Section 4 includes detail on community and stakeholder consultation inclusive of key feedback/contact methods including reference to an existing AGL procedure and existing community reference group which meets quarterly. Agency consultation summarised as agencies that have provided comment during approval phase to be kept updates as required, however no specific methods or timing detailed. Section 4.4 notes consultation required as per development consent specifying agencies requiring consultation relevant to certain plans which provides sufficient detail and meets requirements.	N/A	
(ii) receive record, handle and respond to complaints;	Yes	Section 4.3 includes detail on complaints handling including reference to an existing AGL policy with appropriate level of detail.	N/A	
(iii) resolve any disputes that may arise during the course of the development;	Yes	As above.	N/A	
(iv) respond to any non-compliance and any incident;	Yes	Section 8 includes detail of non-compliance notification and compliance register requirements.	N/A	

**Ravensworth South Coal Mine (DA86/51-Mod 1)
Post Approval Review**



Document: "Ravensworth South Coal Mine Modification Environmental Management Strategy" prepared by AECOM

Revision: Revision C – 18-Oct-2023

Reviewed: KP – 25/1/24

(v) respond to emergencies; and	Yes	Section 3.5 includes detail on incident and emergency management with procedures for incident, emergency response, and pollution incidents including references to existing AGL procedures, noting key emergency contacts and site personnel responsibilities.	N/A	
(f) include:	-			
(i) references to any strategies, plans and programs approved under the conditions of this consent; and	Yes	Section 10 includes reference list of all relevant plans to the EMS, with specific plans referenced throughout the EMS as required.	Supplementary plans referenced in this Section recommended to be kept with the EMS.	Noted
(ii) a clear plan depicting all the monitoring to be carried out under the conditions of this consent.	Partial	Existing figures are suitable however a figure has not been included that is specific to the monitoring to be carried out under the conditions of this consent.	Figure should be created with locations where practicable for any monitoring program committed to under the Consent (i.e., noise, blasting, surface and ground water, air quality,	Figures 3 and 4 have been included to show environmental monitoring locations.
General Comments			Action Required	Company Response