

Boral Cement Limited

Limestone Mine Operations

Bushfire Management Plan 2023

Version History

Version	Date	By Whom	Description of Changes
1	1/11/15	Jody Oakley and Rob Lasker	Version 1
2	31/8/16	Jody Oakley and Rob Lasker	Update contact names and numbers
3	17/11/17	Jody Oakley and Rob Lasker	Update contact names and numbers
4	19/12/18	Jody Oakley and Rob Lasker	Update contact names and numbers, add guidelines for general hazard reduction fires
5	12/12/19	Jody Oakley, Rob Lasker and Mark McCarthy	Add more detail to emergency warnings, add trigger action plan, add site map
6	20/12/19	Les Longhurst	Various detail updates
7	7/01/2020	Jody Oakley and Rob Lasker	Legislation references, security considerations, Regulator notifications
8	July 2022	Jody Oakley	Update contact names and numbers
9	Sept 2022	Jody Oakley	Update Fire ratings from RFS, add blasting exemption
10	November 2022	Therese Thomas and Ben Williams	Re format document- added sections – 2, 7, 8, 13, 22
11	January 2023	Jody Oakley	Make changes as requested by RFS and change Site Manager and Boral Logo
12	September 2023	Jody Oakley, Therese Thomas, Jess Seifert	Annual Review prior to summer. Update maps, contact details, and minor changes throughout
13	December 2023	Jody Oakley	Following emergency exercise – updated duty card

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1. Introduction

In producing this Bushfire Management Plan (BMP), the principal consideration has been to provide for the protection and safety of human life, (including Staff and Contractors of Boral, residents of the locality and firefighters suppressing bushfire events) Property and Boral infrastructure.

A Bushfire left unattended has the potential to endanger lives and damage property. During the bushfire season (October to April) winds are predominately from the SW and NNW. A bushfire on Boral land during such wind conditions has the potential to impact upon flora and fauna of the Morton and Bungonia National Park areas.

An incoming bushfire has the potential to impact Boral in the following manner:

- Damage to exposed buildings
- Disabling of production capacity
- Isolation from the general community
- Loss of regenerative plantings
- Loss of electricity supply

This BMP outlines the risks, controls and emergency response for Boral Cement Limestone Mine operations

2. Scope

This BMP applies to all land within the approved Mining consent boundary.

The BMP provides the framework and guidance for Mining activities to be conducted in a manner whereby

- (a) Appropriate control measures are implemented to minimise the potential for adverse impacts on the mine during the bushfire season,
- (b) Appropriate control measures are implemented to minimise the potential for quarry activities to cause a bushfire.

3. Criteria and Guidelines

The BMP has been prepared in consultation with the RFS and condition B73 74 and 75 of the site development consent SSD 7009. Reference to the sections addressing these conditions are detailed below.

Condition	Section Addressed
B73. The Applicant must: (a) ensure that the development: (i) provides for asset protection in accordance with the relevant requirements in <i>the Planning for Bushfire Protection</i> (RFS, 2019) 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.	Section 8 and 9 Section 10.8 Section 11,12, 15 and 16
B74. Prior to commencing development under this consent, the Applicant must prepare a Bushfire Management Plan for the development, in consultation with RFS. This plan must include a:	Table 1

<p>(a) contact person and 24-hour contact phone number;</p> <p>(b) schedule and description of proposed bushfire mitigation works, including:</p> <p>(i) location of managed and unmanaged vegetation within the site;</p> <p>(ii) location of water supply; and</p> <p>(iii) internal access roads;</p> <p>(c) plan identifying the location and storage of bulk flammable liquids and materials;</p> <p>(d) 'hot works' management plan, including:</p> <p>(i) circumstances when 'hot works' are limited or prohibited; and</p> <p>(ii) safety measures to be implemented when 'hot works' are being conducted; and</p> <p>(e) emergency/evacuation plan in accordance with the <i>Guidelines for the Preparation of Emergency/Evacuation Plans (RFS)</i> and Australian Standard <i>AS3745 Planning for Emergencies in Facilities</i>.</p>	<p>Section 7 and 10 Section 8</p> <p>Section 18 Section 18</p> <p>Section 18</p> <p>Section 10.8</p> <p>Section 6 and Section 15</p> <p>Section 10.8</p> <p>Section 16, 18 and 20</p>
<p>B75. The Applicant must implement the Bushfire Management Plan in consultation with RFS.</p>	<p>Section 23</p>

The relevant legislation and standards applicable to the management of bushfire and maintenance of equipment include the following:

- Rural Fires Act, 1997;
- Rural Fires Regulation 2013;
- Work Health and Safety (Mines and Petroleum Sites) Regulation
- Australian Standard 1851-2012 Routine service of fire protection systems and equipment;
- Planning for Bushfire Protection, 2006, and
- Australian Standard 1019-2000 Internal Combustion Engines – spark emission control devices.

4. Responsibilities and Accountabilities

4.1. Site Manager

The Site Manager will have the following responsibilities:

- Ensure that all conditions of consent are followed by contractors, employees and service providers;
- Ensure that all relevant regulations, licences and approvals are complied with by all personnel on site;
- Maintain overall responsibility for activities undertaken on the Boral site.
- Ensure the plan is communicated to the Marulan RFS Captain and the Southern Tablelands Zone Operations Officer;

- Ensure an adequate number of persons are on the Toban notifications list
- Ensure firefighting equipment is as compatible as possible with the local RFS
- Ensure a liaison meeting with the local RFS brigade takes place at least once a year.
- Ensure appropriate communication with various parties as listed above
- Other communications, such as the Regulators, as required. Refer to Clause 128 of the WHS (Mines and Petroleum Sites) Regulation.

4.2. Environmental Coordinator / WHS Business Partner

The Environmental Coordinator/ WHS Business Partner will report to the Site Manager. They will be responsible for:

- Ensuring that all procedures detailed in this management plan are followed and implemented by the site.

4.3. Managers and Supervisors

These roles will have the following responsibilities:

- Implementation of the procedures contained in the management plan
- Undertake regular inspections and arrange maintenance (as required) of the bushfire protection measures
- Ensure that staff and contractors are aware of the emergency response plan in regards to Bushfires
- Ensure that staff and contractors are tool boxed and informed daily, if necessary on RFS warnings and Alerts and limits to mining activities

5. Rural Fires Act 1997

Boral has a duty as a landholder under Section 63(2) of the Rural Fires Act 1997 to prevent the occurrence of bushfires and minimise the danger of the spread of bushfires on the land that they manage.

Pursuant to Section 99 of the Rural Fires Act 1997, and in accordance with gazette exemptions under Schedule 18, exemption can be made for the lighting of certain classes of fires during a Total Fire Ban.

These exemptions are gazetted in the lead up to the Total Fire Ban. "Mining Operations" are generally exempt such that a

"Fire lit, maintained or used in association with any cutting, welding or grinding work for the purpose of the essential maintenance or repair of mining equipment provided that:

- (a) the fire is lit maintained or used in a manner which will prevent the escape of the fire, and*
- (b) adequate firefighting equipment is provided at the site of the fire to prevent the escape or spread of the fire."*

However, before proceeding with any works, it is strongly recommended that you confirm the exemption applies to any particular Total Fire Ban declaration.

The NSW RFS Commissioner may exclude exemptions from time to time on the Total Fire Ban.

To check this, you can call the Bush Fire Information Line on 1800 679 737 on the day.

Even with such an exemption, Risk assessments are undertaken on site and special permitting is required before any such works can be conducted.

An exemption during a Total Fire Ban under Section 99 (4) of the Rural Fires Act 1997 (NSW) will be applied for each year to cover Blasting Operations and Capital/Maintenance works in the mine.

6. Permits

A fire permit is not required for hazard reduction fires outside the statutory bush fire season but is required that both Firecom and the local brigade are advised 24 hours prior to lighting the fire.

A fire permit must be sought from the Marulan Brigade Captain for fires outside during the Bush Fire Danger Period. This permit is free and can be issued for up to 14 days. It is automatically revoked in the event of a Total Fire Ban. Hot work does not normally fall into the category of requiring a permit but fires for the disposal of explosives for instance do require a permit.

6.1. *General guidelines for hazard reduction fires:*

- DO NOT burn on days declared as a Total Fire Ban by the RFS
- DO NOT burn on a “no burn day” as declared by the Department of Environment and Conservation
- DO NOT burn unless the necessary approvals/permits have been sought (Southern tablelands Zone must be notified 24hrs before a hazard reduction burn takes place)
- DO NOT burn if neighbours and the relevant fire authority (Brigade Captain) have not been notified 24hrs prior
- DO NOT leave the burn unattended

7. Bushfire Inspection Checklist

An annual bushfire inspection will be undertaken on the site before the bushfire season begins. The bushfire season typically occurs between October and April. However, factors such as fuel load, rainfall history and climatic conditions may bring forward or extend the bushfire season. The bushfire inspection will consider:

- Fuel loads on Boral land;
- Advice from the Marulan Brigade Captain of the NSW Rural Fire Service;
- The climatic conditions (particularly rainfall) of the preceding year;
- Methodologies of bushfire risk assessment

The current version of the risk assessment will be kept on G:Drive - G:\015 Safety Document Management System\Mine Safety Management System\Mine Safety Management System\Site Risk Assessments. This inspection checklist currently in place at time of writing the plan is reproduced in Section 22.

8. Identification of Assets

The Marulan South Limestone Mine includes the following key assets:

- Office and amenities building.
- Sand processing plant, screens and conveyors.
- Lime Kiln
- Fuel and oil storage tanks and enclosures.
- Mobile plant and associated equipment.
- Dredge and associated overland pipelines and pumping equipment.
- Completed rehabilitation.
- Power lines and substation.
- Weighbridge

All assets are surrounded by cleared land to a distance of at least 10 metres. These asset protection zones (APZ) consist largely of hardstand areas but in some instances include perimeter haul roads. All APZs consist of gentle slopes which are under 18 degrees.

The only asset at risk of impact from offsite bush fire is the rehabilitation areas around the overburden emplacement areas and remnant vegetation.

Active rehabilitation areas and lawn areas are maintained by contractors and the remnant vegetation and adjacent Bungonia Nation Park are unmanaged vegetation areas in vicinity of the site.

9. Bushfire Management Plan Map

A map shall be prepared of the Boral South Marulan Operations and it shall contain at least the following data:

- High risk assets
- Access points
- Water points
- Access roads and tracks
- Any previous fires or hazard reductions

A table shall be appended to the map with the following information:

- In case of fire call 000 (triple zero)
- Southern tablelands zone RFS contacts
- Marulan RFS Brigade contacts
- Boral key contacts

A second table shall be appended containing:

- The address
- GPS location in Australian Map grid

- GPS location in latitude and longitude.

A third table shall be appended containing:

- NSW RFS escalating warning system and its meanings
- NSW fire danger levels and their meanings

A fourth table shall be appended containing:

- Neighbour contact details

The Bushfire Management Plan forms part of the Boral Cement Marulan Mine Emergency Management Plan and copies can be found across the site in red folders or on the group drive at G:\015 Safety Document Management System\Mine Safety Management System\Mine Safety Management System\Site Plans.

10. Specific Risk Control Measures

Fire risks fall into two categories, the first are risks of ignition sources on site and the second are risks posed by external bush fire. The main potential ignition sources are:

- The fuel storage and refuelling area.
- High voltage transmission lines and transformers.
- Office and kitchen area.
- Mobile plant and trucks.
- Third party trucks accessing the site.
- Crushing and screening plant.
- Lime Kiln

There is a very small risk of fires originating from the mobile plant and processing equipment, given the lack of fuel on haul roads and the pit other than in the equipment themselves. As such, the potential for a fire to spread beyond the confines of the equipment itself is negligible.

The main areas of potential fire risk are the refuelling and storage areas and the main office. These are controllable by incorporating standard fire safety systems such as isolation of ignition sources, provision of appropriate fire extinguishing equipment, smoke alarms in the office, reduction of fuel load and operator training. Specific fire risk controls is listed below.

10.1. Mowing

Mowing shall not take place on days of extreme fire danger or above. Ride-on Mowers shall have at least a 9 litre air water fire extinguisher immediately available. Under some circumstances it may be necessary to use a brush cutter with nylon cord around buildings to reduce the fire risk.

10.2. Asset Protection Zones (Fire Breaks) and Access Tracks

The risk of bushfires in adjacent lands spreading to Boral assets will be minimised by the provision of slashed/mown fire breaks along boundary fences. In case of remnant or regenerating woodland that is adjacent to the boundary of the lease area, the firebreak will be constructed between the woodland/grassland interfaces.

A cleared area will be established and maintained around above ground facilities and buildings. Access tracks will be inspected and maintained if necessary.

An area beside the access tracks will be cut or slashed extending firebreaks, as required. Existing firebreaks will be maintained. Maintenance or the extension of firebreaks will not be undertaken on days of Very High or above Fire Danger.

Access dams and water supplies will be inspected and maintained if necessary. The installation of additional firebreaks will be considered as part of the risk assessment in conjunction with the NSW Rural Fire Service and following the relevant environmental approval being obtained.

Prevailing winds during summer are from the SW, however NW winds that lead to an extreme fire danger, i.e. elevated temperatures and low humidity do occur. Firebreak design will therefore take into consideration that a bushfire is likely to enter the site from the NW, and exit the site to the SE. The Pit, which runs 3km North to South, acts as an effective firebreak to the east. Peppertree SWOE emplacement area located to the north of the Lime Plant infrastructure currently provides an adequate fire break to the north and parts of the north west.

10.3. Mining Activities

Activities that create sparks or hot particles, such as metal grinding and welding will be limited to workshops and hardstand or areas clear of vegetation by a minimum of 20m and will be subject to Boral's Hot Work Permit system. Designated hot work areas will have completed a "Designated Hot Work Area Risk Assessment HSEQ-6-06-F01". All fire bans, as determined by the NSW Rural Fire Service, will be adhered to by employees, contractors and service providers and enforced by Boral Management.

Railine maintenance activities will be conducted with adequate firefighting equipment available. No track work will be undertaken on Total Fire Ban days.

10.4. Vehicles

During catastrophic fire danger, all vehicles will be restricted to identified vehicle routes to reduce the risk of spark emissions. If a vehicle is required to traverse across grassed areas, it is to have an upward exhaust.

Petrol / Diesel powered vehicles and equipment shall not be used in or over vegetation on days of Catastrophic Fire danger.

10.5. Electricity Transmission

Electricity transmission easements will be inspected annually at the time of the bushfire risk assessment to ensure regenerating vegetation does not have the potential to interfere with power lines that sag. Boral will liaise with the owner of the electrical transmission infrastructure with regards to vegetation management within the easement.

10.6. Lightning

In the event of a lightning strike, the location is to be monitored for the next 48 hours.

10.7. Smoking

The risk of accidental bushfire ignition from lit cigarettes will be incorporated into site inductions.

10.8. Hot Works

Boral operate a strict policy requiring Safe Work Method Statements (SWMS) and Authority to Work (ATW) Permits prior to commencement of any tasks on site. This process identifies risks and requires the implementation of controls to be employed to reduce risk. All activities that may give rise to ignition such as hot works, particularly during bushfire seasons or adverse weather conditions must include specific fire control measures as listed in the ATW. An exemption for hot works is kept by the site when applicable exemptions for hot work (for Mining operations) are sought.

10.9. Firefighting equipment

Boral has a wide range of facilities that will be made available to control and extinguish bushfires. Water sources are located on the attached maps. This equipment includes but is not limited to:

- Fast fill hoses and connections
- Two water tankers – one equipped with water cannon
- Water tank trailer
- Clean water dams with maintained access points
- Earthmoving equipment – grader, dozer etc
- Water pumps
- Portable radios
- Fire alarms
- First aid room and supplies

This equipment will be made available on request to the NSW RFS for use within the mine and surrounding areas as needed

11. Fire Incidents

Any incidents of unplanned bushfire during the Bushfire danger period will be reported directly to Triple Zero. The Boral Environmental Officers, Site Managers and WHS Business Partner shall be notified as soon as possible in this event.

12. Communications

All employees, contractors and service providers will be made aware of the emergency procedures applicable on the Boral site during the site induction.

Regular communication and liaison will occur between a Boral Site Representative, Peppertree, the Southern Tablelands RFS and Marulan Brigade Captain.

This communication is to occur:

- Operationally during coordinated responses to bushfires on Boral land via radio communication; and
- Immediately following a bushfire on Boral land. The purpose of the liaison activity is to identify any areas of improvement in the BMP.

The purpose of the liaison activity is to identify any areas of improvement in the BMP and to have local RFS volunteers aware of the site.

13. Training

All employees and contractors working onsite must be inducted. Key staff will be trained in the emergency response procedures.

Where identified by management, additional specific training such as the correct use of fire extinguishers, may be implemented and delivered to relevant personnel and contractors. Appropriate staff will be trained in the relevant standard operating procedures.

14. Plan Dissemination

All employees on site shall be informed of the response requirements of this plan and shall receive a refreshment of these requirements at the start of each bushfire season.

Copies of the plan shall be disseminated to:

Name	Position	Address
Anne Champon	Site Manager – Limestone	Hume St Marulan South
Andy Coe	Operations Manager – Peppertree	843 Marulan South Rd Marulan South
Jess Seifert	WHS Business Partner	Hume St Marulan South
IJ Ehighibe	Environmental Representative- Peppertree	843 Marulan South Rd Marulan South
Crystal Perry	Environmental Representative - Marulan	Hume St Marulan South
Jim Divall	Marulan Brigade Captain	Cnr Portland and Goulburn Ave (PO Box 201) Marulan NSW 2579
	Southern Tablelands Zone Operations Officer	Southern Tablelands Control Centre 40 McIntosh Rd (PO Box 49) CROOKWELL NSW 2583 1410 Laidlaw Street (PO Box 597) YASS NSW 2582

15. Response to Fire Danger Rating

Information on the bushfire danger period and fire activity area monitored using the “Hazards Near Me” App. All Management team members to download the App and have alerts set for the Marulan South watch area.

15.1. Total Fire Bans

On days of total fire ban (Toban) the following activities shall take place:

- Notify Marulan RFS Captain of any hot work activities outside of designated hot work bays
- Check operation of Firefighting Equipment
- Toolbox the warning to all persons on site.
- Confirm firefighting water tanker is full and on standby
- Monitor Hazards near me app regularly
- On low visibility days (such as days of high smoke volumes) Production Supervisors will complete regular inspections of the mining lease checking for any fire activity

On days of total fire ban (Toban) the following activities shall **NOT** take place:

- Hot Work in the open air (unless deemed absolutely necessary and all conditions met on RFS exemption)
- Driving of petrol vehicles on or over vegetation
- Mowing/slashing
- Earthworks in vegetation
- Any grinding activities on the rail

Section 99 (4) Rural Fires Act 1997 NSW Exemption granted (see conditions below):

Applicant Name:	Boral Cement
Event Description:	Essential ongoing operational and capital works activities and/or maintenance
Type of Works:	Cutting, grinding, welding and associated hot Works, including the use of naked flame
Location/s of work:	Hume Street MARULAN SOUTH NSW 2579



NSW RURAL FIRE SERVICE

WHEN A TOTAL FIRE BAN IS DECLARED

Boral Cement - TOBEX0002787

19 September 2023

Prior to the undertaking of any **Essential ongoing operational and capital works activities and/or maintenance**, including, **Cutting, grinding, welding and associated hot Works, including the use of naked flame under schedule Sect. 99(4) - Rural Fires Act 1997-Fire approved by Commissioner of the Rural Fire Service.**

Remember to:

- Check specific TOBAN Orders to ascertain whether standard exemptions have been approved on each day of a TOBAN via the NSW RFS Bushfire Information Line - 1800 NSW RFS (1800 679 737) or your nearest NSW RFS Fire Control Centre, and;
- Notify your nearest NSW Rural Fire Service Fire Control Centre and F+R NSW Station where the proposed works will be conducted, prior to commencing on any TOBAN day (unless otherwise specified).

To find your nearest F+R NSW Station



Scan this QR Code using a smartphone camera
<https://www.fire.nsw.gov.au/page.php?id=9205>

To find your nearest NSW RFS Control Centre



Scan this QR Code using a smartphone camera
<https://www.rfs.nsw.gov.au/about-us/fcc>

Abide by the following gazetted conditions:

- 1). Provision of minimum 9 litre dry chemical fire extinguisher (tested, tagged and in date), fire blanket and minimum 10 litre water container which is readily accessible and located within reach (within 5 metres) of the all appliances being used, areas of work and any areas of preparation for the approved activity.
- 2). Staff training and supervision in the use of this firefighting equipment.
- 3). A spark arrestor to be fitted onto the outlet of any flues and air inlets of equipment being used.
- 4). All combustible materials must be removed for a distance of not less than 15 metres in all directions from the cooking appliance whilst in operation.
- 5). All fuels must be completely extinguished and allowed to sufficiently cool prior to being disposed of in a safe manner.
- 6). The area is checked (including rubbish receptacles, bins, etc.) at the completion of the activity to ensure no heated, smouldering or burning material remains.
- 7). On days where the Fire Danger Rating is predicted to be Extreme or Catastrophic, in consultation with the NSW Rural Fire Service and or Fire + Rescue NSW, request may be made for all hot works activities (including cooking and baking) to be suspended.

Abide by the following additional NSW RFS & F+R NSW Conditions:

- 1). For wood-fired catering, access to a reticulated water supply and provision of an operating fire hose and or hoses that will provide coverage to the entire site when the activities are being undertaken.
 - 2). Strict supervision of all activities to be undertaken for entire duration of works.
 - 3). A fire spotter in place before, during and minimum 30 minutes after activities.
 - 4). A copy of the TOBAN Exemption Approval is to be available for display to an authorised person (e.g. representative of a fire agency, police force, etc.) when requested.
 - 5) On days of Catastrophic Fire Weather all hot works (Services & Utilities - Construction, Essential Repairs or Maintenance) with an open flame is suspended.
- Please also note the requirement to notify the nearest Fire + Rescue NSW fire station and or nearest NSW Rural Fire Service District office prior to undertaking and immediately upon ceasing all activities on any and all days of a Total Fire Ban.



For further information regarding the Total Fire Ban Exemptions, please contact the TOBAN team via email toban.exemptions@rfs.nsw.gov.au

15.2. Catastrophic fire conditions

On days of Catastrophic conditions the following activities shall take place in addition to Toban activities:

- A risk assessment of all operations including considering closing the plant and sending people home – refer to trigger action plan
- A test of all firefighting equipment
- Establishment of communications with the Marulan Brigade Captain

On days of Catastrophic conditions the following activities shall **NOT** take place in addition to Toban activities:

- Hot Work in open air
- Driving in or on vegetation in any vehicle
- Explosions other than in pit blasting
- Train despatch wherever possible

16. Response to Emergency Alert Levels

IT IS CRITICAL THAT BORAL DOES NOT WAIT AND RELY ON BROADCAST WARNINGS BEFORE TAKING ACTION.

FIRES SOMETIMES SPREAD OR ESCALATE SO RAPIDLY THAT WARNING IS NOT POSSIBLE.

If it is a catastrophic day and there is a big fire and it is headed to Marulan South then assume the warning system has failed.

Emergency warnings are broadcast over local public radio stations (Eagle FM, 93.5, Power FM 94.9, and 2GN 107.7FM), the designated public emergency channel is 666 ABC Canberra and the Hazards Near Me app send out notifications. On days of total fire bans or extreme conditions, this will be discussed at the start up meeting at the commencement of shift and it will be decided here who should be tuned into the radio for the purposes of hearing any emergency warnings.

On receipt of any warnings in the immediate area the Site Manager, WHS Business Partner or delegate will contact the local fire Captain and agree between the parties what communications should be carried out, to which neighbours and by whom. In the event that the local fire Captain is not able to be contacted, a Boral delegate will endeavour to inform the immediate neighbours.

Because of the somewhat unique location of the Marulan South quarries with only one access road Boral needs to respond at a higher level than most of the community.

Please refer to the trigger action plan to assess what action may need to be taken

16.1. Advice:

“A fire has started. There is no immediate danger. Stay up to date in case the situation changes”

On receipt of this warning Boral shall:

- Check on the availability and operation of firefighting equipment

- Warn all persons on site of the “advice” via the two way radio and advise them to monitor their work area for any fire activity
- Establish communications with key persons. Includes RFS Captain and Senior Boral Management
- Consider stopping Kiln operations to allow for appropriate shutdown procedures to occur.

16.2. Watch and Act

“There is a heightened level of threat and you need to start taking action now”

On receipt of this warning Boral shall:

- Activate and check all firefighting equipment
- Ensure all persons onsite are aware of the warning via the two way radio
- If the fire has impact potential - risk assess and act on evacuation of workers to their home
- If evacuation is required initiate the Emergency Management Plan and follow evacuation procedures, relevant duty cards and the instructions of the Chief Warden. The Chief Warden will contact emergency services to advise them that the site has been evacuated and that everyone has been accounted for. Resource Regulator must be notified of the evacuation as soon as possible by the Chief Warden (Site Manager or his delegate) or WHS Business Partner
- If Kiln still running consider shutdown procedures, taking into account the local impact, if any.
- Advise appropriate senior persons within Boral Management

16.3. Emergency Warning

“An Emergency warning is the highest level of bushfire alert. You need to take action NOW. Any delays puts your life at risk”

On receipt of this warning Boral shall:

- If the fire has impact potential - risk assess and act on evacuation of workers to their home
- If evacuation is required initiate the Emergency Management Plan and follow evacuation procedures, relevant duty cards and the instructions of the Chief Warden. The Chief Warden will contact emergency services to advise them that the site has been evacuated and that everyone has been accounted for. Resource Regulator must be notified of the evacuation as soon as possible by the Chief Warden (Site Manager or his delegate) or WHS Business Partner
- Risk assess if fire is imminent and safe evacuation cannot occur to stop persons leaving the site (ie if access / egress has been impacted)
- Assemble and account for all persons in the planned safe location
- Following a risk assessment of conditions (ie fire direction, wind direction and speed) the following places are the designated shelter areas:
 - Bottom section: Machine Shop,

- Top Section: Store (if coming from E or Se consider electrical offices or Kiln)
- Last resort is the North Pit.
- Communicate with RFS Captain and advise appropriate senior persons within Boral Management
- If Kiln still running consider shutdown procedures, taking into account the local impact, if any.

Table 1: Bushfire Contacts List

In case of Emergency or to report a fire call 000 (triple zero)

Name	Position	Mobile	Phone	Email / Radio Channel
Main Number	Emergency Contact: Site Office		48 203 000	
Production Control	Emergency Contact: Production Control		48 203 028 / 4056 6111	
Lime Plant Control	Emergency Contact: Lime Plant		48 203 029 / 0401 892 303	
Jess Seifert	WHS Business Partner			Jessica.seifert@boral.com.au
Crystal Perry	Environmental Representative – MSL		48 203 007	Crystal.perry@boral.com.au
IJ Ehighibe	Environmental Representative– Peppertree		48 411 701	lj.ehighibe@boral.com.au
Anne Champon	Site Manager – Marulan		48 203 001	Anne.champon@boral.com.au
Andy Coe	Operations Manager – Peppertree		48 411 701	Andy.coe@boral.com.au
	Southern Tablelands RFS Operations		6226 3100 4832 0268	Yass Crookwell
Firecom	Yass Crookwell		6226 3100 4832 0268	
Jim Divall	Marulan RFS Captain		4841 1555	UHF Channel 16
Michael Lups	Snr Deputy Captain			
Terry Lewis	Bungonia RFS Captain			UHF Channel 16
Fab Cella	Senior Deputy			
Brett Roberts	Windellama RFS Captain		0413 533 066	UHF Channel 21
Resource Regulator	Mines Inspectors		1300 814 609	Called by the Site Manager or WHS Business Partner

Table 2 Address and coordinates of Boral South Marulan Operations

Operation	Address	GPS – Mapgrid	GPS – lat / long
Boral Cement Marulan South Limestone Mine	5 Hume St, Marulan NSW 2579. Nearest cross street – Marulan South Road (becomes Cooper Crescent over railway line) 8.5 kms SE from Jerrara Rd / Hume Highway overpass.	56H228543.1 6149025.871	34°45'53.3" South 150°02'02.7" East -34.764849 150.034110
Boral Peppertree Quarry	843 Marulan South Rd Marulan South NSW 2579	56H228078 6149734	34.D45.501 150D1.756

Table 3: NSW RFS Fire Danger Ratings and Alert Levels

FIRE DANGER RATING	WHAT YOU SHOULD DO
CATASTROPHIC	<p>For your survival, leave bush fire risk areas.</p> <ul style="list-style-type: none"> › These are the most dangerous conditions for a fire. › Your life may depend on the decisions you make, even before there is a fire. › Stay safe by going to a safer location early in the morning or the night before. › Homes cannot withstand fires in these conditions. › You may not be able to leave and help may not be available.
EXTREME	<p>Take action now to protect your life and property.</p> <ul style="list-style-type: none"> › These are dangerous fire conditions. › Check your bush fire plan and ensure that your property is fire ready. › If a fire starts, take immediate action. › If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts. › Reconsider travel through bush fire risk areas.
HIGH	<p>Be ready to act.</p> <ul style="list-style-type: none"> › There's a heightened risk. Be alert for fires in your area. › Decide what you will do if a fire starts. › If a fire starts, your life and property may be at risk. The safest option is to avoid bush fire risk areas.
MODERATE	<p>Plan and prepare.</p> <ul style="list-style-type: none"> › Stay up to date and be ready to act if there is a fire.
NO RATING	<ul style="list-style-type: none"> › Fire danger ratings are used on days when you need to take action. On days of minimal risk, 'No Rating' will be issued.

NSW RFS Alert Levels	
	<p>Advice A fire has started. There is no immediate danger. Stay up to date in case the situation changes.</p>
	<p>Watch And Act There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family.</p>
	<p>Emergency Warning An Emergency Warning is the highest level of Bush Fire Alert. You may be in danger and need to take action immediately. Any delay now puts your life at risk</p>

17. Neighbour List

Neighbours	Address	Emergency Notification Phone Number	Method
Peppertree Quarry	843 Marulan South Road	02 48 411 701	Phone/Door knock
	5 Hume St Marulan South		Phone/Door knock
	683 Marulan South Road		Phone
	452 Marulan South Road		Phone/Door knock
	709 Marulan South Road		Phone/Door knock
	565 Marulan South Road		Phone/Door knock
	381 Marulan South Road		Phone/Door knock
	357 Marulan South Road		Phone/Door knock
	505 Marulan South Road		Phone
	400 Marulan South Road		Phone/Door knock
	270 Glynmar Road		Phone/Door knock
	838 Lookdown Road, Bungonia		Phone

18. Bushfire Duty Card

Emergency Procedure	<i>Bush Fire Duty Card</i>
What happened?	<i>Bush Fire in surrounding bushland</i>
Immediate response	<ol style="list-style-type: none"> 1. Assess the situation, listen to the local radio station, check the “Hazards Near Me” app and contact the RFS Captain for an update. 2. Use Bushfire Trigger Action Plan (in the Bushfire Management Plan) to establish if evacuation is possible or if shelter is to be taken. 3. Advise the supervisors and / or area warden immediately of the fire or smoke and where it is on site/ or in what direction it is approaching the site and what action will be taken – evacuate or shelter. 4. Shut down any machines, appliances, valves or switches if it is safe to do so. 5. Park HME in North Pit Extension at least 30m apart, if time permits and it is safe to do so 6. Consider flying the drone to gain situational awareness 7. Close any doors or windows in buildings / equipment 8. Kiln – refer to kiln emergency shut down duty card. 9. Consider using site firefighting equipment for protection of life and protection of hazardous substances (such as the fuel farm area, the gas cylinder storage and Store) if it is safe to do so. Either fight the fire or evacuate to safety – using the correct extinguisher/appliances. 10. Do not attempt to stay and defend against Extreme and Catastrophic rated bushfires 11. Stay upwind from fire – be aware that toxic fumes are given off by some fires
Further response	<p><u>Evacuation (if safe to do so):</u></p> <ul style="list-style-type: none"> ● Emergency Coordinator will make the emergency evacuation call over the radio, once advised to so from the Chief Warden ● Supervisor or Area Warden to coordinate evacuations in their work area and ensure all personnel are accounted for and they have transport to leave the site and all areas have been checked to ensure no personnel remain. ● Continue making Emergency Evacuation Call over the radio until all personnel are accounted for and left site ● Ensure TRN and Peppertree are also alerted – either by phone or radio ● Chief Warden to post a sentry on both gates to check that all personnel have left site and allow access for emergency services as required. ● If evacuating leave Bulk Water Truck near store for RFS to fill up from. ● Chief Warden to advise Local Emergency Services and Peppertree that the site has been evacuated and await their instructions ● Only re-enter site once the bushfire threat has passed and the site is deemed safe by emergency services. <p><u>Shelter (when it is no longer safe to evacuate):</u></p> <ul style="list-style-type: none"> ● Chief Warden: <ul style="list-style-type: none"> ● Advise Local Emergency services that personnel are sheltering on site, how many and where. Ensure gates are all propped open. ● Alert TRN to the emergency and coordinate where they are sheltering – ie can they leave or get down to Machine Shop. ● Ensure Peppertree are also alerted – either by phone or radio. ● Maintain situational awareness through radio, NSW RFS apps/websites (if possible) and local firefighting resources. ● If time permits and it is safe to do so spray designated shelter areas with water from bulk water truck (and then park in South End of ROM with tyres facing away from Machine shop) or using plant water if available

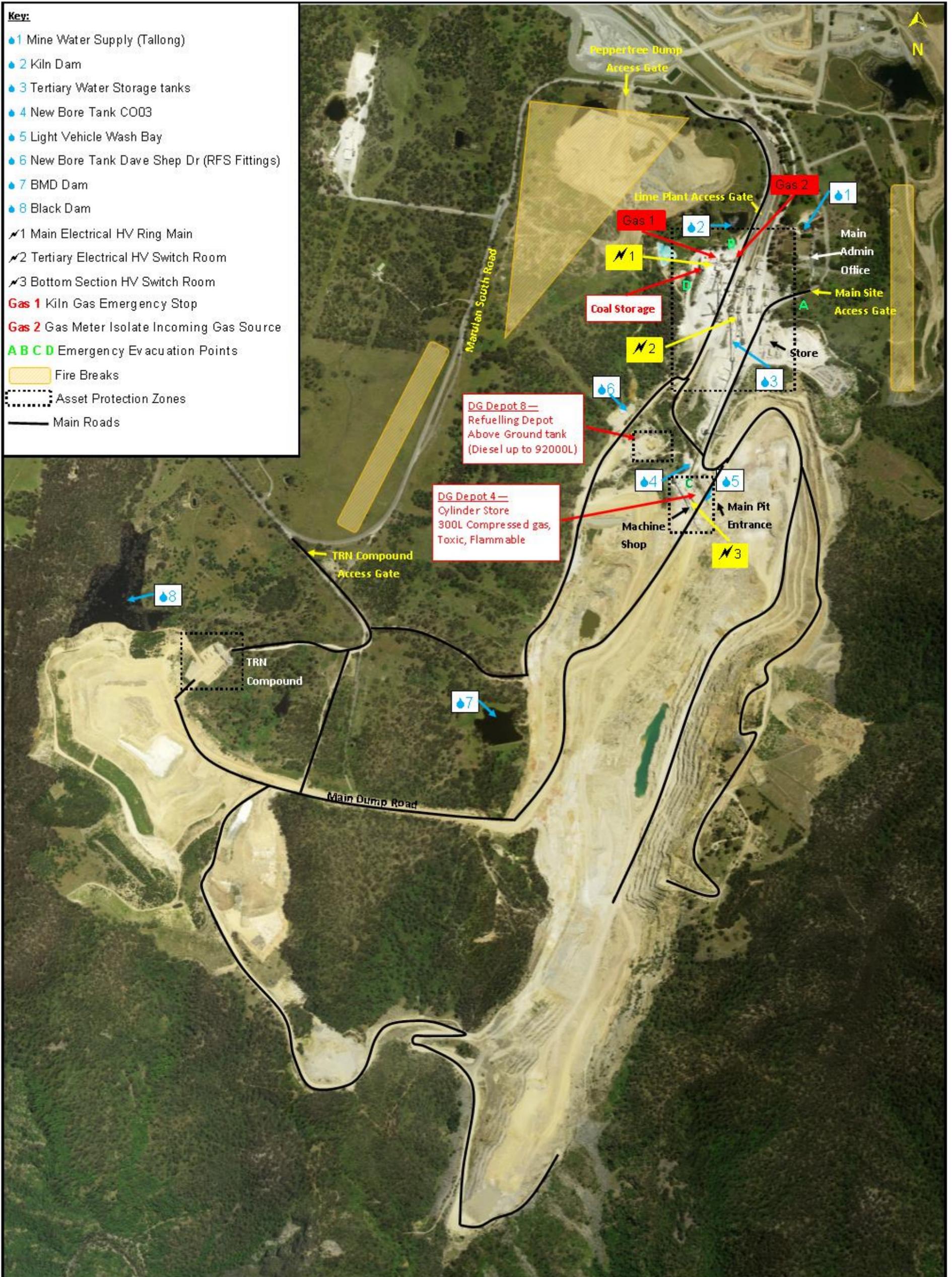
Emergency Procedure

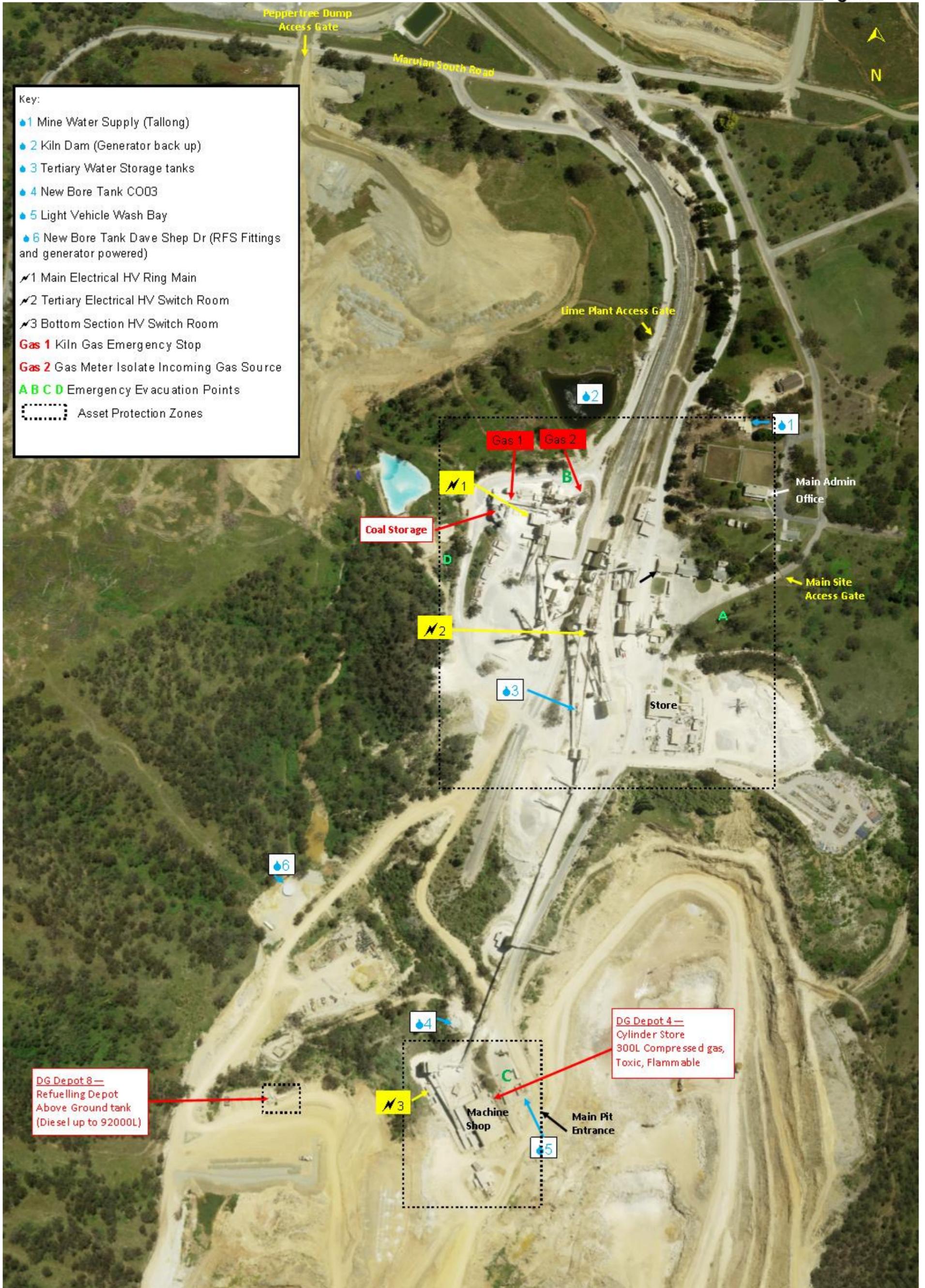
Bush Fire Duty Card

- Ensure close neighbours are aware of the situation
- **Emergency Coordinator:**
 - Make the Emergency call over the Broadcast Channel 12 and across channel 1, 2, 3 advising personnel to take Shelter
 - If safe to do so and time permits print 3 copies (or alternately email to the shelter areas) the WOL and Kronos report and give to Chief Warden to disperse.
 - Continue making Emergency Evacuation Call over the radio until all personnel are accounted for in the shelter areas
 - Check with each area warden in the shelter areas that all personnel are accounted for using evacuation checklist
 - Establish the whereabouts of any missing personnel.
- **Supervisor / Area Warden:**
 - Coordinate all personnel on site to the safest designated shelter (based on risk assessment).
 - If sending personnel to check areas – send in pairs and arrange communication on another channel to keep in contact
 - Ensure all personnel are accounted for in the designated shelter area using the evacuation checklist– if time permits ensure Kronos and WOL reports are on hand
 - Designated shelters: Machine Shop, Store, Kiln and North Pit (last resort)
 - Have enough vehicles in the vicinity of the designated shelter in case further refuge needs to be sought
 - Consider taking extra drinking water, site communication devices, portable firefighting equipment and first aid kits to the designated shelter areas
 - Ensure all windows and doors are closed in designated shelter areas, leaving one door as the entry / exit door. Place wet clean rags around doors and windows.
- **Electrical:**
 - If time permits and it is safe to do so, get electrical department to set up generator at the selected shelter area – once complete ensure that they are accounted for in a shelter area
- **Production:**
 - If safe to so and time permits, park small water cart next to the store in filler loadout area and the bulk water truck in the south end of ROM for putting out spot fires after front has passed.
 - Call all HME to park up in the pit and pick up HME operators. If there is not enough time until fire impacts or there is no visibility the last resort is to leave operators in pit area (preferably on middle benches in HME – windows, doors and vents closed and all hazard lights operational – maintain radio contact
 - Take the Trauma kit and Defibrillator from Control room to Maintenance Workshop.
- **Lime Plant:**
 - Assess if the Kiln is to be immediately shut down and evacuation to designated shelter is required (If time permits start the back-up generator), or whether it is safe to stay and shelter in place.
 - If safe to do so – monitor gate for trucks coming in and direct them to the shelter area.

Emergency Procedure	<i>Bush Fire Duty Card</i>	
	<ul style="list-style-type: none"> Two persons to make regular exterior visual inspections (wearing appropriate PPE and with two way radios) of the shelter for embers and extinguish where possible or call 000. When bushfire threat has passed the area and the area and access/ egress to site is deemed safe by emergency services, account for all personnel and risk assess if operations will continue or if personnel will be sent home. Contact relevant Managers and Peppertree advising them when the emergency is declared over. Tape off the area to keep unauthorised personnel out. Secure scene for incident investigation 	
Who is in charge?	The site Chief Warden is in charge of this type of incident until relieved by the Emergency Services	
Who to call <i>Upon identifying this type of emergency, urgently contact. Follow incident matrix for further notifications</i>	Name Chief Warden / Deputy Warden Emergency Services Marulan RFS Captain Bungonia RFS Captain Peppertree Quarry TRN Mine Management Team – Site Manager, Plant Manager, Pit Manager, Mine Manager, WHS Partner Resources Regulator	Contact no: Two way radio Dial 209 000 0407 227 047 UHF16 0408 223 380 UHF16 48 411 701 or ext 401 Channel 8 on site radio Various – refer to contact list 1300 814 609
Emergency equipment required	<ul style="list-style-type: none"> Site firefighting equipment such as extinguishers, water truck First aid kit Site communication devices 	
Resuming operations	<ul style="list-style-type: none"> Clearance to be obtained from emergency services Complete a site inspection looking for spot fires Turn off generators once power restored, open gates and return defibrillators This type of incident may require regulator notification and regulatory approval before resuming operations, to be determined by WHS Business Partner and Site Manager. Prevent access to areas involved in the incident until the scene is released. Commence internal incident investigation Equipment damaged in the incident will require inspection by a suitably qualified person after repair and before returning to service. Risk assessments of equipment involved in the incident will require review prior to returning the equipment to service. Critically damaged equipment may require replacement. Fire extinguishers and fire suppression systems will need to be replaced and or recharged if they have been activated. Consider incident debrief based on the severity of the incident. 	

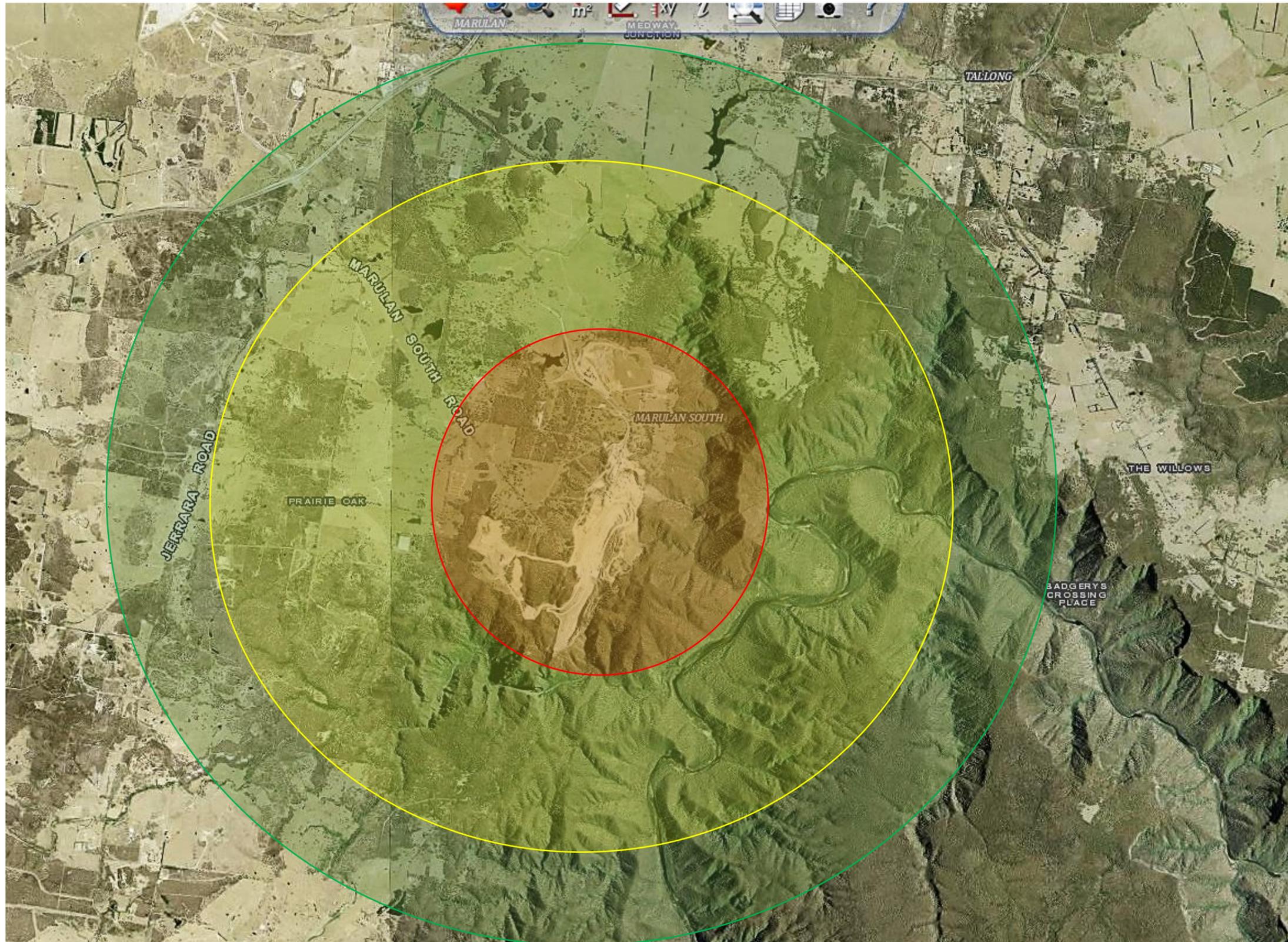
19. Site Maps





Trigger Action Map

Red: Emergency – take shelter if escape isn't possible
Yellow: Watch and Act – Evacuation if required
Green: Consider Evacuation depending on conditions



21. Bushfire Trigger Action Matrix

Fire Danger Rating:	Severe/Extreme/Catastrophic		Use in conjunction with Bush Fire duty Card	
Trigger Action Map	Fire Direction	Wind Direction	Outcome	Action
Green Zone	W/NW	W/NW	Fire could move very quickly and access could be blocked	<ul style="list-style-type: none"> ➤ Consider early evacuation if safe to do so ➤ Check availability and operation of firefighting equipment ➤ Advise all personnel on site of fire and actions being taken ➤ Actively monitor Mine site for fire activity ➤ Advise other key persons of threat ➤ Consider stopping kiln operations
	W/NW	E/SE	Fire moving away from Mine, however access could be become blocked	<ul style="list-style-type: none"> ➤ Consider early evacuation if safe to do so ➤ Check availability and operation of firefighting equipment ➤ Advise all personnel on site of fire and actions being taken ➤ Actively monitor Mine site for fire activity ➤ Advise other key persons of threat ➤ Consider stopping kiln operations
	E/SE	W/NW	Fire moving away from Mine	<ul style="list-style-type: none"> ➤ Monitor weather conditions ensuring wind doesn't change direction ➤ Check availability and operation of firefighting equipment ➤ Advise all personnel on site of fire and actions being taken ➤ Actively monitor Mine site for fire activity ➤ Advise other key persons of threat
	E/SE	E/SE	Fire moving towards Mine moving up hill	<ul style="list-style-type: none"> ➤ Consider early evacuation if safe to do so ➤ Check availability and operation of firefighting equipment ➤ Advise all personnel on site of fire and actions being taken ➤ Actively monitor Mine site for fire activity ➤ Advise other key persons of threat ➤ Consider stopping kiln operations
Yellow Zone	W/NW	W/NW	Fire within danger zone and access will be become blocked, possible Ember attacks	<ul style="list-style-type: none"> ➤ Evacuate now if safe to do so. Rail access road may need to be considered ➤ Activate and check all firefighting equipment if staying ➤ Advise all persons on site of the situation via two way radio ➤ Activate evacuation procedures and follow bushfire duty card ➤ Chief Warden to contact Emergency services and advise them of evacuation ➤ If Kiln is still on, consider emergency shutdown procedures or whether there is time to shut down to correct temperature
	W/NW	E/SE	Fire moving away from Mine, however access could be become blocked	<ul style="list-style-type: none"> ➤ Evacuate now if safe to do so. ➤ Activate and check all firefighting equipment if staying ➤ Advise all persons on site of the situation via two way radio ➤ If Kiln is still on, consider emergency shutdown procedures or whether there is time to shut down to correct temperature
	E/SE	W/NW	Fire moving away from Mine	<ul style="list-style-type: none"> ➤ Monitor conditions closely if wind changes direction, evacuate if safe to do so ➤ Activate and check all firefighting equipment if staying ➤ Advise all persons on site of the situation via two way radio ➤ If Kiln is still on, consider emergency shutdown procedures or whether there is time to shut down to correct temperature
	E/SE	E/SE	Fire moving towards Mine, moving up hill, possible Ember attacks	<ul style="list-style-type: none"> ➤ Evacuate now if safe to do so ➤ Activate and check all firefighting equipment if staying ➤ Advise all persons on site of the situation via two way radio ➤ Activate evacuation procedures and follow bushfire duty card ➤ Chief Warden to contact Emergency services and advise them of evacuation

				<ul style="list-style-type: none"> ➤ If Kiln is still on, consider emergency shutdown procedures or whether there is time to shut down to correct temperature
Red Zone	W/NW	W/NW	Fire Imminent, access blocked	<ul style="list-style-type: none"> ➤ Take Shelter in designated shelter areas (based on risk assessment): <ul style="list-style-type: none"> ○ Bottom section: Machine Shop ○ Top Section: Store ○ Last resort is the North Pit. ➤ Activate and check all firefighting equipment ➤ Advise all persons on site of the situation via two way radio ➤ Activate evacuation procedures to shelter areas and follow bushfire duty card ➤ Chief Warden to contact Emergency services and advise of the situation ➤ If Kiln is still on, begin emergency shutdown procedures or consider whether there is time to shut down to correct temperature
	W/NW	E/SE	Fire moving away from Mine - access will most likely be blocked	<ul style="list-style-type: none"> ➤ Take Shelter in designated shelter areas (based on risk assessment): <ul style="list-style-type: none"> ○ Bottom section: Machine Shop ○ Top Section: Store ○ Last resort is the North Pit. ➤ Activate and check all firefighting equipment ➤ Advise all persons on site of the situation via two way radio ➤ Activate evacuation procedures to shelter areas and follow bushfire duty card ➤ Chief Warden to contact Emergency services and advise of the situation ➤ If Kiln is still on, consider emergency shutdown procedures or whether there is time to shut down to correct temperature
	E/SE	W/NW	Fire moving away from Mine	<ul style="list-style-type: none"> ➤ Evacuate if safe to do so and only if advised by RFS, otherwise shelter in designated areas (based on risk assessment): <ul style="list-style-type: none"> ○ Bottom section: Machine Shop ○ Top Section: Store /electrical offices ○ Last resort is the North Pit. ➤ Activate and check all firefighting equipment if staying ➤ Advise all persons on site of the situation via two way radio ➤ Activate evacuation procedures and follow bushfire duty card ➤ Chief Warden to contact Emergency services and advise them of evacuation ➤ If Kiln is still on, consider emergency shutdown procedures or whether there is time to shut down to correct temperature
	E/SE	E/SE	Fire imminent, conditions could be too dangerous to leave even if access is not blocked	<ul style="list-style-type: none"> ➤ Take Shelter in designated shelter areas (based on risk assessment): <ul style="list-style-type: none"> ○ Bottom section: Machine Shop ○ Top Section: Kiln / electrical offices ○ Last resort is the North Pit. ➤ Activate and check all firefighting equipment ➤ Advise all persons on site of the situation via two way radio ➤ Activate evacuation procedures to shelter areas and follow bushfire duty card ➤ Chief Warden to contact Emergency services and advise of the situation ➤ If Kiln is still on, begin emergency shutdown procedures or consider whether there is time to shut down to correct temperature

22. Annual Bushfire Checklist

Inspection Item	Status (Y/N/NA)	Comments/ Actions Required
1. Safe road and track access free of vegetation and blockages. (section 10.2)		
2. Adequate fire breaks free of vegetation, litter and fuel. APZ's should have a minimum of 10m around assets (section 8)		
3. Maintenance of access to nominated water storage.		
4. Annual Inspection of transmission easements free of vegetation (section 10.5)		
5. Ensure site is free of rubbish.		
6. Review weed management.		
7. Identify areas where fuel load is to be reduced via slashing/grazing.		
8. All fire fighting equipment, water pumps and fittings are inspected for correct function. (section 10.9)		
9. Inspect flammable liquid stores and fuel storage areas for any potential ignition sources.		
10. Contact details of local emergency services are updated.		
11. The management plan is updated		
12. Review adequacy of site induction		
13. Review adequacy of hot work permit template (Section 10.8)		

