

CULLEN VALLEY MINE

FIRE MANAGEMENT PLAN

Shoalhaven Coal Pty Ltd

3 December 2025

DOCUMENT CONTROL

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1. INTRODUCTION

1.1 Background

Cullen Valley Mine (CVM) is located near Cullen Bullen in the Western Coalfields of NSW, approximately 30 km north-west of Lithgow (see **Figure 1**). Underground mining commenced at CVM (formerly Tyldesley Colliery) around 1904 and continued up until the 1960s when the workings were abandoned. Early open cut operations were conducted on the site between 1948 and 1953.

The current development consent for CVM (DA 200-5-2003) was granted by the Department of Infrastructure and Planning (now the Department of Planning and Environment (DPHI)) in August 2004 for a period of 21 years. The conditions of DA 200-5-2003 were subsequently modified in December 2004 to allow for the transportation of product coal from CVM to domestic destinations other than Mount Piper Power Station. The conceptual layout of the site as approved under DA 200-5-2003 is shown on **Figure 2**.

Mining of coal at CVM commenced in May 2000 using open cut methods following a four-month construction phase and continued until the site was placed in Care and Maintenance in early 2013.

Shoalhaven Coal Pty Ltd (trading as Castlereagh Coal Pty Ltd (Castlereagh Coal)) purchased CVM in May 2015 and has operated the mine under Care and Maintenance since that time. Castlereagh Coal recommenced open cut coal mining operations at CVM in early 2022 within the existing disturbance area approved under DA 200-5-2003, in order to collect remnant coal reserves. The site returned to care and maintenance in July 2023. Under a new modification issued in August 2025, Castlereagh Coal intends to recover the remaining coal reserves, with a scope to recommence mining operations in 2026.

1.2 Document Purpose and Scope

This Fire Management Plan (FMP) document has been prepared to describe the outline the response to, and management of fire within the CVM site. This revision of the FMP has been prepared in accordance with the requirements of DA 200-5-2003 for use by Castlereagh Coal during the recommencement of mining operations on site.

1.3 Document Objectives

The objectives of this document are to:

- Describe fire management procedures and response measures at CVM;
- Provide mitigation controls that will be implemented to reduce the risk and severity of fire events on site; and
- Outline procedures for communication with external CVM stakeholders in relation to fires.

Statutory requirements from DA 200-5-2003 that relate to this FMP and where they are addressed in this document are provided in **Table 1**.

1.4 Document Structure

The document is structured as follows:

- **Section 1** outlines the purpose, scope and objectives of this FMP and provides relevant background information on CVM;

- **Section 2** outlines the management plan including mitigation measures, monitoring programs, air quality standards and land acquisition procedures;
- **Section 3** outlines the relevant stakeholder engagements as well as complaints, incidents and reporting requirements;
- **Section 4** provides an overview of the roles and responsibilities of personnel within the company in managing environmental issues for Cullen Valley Mine;
- **Section 5** outlines the reporting and review requirements for this FMP; and
- **Sections 6 and 7** provide a list of reference documents and abbreviations used in this document.

Table 1 FMP Requirements

DA 200-5-2003 Condition	Requirement	Where Addressed
Schedule 4, Condition 57	The Applicant shall: (a) ensure that the development is suitably equipped to respond to any fires on site to the satisfaction of DPI and the Rural Fire Service; and	Section 2.3, 3
	(b) prepare a Fire Management Plan; to the satisfaction of DPIE and the Rural Fire Service	Section 3

Figure 1 Regional Locality

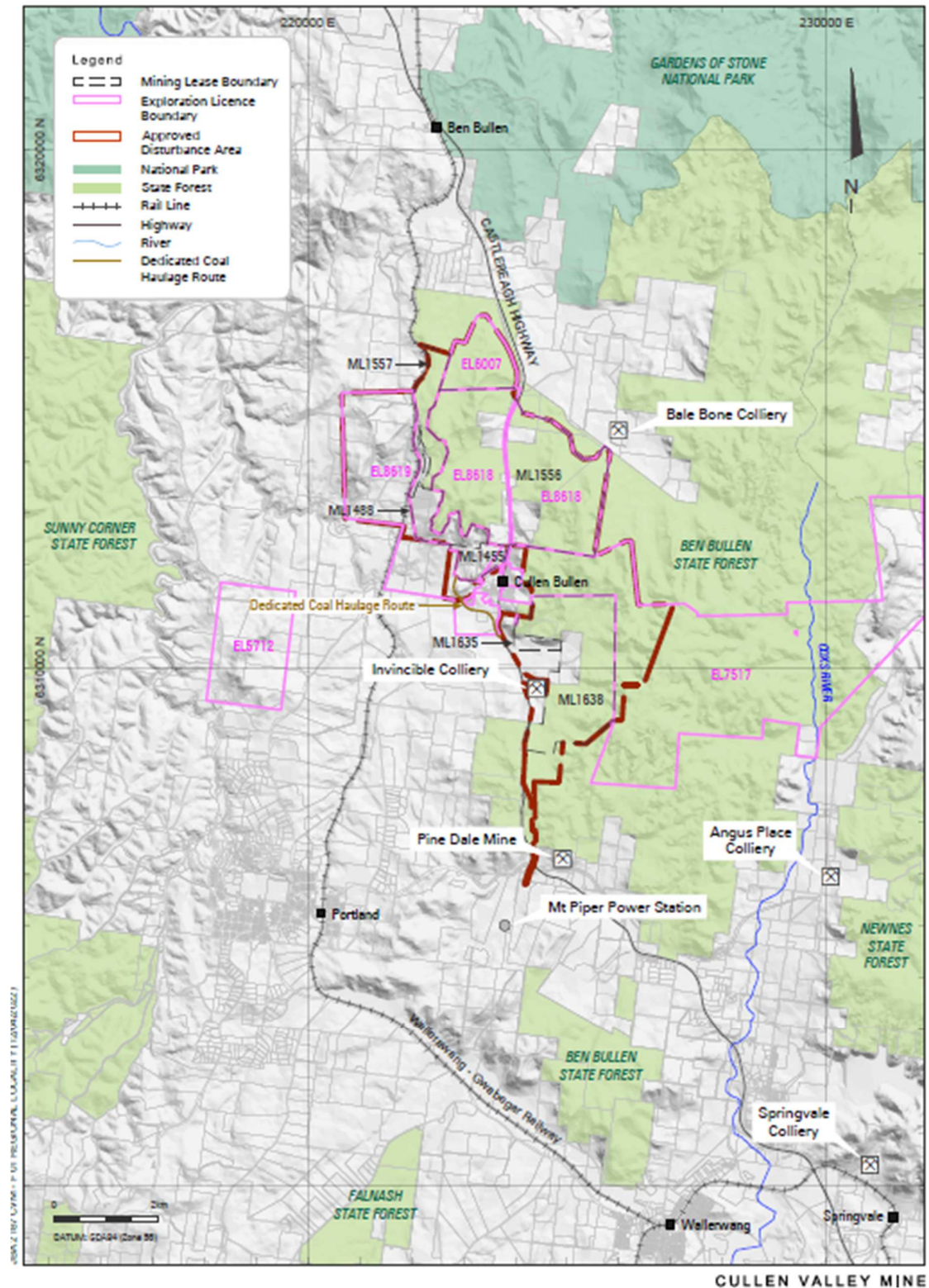
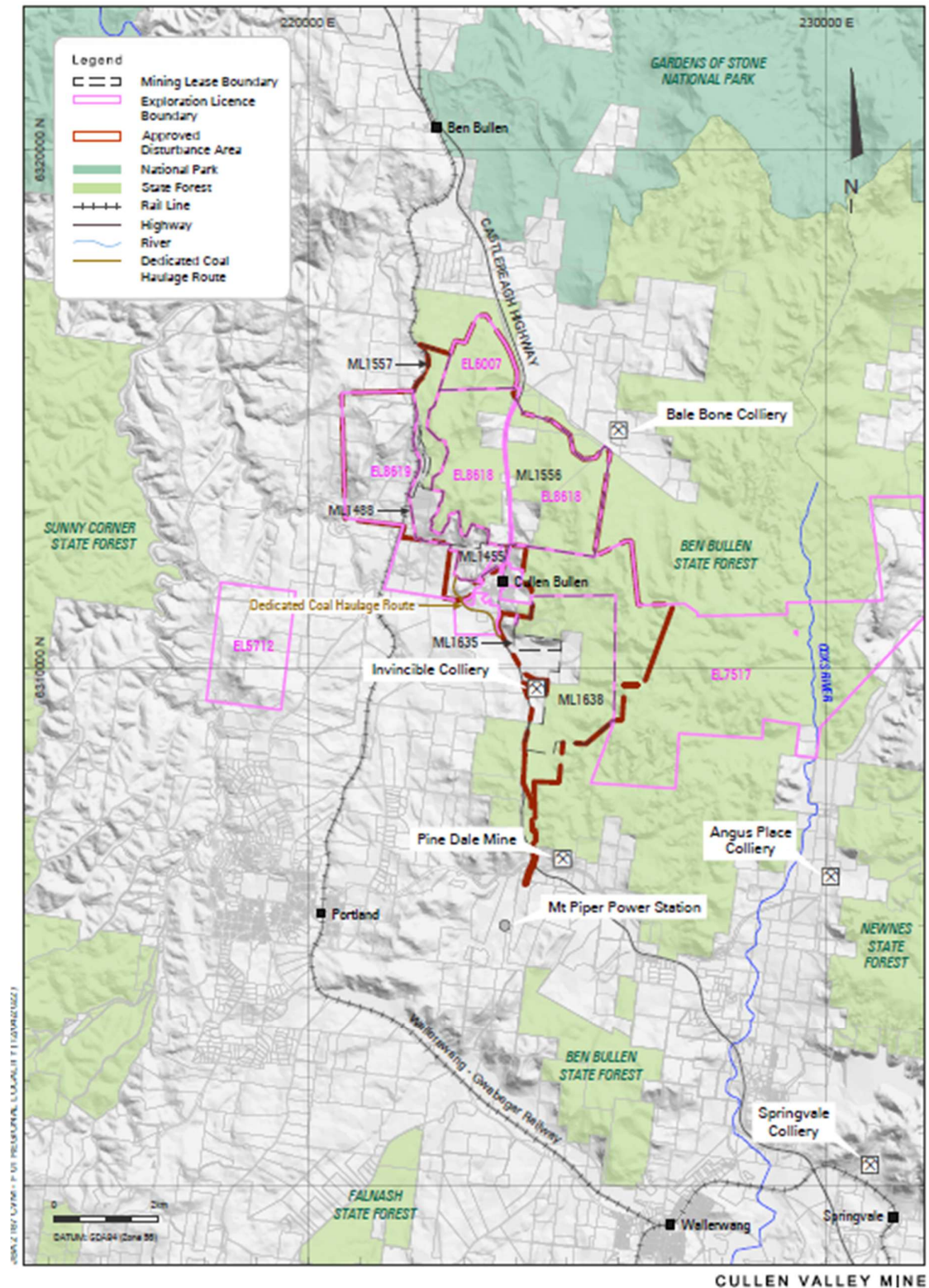


Figure 2 Site Layout Plan



2. FIRE MANAGEMENT PLAN

2.1 Existing Environment

This section provides a summary of the existing environment of CVM and the surrounding land categories that have been considered in this FMP. These include the CVM site and adjacent Habitat Compensation Areas (HCA), privately owned land, the Wallerawang-Gwabegar Rail Line and the Castlereagh Highway (refer to **Figure 2** and **Figure 3**).

2.1.1 CVM Site

The existing CVM site generally consists of a combined open cut and highwall coal mining operation and associated infrastructure, rehabilitation areas and water management control structures. Coal is approved for extraction from the Upper Irondale, Irondale, Lidsdale and Lithgow seams of the Illawarra Coal Measures.

Open cut mining operations are planned to recommence on site in 2026 utilising shovel/excavator and a fleet of trucks. Coal will be extracted from seven seams within the Illawarra Coal Measures by the open cut operation. Highwall and underground mining operations are also approved under DA 200-5-2003 and include highwall mining and underground mining of the Irondale and Lithgow seams using continuous miner units. No highwall or underground mining is currently undertaken at CVM.

Site infrastructure generally includes the following:

- The CVM site offices, workshop, bathhouse and associated amenities;
- Fully bunded fuel storage facilities housing one 90,000 L tank and associated pipes, meters and pumps;
- Coal stockpiles with a capacity of 100,000 tonnes;
- Carpark and internal access roads (including a private haul road to the south of Cullen Bullen township), with site access from an intersection with Portland Cullen Bullen Road (see **Figure 1** and **Figure 2**); and
- Powerlines, transformer installations and other mining related facilities.

The land to be accessed for the open cut operation is predominantly covered by undulating native woodland and forests which comprise part of the Gardens of Stone State Conservation Area. While these native vegetation communities represent a stable and low maintenance landform, the vegetated areas surrounding CVM may represent a hazard during a fire event.

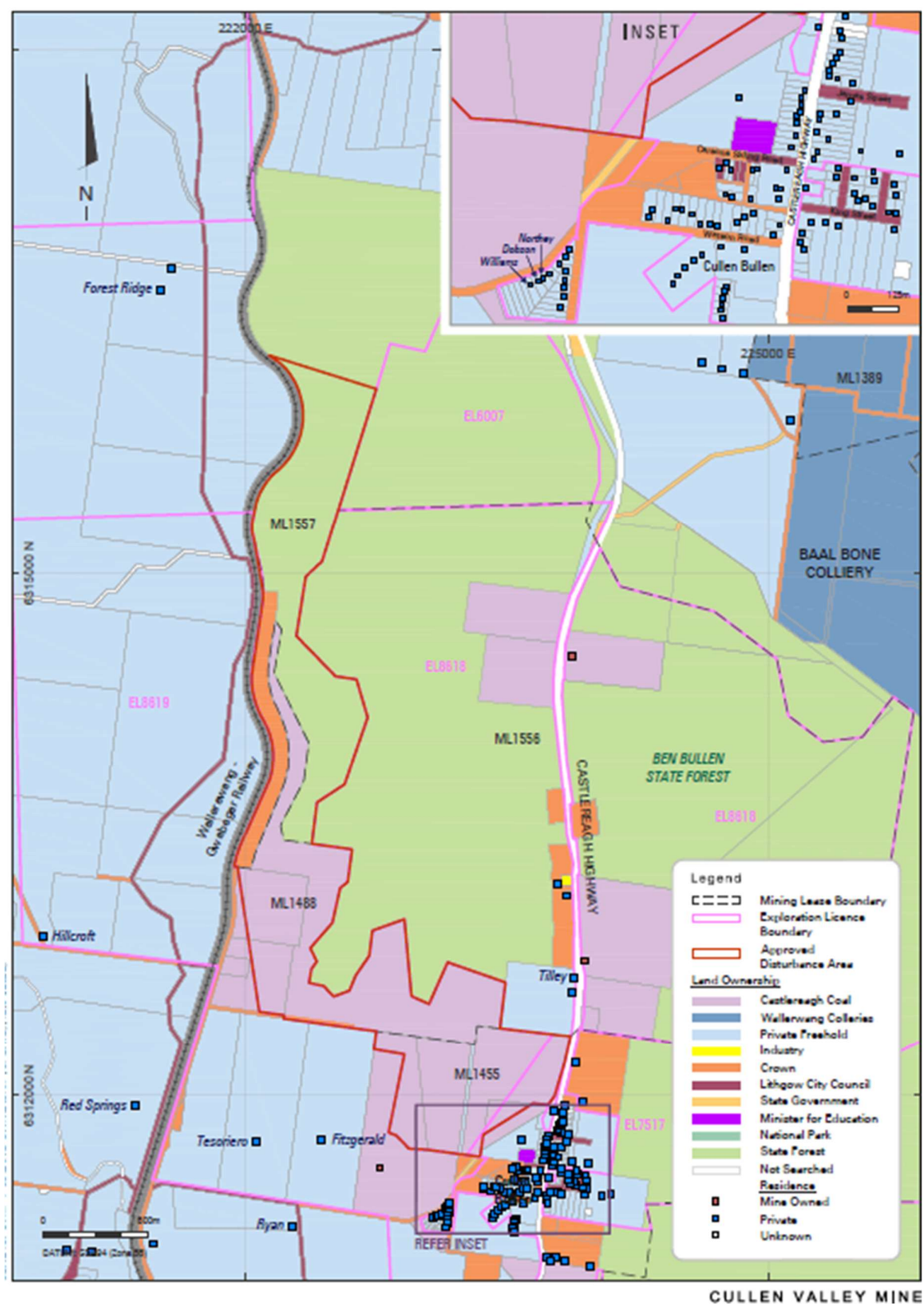
2.1.2 Surrounding Private Land Ownership

The lands occupied by CVM are predominantly managed by National Parks and Wildlife Service (NPWS) as part of the Gardens of Stone State Conservation Area, with other areas within the site held by Castlereagh Coal and the Crown Lands. A number of private landholdings are located in the immediate surrounds of the site. The status of land ownership surrounding CVM is shown in **Figure 3**.

The township of Cullen Bullen is located approximately 0.5 km to the south of the CVM site administration facilities and adjacent to the Castlereagh Highway (refer **Figure 1**). Cullen Bullen is surrounded by lands cleared for small rural properties and by the Gardens of Stone State Conservation Area.

A number of private rural properties are also located in the vicinity of the CVM, the locations of which are shown in **Figure 3**. Lands to the west have generally been cleared for existing agriculture including cattle grazing, while those properties immediately to the south and north of the site consist of small rural allotments.

Figure 3 Land Ownership



2.1.3 Wallerawang – Gwabegar Rail Line

The Wallerawang – Gwabegar Rail Line runs from south to north immediately adjacent to the western boundary of CVM, separating the site and the Ben Bullen State Forest from the cleared rural properties located along Red Springs Road. As shown on **Figure 2**, the location Wallerawang – Gwabegar Rail Line provides an effective potential fire break.

2.1.4 Castlereagh Highway

The Castlereagh Highway, a major regional road, provides a boundary to the east of the site, bordering the Gardens of Stone State Conservation Area to the east of the CVM site, as shown in **Figure 1**. The highway provides an effective access and potential firebreak between the site and further State Forest areas to the east.

2.1.5 Habitat Compensation Areas

The CVM Habitat Compensation Areas (HCAs) as shown on **Figure 2** are approximately 50 ha in size and are predominantly native woodland areas owned by Castlereagh Coal. The HCAs have been permanently delineated as conservation areas under DA 200-5-2003. The HCAs are located surrounding the areas previously disturbed by mining activities at CVM and adjacent to the Gardens of Stone State Conservation Area.

The aim of the HCAs is to provide a habitat for native wildlife, which gains much of its value in its location being continuous with the vegetation communities in the Gardens of Stone State Conservation Area. An important component of the habitat potential of the area relevant to fire management is fallen logs and leaf litter, which offer shelter for small ground dwelling mammals and reptiles.

2.1.6 Subsurface Heating

An area of underground heating was first encountered at CVM early in 2004 by the open cut operations of Lithgow Coal Company (previous owners of CVM). This fire had started in the abandoned Tyldesley Mine in the mid-1960s or 1970s and despite attempts to contain this event since, the fire is still being managed in consultation with the NSW-Resources – Resources Regulator (RR).

A Plan of Works for the management of the underground heating areas was updated by Umwelt (2020) and included in the CVM Mining Operations Plan 2021 - 2025. A further review relative to a Section 240 Notice requiring an updated Plan of Works for the containment and extinguishing of the subsurface heating has been commissioned, with the outcomes to be adopted into Rehabilitation Management Plan and related CVM documents.

Castlereagh Coal will continue to monitor for subsurface heating and undertake treatment measures in accordance with the updated Plan of Works. Monitoring and treatment activities for the subsurface heating area currently include:

- Weekly monitoring of heating areas (temperature/heat gun, sulphurous smell, smoke, discoloration of the ground, vegetation dieback or stress and/or surface cracking);
- Capping of surface cracking in heating areas; and
- Excavation and compaction of material as required to mitigate identified heating areas.

2.2 EMERGENCY CONTACTS

In all cases where there is a risk of loss of life, serious injury, or spread of fire onto adjoining properties, the RFS will be contacted immediately for assistance through the 000-emergency number. The RFS will also be contacted if there is a risk of fire impacting on infrastructure and other assets within CVM.

Forests NSW will also be contacted as soon as possible in the event that a fire is detected in the Gardens of Stone State Conservation Area or if there is a risk of fire impacting their lands adjacent to the CVM site.

All personnel are responsible to notify the CVM Mine Manager and site office on the numbers provided in **Table 2** in the event of a fire occurring on site, or if there is the possibility that a fire in the region may reach the site.

All employees, contractors and visitors to the site are made aware of the appropriate emergency contacts and procedures to be used in the event of a fire during the site induction process.

2.3 MANAGEMENT STRATEGIES

This section provides a summary of the management strategies in place at CVM to minimise fire risk and manage any events that may occur.

2.3.1 CVM Site & Adjacent Properties

For the CVM site, the Wallerawang – Gwabegar Rail Line and surrounding road network provide effective fire breaks to assist in providing access for fire response and management. General measures implemented at CVM for the management of fire risk include:

- Regular inspections and maintenance of vegetation adjacent to site infrastructure, access roads and existing fire trails, as appropriate;
- Ensuring firefighting equipment is available on mobile equipment (including water carts) for the initial response to fire events on site, or to assist emergency services, if required;
- Ensuring all on site water storages are available for firefighting purposes to CVM personnel and the RFS, if required. The locations of current water management infrastructure on site are shown in **Figure 2**;
- All infrastructure areas, mobile and stationary plant and equipment at CVM having access to fire extinguishers;
- All infrastructure areas are regularly maintained to reduce the potential for fire occurrence or spread. Site equipment will be maintained in good working order to prevent incidents that could potentially result in a fire; and
- Ensuring that no additional impediment is caused by Castlereagh Coal to existing access tracks in the adjacent Gardens of Stone State Conservation Area which may be used for firefighting purposes by the RFS and NPWS.

2.3.2 Habitat Compensation Area

The HCAs pose a fire risk given the developed structure of the vegetation, leaf litter, fallen logs and continuity with the Gardens of Stone State Conservation Area. The structure of the vegetation within the HCAs provides the habitat values of these areas. As such, typical fire management strategies such as hazard reduction burning and fire break construction are not proposed for these areas due to their potential to greatly diminish their ecological significance.

The general fire management measures described in **Section 2.3.1** will be implemented for the areas of the HCAs which share common boundaries with private properties and the mining and infrastructure areas of CVM.

Table 2 Contact Details

Emergency Contact	Contact Number
Emergency Services	000
Lithgow LGA Fire Control Centre	1300 258 737
Cullen Valley Mine Site Office	0492 007 958
Cullen Valley Mine Manager	0492 007 958
National Parks and Wildlife Service	1300 072 757
Gardens of Stone State Conservation Area	(02) 6336 6200

3. STAKEHOLDER ENGAGEMENT

3.1 FMP Consultation

Correspondence with regulatory agencies relating to this revision of the FMP is included as **Appendix A**.

3.2 External Communications

3.2.1 Community Complaints

All community complaints received by CVM are recorded in the Castlereagh Coal Complaints Register. The register is regularly maintained and published on the Castlereagh Coal website to document a summary of all complaints received and follow-up actions taken by CVM personnel in response.

Further detail on the management of community complaints is provided within Section 6.1.3 of the CVM EMS.

3.2.2 Incidents and Non-Compliances

Schedule 6, Condition 10 of DA 200-5-2003 requires CVM to notify the Department within 24 hours of becoming aware of an incident. The notification must be made in writing via the NSW Planning Portal (Major Projects) and address details of the incident including:

- Date, time and location;
- A brief description of what occurred and why it has been classified as an incident;
- A description of what immediate steps were taken in relation to the incident; and
- Identifying a contact person for further communication regarding the incident.

Schedule 6, Condition 11 of DA 200-5-2003 requires CVM to provide the Department with a subsequent incident report in accordance with Appendix 7 of DA 200-5-2003. The subsequent incident report must:

- Identify how the incident was detected;
- Identify when the Applicant became aware of the incident;
- Identify any actual or potential non-compliance with conditions of consent;
- Identify further action(s) that will be taken in relation to the incident; and
- Provide a summary of the incident;
- Provide outcomes of an incident investigation, including identification of the cause of the incident;
- Provide details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence, including the period for implementing any corrective and/or preventative actions; and
- Provide details of any communication with other stakeholders regarding the incident.

Schedule 6, Condition 12 of DA 200-5-2003 requires CVM to report any non-compliance against conditions related to this FMP (refer **Table 1**) to the Department within seven days of becoming aware of the non-compliance and then in the Annual Review. Notification will be submitted in writing via the DPHI Planning Portal (Major Projects), identify the development (including the development application number and name).

Any reporting of a non-compliance with the relevant conditions of DA 200-5-2003 will outline the following:

- Condition of consent that the development is non-compliant with;
- Why it does not comply;
- Reasons for the con-compliance (if known); and
- What actions have been undertaken, or will be undertaken, and when, to address the non-compliance.

4. ROLES AND RESPONSIBILITIES

Table 4 summarises the management measures discussed in this FMP and provides the relevant responsibilities for each. These responsibilities may be delegated as required.

Ref	Control Measure	Responsibility	Timing
1	Review and approve this EMS and provide adequate resources for its implementation on site.	Operations Manager	Ongoing
2	All employees and contractors to be made aware of emergency procedures and responses in the case of fire at CVM.	All employees	Ongoing
3	Immediately enact the emergency notification procedure in the event of a fire on site (Section 2.2 of this FMP), notifying the site office and Mining Supervisor.	All employees	As required
4	Co-ordinate the immediate response to a fire on site and liaise with emergency services, as required.	Mining Supervisor	As required
5	All fire management equipment will be regularly maintained to ensure ongoing effectiveness.	Operations Manager	Ongoing
6	All onsite roads and water management infrastructure will be regularly maintained to provide access in the event of a fire.	Operations Manager	Ongoing
7	Monitor the areas impacted by subsurface heating in accordance with the CVM Plan of Management for Subsurface Heating.	Environment Officer	Ongoing
8	Notify the RFS if there are any changes to site access points at CVM.	Operations Manager	As required
9	Fire and subsurface heating management actions and any additional management measures will be reported in the CVM Annual Review.	Environment Officer	Annual
10	Complete review of this FMP to ensure consistency with current operations at CVM and industry standards and procedures.	Environment Officer	Five Yearly

5. REPORTING & REVIEW

5.1 Reporting

5.1.1 Annual Reporting

In accordance with Schedule 6, Condition 5 of DA 200-5-2003, CVM will continue to submit an Annual Review to DPHI and relevant agencies. The Annual Review will include a summary of any changes to management or response arrangements for fire or subsurface heating on site during the year and detail any related incidents and non-compliances.

A copy of each CVM Annual Review is provided to DPHI, RR, EPA, LCC and the representatives of the mine Community Consultative Committee (CCC).

5.1.2 Stakeholder Reporting

In accordance with Schedule 6, Condition 8 of DA 200-5-2003 CVM is required to establish a CCC to oversee the environmental performance of the mine. While in operation, the CCC will meet at least twice a year and will review and provide advice on environmental performance including this document, monitoring results, audit reports or complaints.

5.2 Auditing

In accordance with Schedule 6, Condition 6 of DA 200-5-2003, Castlereagh Coal will commission an Independent Environmental Audit within two years of the date of consent, and every three years thereafter, for submission to DPHI, unless otherwise approved. This audit report will consider the effectiveness of the FMP and provide environmental management advice to ensure its ongoing effectiveness.

5.3 Review

This FMP will be reviewed on at least a five yearly basis to ensure that it remains consistent with operations at CVM and in accordance with general industry standards and procedures. Reviews will consider the need to modify the FMP and the management measures in place at CVM to ensure that all practicable measures are in place to minimise the risk of fire on site.

The FMP will also be reviewed (and if necessary, updated) in response to:

- Relevant findings from Independent Environmental Audits;
- Findings from investigations of community complaints or monitoring non-compliances relating to air quality impacts;
- Directions from regulatory agencies; and
- Changes to conditions of consent.

Approval of any major amendments to this FMP will be sought from the Secretary of DPHI and other stakeholders, as required under DA 200-5-2003.

6. REFERENCES

- Castlereagh Coal (2022) *Cullen Valley Mine Environmental Management Strategy*.
- Castlereagh Coal (2022) *Cullen Valley Mine Environmental Monitoring Program*.
- International Environmental Consultants (2003) *Cullen Valley Mine Lease Extension Project*.
- Umwelt (2020) *Care and Maintenance Mining Operations Plan (2021 – 2025) Cullen Valley Mine*.

7. ABBREVIATIONS

Abbreviation	Meaning
CCC	Community Consultative Committee
CVM	Cullen Valley Mine
DPHI	Department of Planning, Housing and Infrastructure
RR	NSW Resources – Resources Regulator
EIS	Environmental Impact Statement
EMP	Environmental Monitoring Program
EPA	Environmental Protection Authority
FMP	Fire Management Plan
HCA	Habitat Compensation Areas
LCC	Lithgow City Council
RFS	Rural Fire Service
t	Tonnes

APPENDIX A

STAKEHOLDER ENGAGEMENT

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