

# **Bushfire Management Plan**

for the

# Pine Dale Coal Mine

(Including the Yarraboldy Extension)

February 2015

Revision History				
Version	Revision Date	Reason for Revision	Author	Authorised by:
1	June 2011	First edition	RW Corkery & Co	Hilton Goldinch
2	February 2015	Care and Maintenance	T Hurdley	G Goodwin
3	February 2015	Amended to include comments from NSW Rural Fire Service	T Hurdley	G Goodwin
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# 1. INTRODUCTION AND SCOPE

This Bushfire Management Plan (BFMP) for the Pine Dale Coal Mine, incorporating the Yarraboldy Extension, ("the mine") has been prepared in accordance with *Schedule 3 Condition 52* of Project Approval 10\_0041 and forms part of Enhance Place Pty Limited's Occupational Health and Safety Management System.

The mine is located near Blackmans Flat on the northern side of the Castlereagh Highway 17km northwest of Lithgow in the Western Coalfields of NSW (see **Figure BF1**).

The BFMP has been prepared in consultation with the Rural Fire Service (RFS) and to the satisfaction of Forestry Corporation of NSW (FCNSW).

The Pine Dale Mine has been placed on care and maintenance following cessation of all coal extraction in April 2014. Rehabilitation activities only are proposed during the care and maintenance term.

#### 1.1 SCOPE

Under Section 63 of the *Rural Fires Act 1997*, it is the duty of the owner or occupier of land to take any practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of the spread of bush fires on or from that land.

The scope of the BFMP applies to the mine, incorporating ML 1569, ML 1578 and MLA 375, and covers all activities during the care and maintenance term which may impact on, or influence a risk to bushfire occurrence and/or management. The purpose of the BFMP is to:

- (a) Identify potential causes of bushfires (Section 6);
- (b) Implement controls including fire equipment and locations (Section 7);
- (c) Identify induction and training for employees and contractors (section 7.8);
- (d) Identify emergency telephone numbers (Section 8);
- (e) Describe a process for audit and review (Section 9); and
- (f) Define responsibilities (Section 10).

# 2. OBJECTIVES

The objectives of Pine Dale Mine bushfire management is to:

- (a) identify the hazards and risks associated with bushfires;
- (b) manage and control those hazards and risks by monitoring and maintaining areas where bushfire hazards are identified;
- (c) contain any outbreak of fire related to the mine; and

(d) protect surrounding properties from fire damage originating from the mine operations.

# 3. SITE LOCATION AND DESCRIPTION

The Pine Dale coal mine is owned and operated by Enhance Place Pty Ltd (Enhance Place), located approximately 17 kilometres north-west of Lithgow and 5km north of Wallerawang in New South Wales (see Figure 1).

Extractive open cut mining operations ceased in April 2014 when Approved mineable resources were exhausted. Rehabilitation activities are currently being undertaken consistent with the Approved Care and Maintenance Mining Operations Plan.

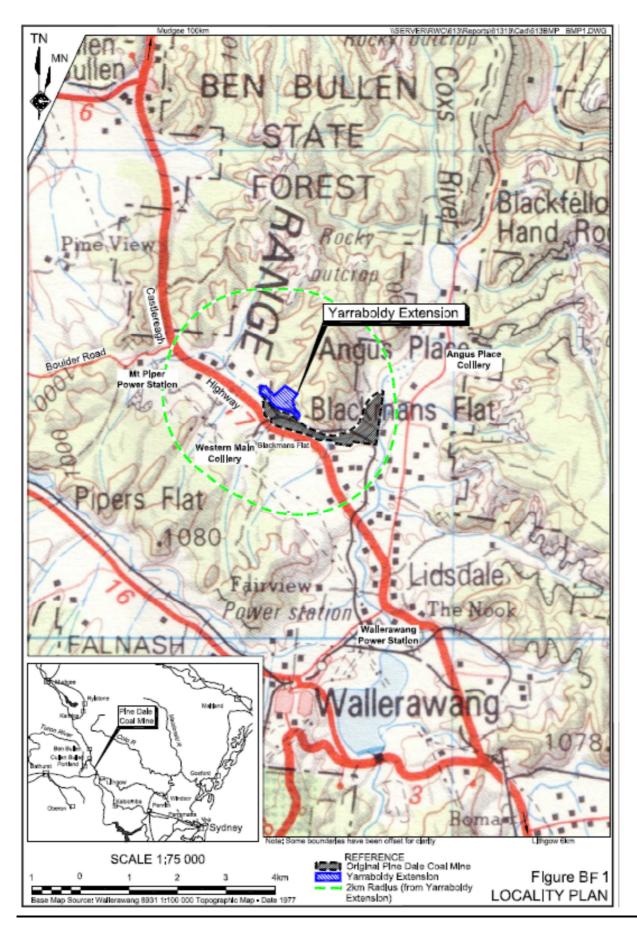
As the Site has previously been cleared for open cut mining purposes it is predominantly free of mature bushland, characterised by regenerating pasture land and tube stock.

The vegetation to the north of the mine is dominated with woodland and open forest vegetation being the Ben Bullen State Forest, whilst to the south lies Neubeck Creek, the Castlereagh highway and the settlement of Blackmans Flat and isolated residences.

The following Rural Fire Brigades and Fire and Rescue Stations are located within proximity to the site:

- Wallerawang Rural Fire Brigade, approximately 3km south east
- Portland Rural Fire Brigade, approximately 7.5km west.
- Wallerawang Fire and Rescue NSW Station, approximately 5.5km south
- Portland Fire and Rescue NSW Station, approximately 7.5km west.

Figure 1 - Site location



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# 4. APPROVAL REQUIREMENTS

Conditional requirements within Project Approval 10\_0041 relevant to bushfire management are detailed at Table 1.

Table 1 - Project Approval Condition

Ref	Project Approval Condition
Schedule 3	The Proponent shall:
Condition	(a) ensure that the development is suitably equipped to respond to any fires
51	on-site; and,
	(b) assist the emergency services as much as possible if there is a fire on-site
	during the development.
Schedule 3	By the end of April 2011, the Proponent shall prepare and implement a Bushfire
Condition	Management Plan for the site, to the satisfaction of the State Forest in
52	consultation with the local Rural Fire Service.

# 5. CONSULTATION

The BFMP has been prepared in consultation with the RFS and FCNSW. Further consultation will be undertaken with the relevant authorities and/or stakeholders prior to extractive mining reoccurring at the site.

A copy of the BFMP will be placed on the Pine Dale Mine website.

# 6. **BUSHFIRE HAZARD IDENTIFICATION**

#### 6.1 BUSHFIRE HAZARDS AND CATEGORISATION

A Care and Maintenance Risk Assessment (CMRA) has been completed for the Care and Maintenance term (Pine Dale Mine 2014). Fire was identified to be a low risk due to minimal machinery being operated at the site being utilised for rehabilitation activities only, no combustible fuels being stored on site and no blasting or vegetation clearing campaigns being undertaken during the care and maintenance term.

However, key risk areas during the extractive mining term will continue to apply during the care and maintenance term which include;

- a) public access areas;
- b) active operational areas;
- c) administration area;
- d) workshop areas;

The areas above were considered due to their risk of impacts to health and safety of employees/contactors, infrastructure and materials, business operations, environment and potential spread into the community

Other hazards that could cause a bushfire include:

- a) lightning;
- b) arson;
- c) arcing from powerlines

# 7. MANAGEMENT AND MITIGATION MEASURES

#### 7.1 INTRODUCTION

Enhance Place will continue to operate in accordance with the management procedures and controls provided herein which will be developed and reviewed in consultation with relevant regulators. All potential and onsite bush fire hazards are managed in accordance with the Rural Fires Act 1997 and regulated by the RFS.

#### 7.2 MANAGEMENT STRATEGIES FOR ASSETS

This section outlines the key guiding principles that Enhance Place and its contractors will use to protect assets, minimise and manage potential bush fire hazards associated with the mine and to prevent the potential spread of any such event.

- a) Site inductions and training for all personnel and contractors will be undertaken to ensure any one working on the mine is aware of their responsibilities as set out in this BFMP;
- b) All employees and contractors to be made aware of emergency procedures and responses in the case of a fire event;
- c) Internal monitoring and communication of fire danger risks;
- d) Monitoring and maintenance of assets where bush fire hazards exist to prevent or minimise the potential outbreak of bush fire, particularly the key risk areas;
- e) Undertake hazard reduction via prescribed burning as required in consultation with the RFS, FCNSW and immediate surrounding landowners;
- f) Monitoring and maintaining, in conjunction with FCNSW all fire trails or access roads in Ben Bullen State Forest at the mine boundary. In the event of a fire this serves to allow fire fighting services access and establishes fire breaks;
- g) All roads and water infrastructure within the mine boundary will be maintained for access and use by internal parties and emergency services in the event of a fire;
- h) Regular checking and maintenance of all fire management equipment;

- i) Fire extinguishers to be fitted in all mobile equipment and the training of staff in their operation;
- j) Fitting and maintaining efficient exhaust systems to mobile equipment;
- k) Ensuring that vehicles with low level exhaust systems do not leave defined access tracks in conditions likely to lead to ignition of combustible plant material;
- Use of official warnings to evacuate in the event of a bushfire and notify relevant authorities;
- m) Advise RFS, neighbours and other authorities of any fire within the mine boundary or immediate surrounding area;
- n) Offer assistance of trained persons/equipment/water storage to RFS in the event of bush fire in close proximity to the mine;

### 7.3 EQUIPMENT OPERATION

Mobile equipment will be fitted with efficient exhaust systems to reduce the potential of ignition from hot exhausts. Vehicles with low level exhaust systems will be restricted from leaving defined access tracks in conditions that pose risk to ignition of combustible plant material and hence fire potential. Any mobile vehicles working in vegetated areas will not be left unattended where there is an environment that provides fire risk. Alternatively mobile vehicles should be parked up in a safe cleared location free of vegetation. If mobile vehicles must be left unattended in vegetated areas, the area must first be deemed safe prior to personnel leaving.

#### 7.4 WELDING OPERATIONS

Should welding activities be required, these works shall be conducted and confined to the main workshop area. Should welding or cutting have to be conducted outside the workshop area, the following safeguards will be employed.

- An area within 20.0m radius of the worksite will be cleared of all flammable materials.
- All oils, greases etc. will be cleared from the immediate work area.
- Fire extinguishers of an 80BE rating will be positioned within 10.0m of the work area.
- A Fire Tender will be maintained in readiness during the welding and or cutting operations.

No hot works shall be conducted outside the workshops during periods in which fire notices prohibiting such activities are issued by the RFS. Similarly any notices issued by the FCNSW or if the risk is internally assessed as being too high will also cease outside hot works.

#### 7.5 FIXED PLANT AND BUILDINGS

All workshops and offices will be equipped with approved 80BE rated fire extinguishers. Their locations will be indicated by appropriate signage. The approved 80BE extinguishers will be installed at the following locations:

- Offices : minimum one (1) extinguisher
- Bathhouses : minimum one (1) extinguisher
- Crib Rooms : minimum one (1) extinguisher
- Workshops : minimum two (2) extinguishers

#### 7.6 FLAMMABLE LIQUIDS

No flammable liquids will be stored on site during the care and maintenance term.

#### 7.7 FIRE FIGHTING EQUIPMENT AND PROTECTION

All fire fighting extinguishers will comply with AS/NZS 1841.1:2007. All fire equipment will be kept in a serviceable condition and be inspected and tested as detailed in the Manager Mechanical Engineering's Management Plan.

Existing dams will continue be made accessible to the RFS and FCNSW should water be required in an event.

As the site is progressively revegetated, existing fire breaks around the perimeter of the Yarraboldy Extension Area will be managed in consultation with the FCNSW, with the opportunity for these to be maintained for use as designated fire management trails.

#### 7.8 TRAINING

All mining personnel will receive basic fire control training at the commencement of employment and undertake refresher training at regular intervals.

The mine will ensure that, during site induction, all contractors will receive basic fire fighting knowledge. Part of this training will include the:

- 1. identification of the muster area in the case of an emergency;
- 2. ban of all smoking within vegetated areas; and
- 3. ban all open fires

### 8. EMERGENCY

#### 8.1 EMERGENCY RESPONSE

During the Care and Maintenance term, all personnel are responsible under the BFMP to notify the Mine Manager in the event of a fire occurring on site, or if there is a fire event within close proximity that has the potential to threaten assets. In the event that the fire cannot be controlled by mining personnel assistance will be sought from the RFS.

Fire events that pose a reasonable risk to assets and life are deemed as a fire emergency and as such the RFS will be contacted immediately for assistance through the 000 emergency number. The emergency response process will be in accordance with the Emergency Management System and BFMP.

Contact with the FCNSW, RFS and emergency services will occur as soon as possible in the event that a fire is detected in the BBSF, or if there is a risk of a fire event spreading into the BBSF adjacent to the mine.

#### 8.2 EMERGENCY CONTACTS

All employees, contractors and visitors to the site through the induction process are made aware of the appropriate emergency contacts as detailed in Table 2 and the procedures to be followed in the event of a fire.

Emergency Contact		Telephone No
Emergency services 24hrs- fire		000
Lithgow Rural Fire Service	Business hours only Monday Friday 0830 – 1700	(02) 6353 1862
	Outside business hours	000
Lithgow Mines Rescue Service		(02) 6350 1000
FCNSW 24 Hr contact		(02) 6332 4812
Pine Dale Mine UHF Channel		10
Pine Dale Mine Manager		04 18830598
Mine Dale Mine Site office		(02) 6355-1761

<b>Table 2 - Emergency Contact Numbers</b>	
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# 9. AUDIT AND REVIEW

#### 9.1 INTERNAL AUDIT PROCESS

The organisation and implementation of internal audits will be the responsibility of the Manager of Mining Engineering.

Audits will be conducted to consider the documentation, physical requirements and procedures in the system as well as the understanding of the workforce regarding the plan.

Internal audits will be conducted every 2 years on the following areas.

- Procedures
   Documentation
- Adequacy Knowledge

The findings of all audits will be the subject of an internal review and actions recommended for implementation acted upon where considered appropriate.

The BFMP will be audited and consultation undertaken with relevant stakeholders prior to extractive mining activities recommencing at the mine.

#### 9.2 EXTERNAL REPORTING

Results of the BFMP including any Bush Fire occurrences on the mine or assistance provided to emergency services will be included in the Annual Environmental Management Report which will be made publically available via the Pine Dale Mine website.

# **10. RESPONSIBILITIES**

Enhance Place recognises the importance of identifying key roles and responsibilities to avoid, minimise and control bush fire impacts to the mine. During the care and maintenance term, the Manager Mining Engineering has the overall responsibility for the management of the mine including the responsibility for compliance with the commitments within the BFMP and the mine's Fire and Emergency Management System developed in accordance with the *Coal Mines Health and Safety Act 2002.* 

A list of roles and responsibilities related to the implementation of the BFMP are detailed at Table 3.

Role	Responsibilities
Mine Manager	a) Ensure employees and contractors understand their obligations under
	the BFMP
	b) Monitoring compliance with the Bushfire Management Plan
	c) Maintenance and inspection of fire fighting equipment
	d) Reporting and replacing damaged fire equipment
	e) Ensure that all the on-site safeguards and controls are in place

#### Table 3 - Roles and Responsibilities

Environment Manager	a) Oversee implementation, on-going management and coordinate any future reviews of the BFMP	
All Personnel	<ul> <li>a) Understand and comply with the requirements of the BFMP</li> <li>b) Relevant personnel to undergo firefighting and response training</li> <li>c) Be aware of emergency procedures and responses in the case of Bush Fire</li> </ul>	

#### 10.1 COMPLAINTS RESPONSE

Enhance Place has developed a procedure to receive, respond, record and action any complaints received from the community. Enhance Place will record specific details relating to a community complaint including:

- a) The nature of the complaint;
- b) The method of the complaint e.g. telephone, in person etc;
- c) Monitoring results, if required;
- d) Immediate actions taken;
- e) Any corrective actions taken;
- f) Response to complainant.

Complaints will be recorded within the complaint register and a summary of complaints received for the reporting period will be included in the Annual Return, Annual Environmental Management Report and made publically available on the Pine Dale Mine website.

#### 11. **REFERENCES**

NSW RFS (2006) *Planning for Bushfire Protection 2001*. Planning and Environment Services (Available online – <u>www.bushfire.nsw.gov.au</u>).

Pine Dale Mine (2014) Pine Dale Mine Care and Maintenance Risk Assessment February 2012