

Dunmore Quarry

Bushfire Management Plan



Document Control Sheet

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Bushfire Management Plan

Version	Date	Prepared by	Reviewed by	Distribution
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2.	October 2007	Rod Wallace Environment & Community Advisor	Jason Williams Dunmore Quarry Manager	- Department of Planning - Shellharbour Council - NSW Rural Fire Service - Dunmore Quarry Community Consultative Committee
3.	May 2010	Mel Goodall Environmental Coordinator	Rod Wallace Planning & Development Manager	- Department of Planning - Shellharbour City Council - NSW Rural Fire Service - Dunmore Quarry Community Consultative Committee
4.	May 2013	Mel Goodall Environmental Advisor	Rod Johnson NSW/ACT Environment Manager Boral Property Group	
5.	August 2016	Ronnie Lawton Environmental Coordinator, Dunmore	Todd Kalajzich Quarry Manager, Dunmore	- Department of Planning - Shellharbour City Council - NSW Rural Fire Service - Dunmore Quarry website

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1.0 Introduction

1.1 Background

This management plan (BMP) covers aspects of bushfire management for the Dunmore Quarry operation and adjacent land.

This document falls under the Boral Health, Safety, Environment and Quality (HSEQ) management system.

1.2 Scope

The scope of this BMP includes the following:

- Dunmore Quarry project site
- Local area including Boral owned land, property and infrastructure.

The plan was developed following consultation with the NSW Rural Fire Service with reviews of the plan undertaken on an as needs basis. Final copies of the plan were lodged with the NSW Rural Fire Service and Shellharbour Shire Council with amendments undertaken during the review process to be lodged with Department of Planning, Shellharbour City Council, NSW Rural Fire Service and the Dunmore Quarry Community Consultative Committee.

Appendix A of this plan outlines the relevant area along with elements associated with bushfire management.

1.3 Requirement for Bushfire Management

Schedule 4 of the Dunmore Quarry Development Consent Conditions (Consent No. 470-11-2003 contains conditions 4(76 and 77) of the development consent state:

“76. The Applicant shall:

- (a) ensure that the development is suitably equipped to respond to any fires on-site;
and*
- (b) assist the Rural Fire Service and Emergency Services as much as possible if there is a fire on-site.*

77. Within 6 months of the date of this consent, the Applicant shall prepare a Bushfire Management Plan for the development, to the satisfaction of Council and the Rural Fire Service.”

This plan has been developed to outline how Boral will satisfy the requirements of the above conditions.

2.0 Objectives for Bushfire Management

The objectives of bushfire management are to minimise the risk of bushfires and rapidly control outbreaks should they occur, in order to:

- Minimise potential for spread of bushfires within and surrounding Boral lease areas;
- Protect people, property and assets;
- Protect areas of heritage value; and
- Protect areas of threatened flora and vegetation communities.

3.0 Potential Causes and Impacts

The bushfire danger period in NSW generally occurs between 1 October and 31 March (inclusive) of the following year. The season may be varied depending upon the existing or forecast weather conditions and fuel states applicable at the time. Climatic conditions can contribute to the severity of a fire season. Very severe conditions usually result from:

- Wet, late summer and autumn promoting heavy fuel accumulation;
- Dry and windy winters with heavy frosts;
- Dry springs and the early onset of summer conditions;
- Occurrence of an extended drought period; or
- Lower than average rainfall throughout winter.

Whilst Dunmore Quarry operational activities may increase the risk of fires, it will also potentially provide effective fire breaks. Should a fire occur and be allowed to continue unchecked, it will pose a threat to:

- The safety and property of neighbouring land owners;
- Mining equipment and other company assets;
- Grass cover, exposing the land to soil erosion;

- Flora and fauna habitat; and
- Land productivity.

4.0 Control Measures

Detailed control measures for prevention and control of bushfires are presented in **Table 1**. They include:

- Grazing of pastures to minimise fuel build-up;
- Vegetation maintenance around infrastructure; and
- Ongoing communications with the NSW Rural Fire Service.

These measures aim to reduce the severity of a bushfire by reducing the amount of fuel available to burn, should one occur. This makes a bushfire easier to control and reduces the level of damage.

Control measures will be undertaken with regard to the impact on flora and fauna. Dunmore Quarry has known populations of threatened species that must be protected. Prior to any clearing of any land for firebreaks, a Request for Approval to Clear Vegetation form (HSEQ-8-08-F01) must be completed and approved.

Dunmore Quarry uses existing fire control infrastructure, with firefighting equipment at key points (that is serviced regularly), and an emergency response team to help reduce the impact of potential fires onsite.

Dunmore Quarry has access to two water carts with capacities of 50,000 litres. Following consultation with the NSW Fire Service, the water cart has been fitted with STORZ fittings, compatible with the NSW Fire Brigade and NSW Rural Fire Service.

A plan of Dunmore Quarry's holding area, infrastructure, access points, which will also serve as staging areas, key waterways and roads is attached in **Appendix A**.

Occurrence of a fire will trigger Boral's emergency response procedures with the NSW Rural Fire Service being notified through the 000 emergency number. If Boral can control the fire or external assistance is not required, notification of all fires will still be undertaken. This will be done in accordance with Boral's procedure for managing external affairs when contacting external emergency services.

Table 1

CONTROL MEASURE		RESPONSIBILITY	TIMING / FREQUENCY
1	All new employees and contractors to attend a Boral induction prior to commencement of work on site. Inductions will ensure awareness and understanding Boral objectives and emergency procedures.	All staff and contractors	Prior to commencement of work
2	All works onsite require a Safe Work Method Statement (SWMS) and Authority to Work (ATW) Permits prior to commencing tasks on site. This process identifies risks and implements controls in place to reduce such risk.	Site Supervisor	Prior to commencement of work
3	Where possible, pasture in the buffer zone around the quarry will continue to be grazed to avoid the build-up of excessive fuels.	Site Manager	Ongoing
4	If necessary, in areas where grazing is not practical, other risk management measures will be taken, such as slashing, grading of fire trails or hazard reduction burning, except in areas where threatened flora and fauna are present.	Site Manager	Ongoing
5	Prior to the initial disturbance of undisturbed Boral land for firebreaks, a Request for Approval to Clear Vegetation form (HSEQ-8-08-F01) must be completed and approved.	All Staff and Contractors	As required
6	Permits for hazard reduction burning must be obtained from the Rural Fire Service during the fire danger period. In addition, a hazard reduction certificate will be obtained for hazard reduction works in the asset protection zone or strategic fire advantage zone.	Site supervisors/ manager	As required
7	A regular slashing and maintenance program around quarry roads and infrastructure will be carried out.	Site Manager	Ongoing
9	Ongoing communications will be maintained with the NSW Rural Fire Service.	Environmental Coordinator	Ongoing
10	Currently approved fire control systems (including site communications, fire extinguishers and other equipment) will be maintained.	Site Supervisors	Ongoing
11	Site Emergency Response teams will service the site in the event of a fire, and the appropriate Statutory Authority will be contacted.	Site Manager Site Supervisor	Ongoing
13	All fires on Boral land during the bushfire danger period will be reported to 000.	Site Manager Site Supervisor	As required
14	Access points will be used by Boral as staging areas. In the case of a fire requiring assistance, the fire service contacted will be informed of which access point/gate to stage at for briefing by Boral and will then be accompanied onto the site.	Site Supervisor	As required
15	Annual inspections will be made prior to the bushfire season (July/August) to ensure adequacy of fire control measures.	Site Supervisor	Annually (July/August)

5.0 Monitoring, Reporting and Reviewing

5.1 Monitoring

Annual inspections will be made prior to the bushfire season (July/August) as part of the ongoing land management inspections to ensure adequacy of fire control measures. A copy of the annual inspection checklist is included in **Appendix 2**. This will include an evaluation of last year's control measures, the assessment of stocking levels on pasture, identification of new and existing areas that require slashing, inspection of firebreak adequacy, and inspection of adequacy of firefighting equipment and facilities. Ongoing maintenance of bushfire controls will be carried out as required following regular inspections by supervisors.

5.2 Reporting

A summary of any bushfire management issues and actions arising throughout the year will be presented in the Annual Review report for the quarry, which will be distributed to relevant regulators and stakeholders.

Performance against the objectives of the BMP will also be reported in the annual environmental report. The objective will be achieved if fire reduction and hazard control is carried out on a regular basis and regular consultation with the NSW Rural Fire Service is maintained.

5.3 Review

The BMP will be reviewed and updated every 3 years, or as required following annual inspections. The review will include an assessment of the effectiveness of the established bushfire controls and their performance against the plan's objective. Progressive amendments will be made to the BMP as a result of Boral's continuous improvement process. Any amendments to the plan will be undertaken in consultation with the NSW Rural Fire Service.

To date the bushfire prevention measures put in place have been successful. The sites emergency response procedures, which include response to fire, involve emergency response drills that help to assess the ability and capacity of the quarry to respond in such circumstances. These drills will continue and any improvements needed made upon review of the drill performance.

As information and processes improve in regard to fire management the bushfire management plan will be reviewed and site personnel updated on changes.

6.0 Responsibilities

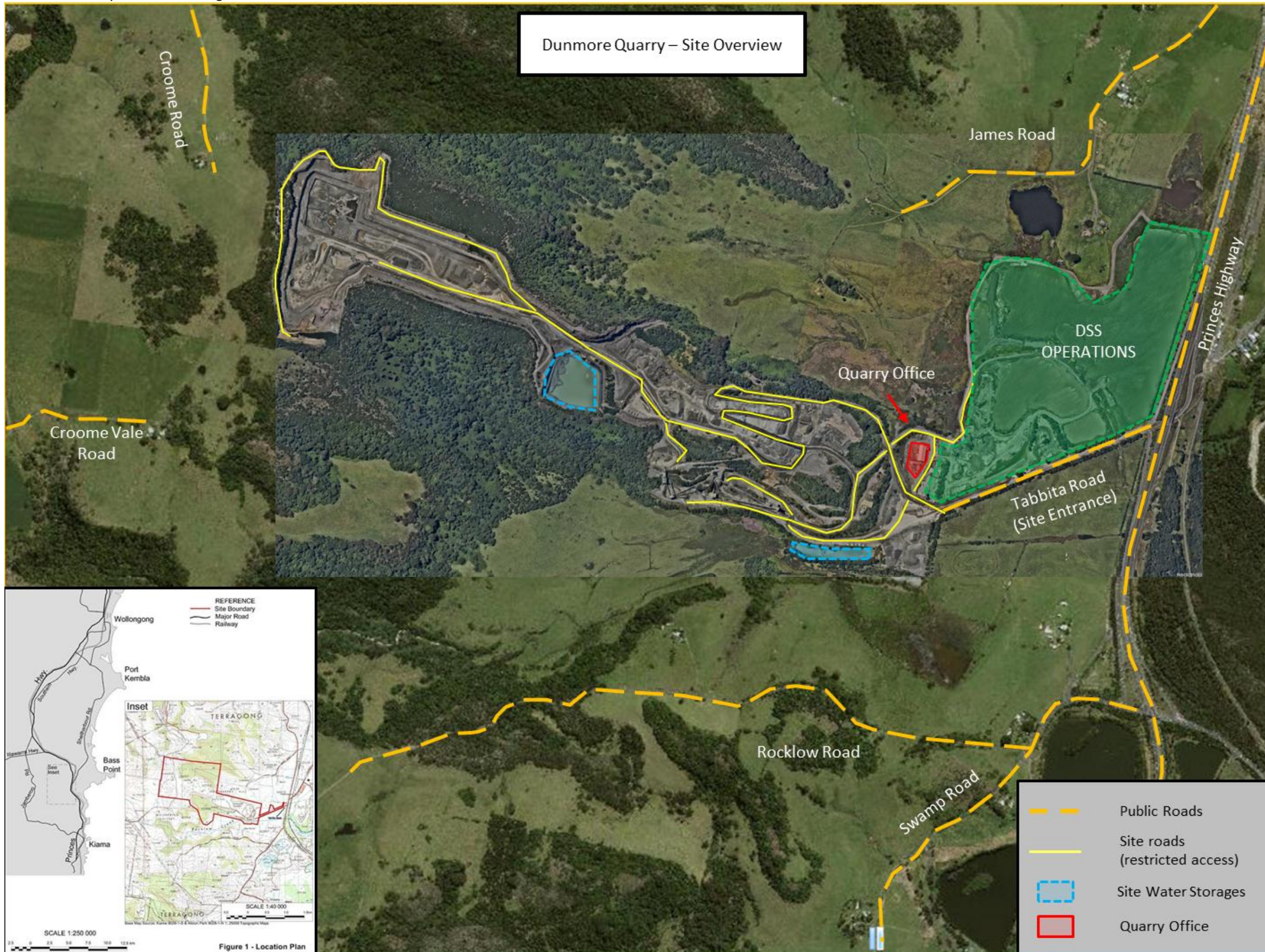
The Dunmore Quarry Manager will be accountable for the implementation of the BMP. Specific accountabilities are provided in **Table 1**.

Key personnel involved in Bushfire management of Dunmore Quarry include:

Position	Name	Contact Details
Quarry Manager, Dunmore	Todd Kalajzich	0401 895 086
Production Manager, Dunmore	Brodie Bolton	0401 896 866
Production Supervisor, Dunmore	Stuart McLean	0401 895 524
Environmental Coordinator, Dunmore	Ronnie Lawton	0401 892 133

Appendix A

Dunmore Quarry Bushfire Management Plan – Site Overview



Please note:

- Drawing not to scale.
- Site roads are subject to change.
- Water storages will have varying volumes of water throughout the year
- The size and location of the Dunmore Sand & Soil (DSS) operational ponds are variable in nature.

Appendix B

Dunmore Quarry Bushfire Management Annual Bushfire Preparation Inspection



Name of Inspector:	Position:	Signature:	Date of Inspection:
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Item	Checklist Item	Status			Actions
		Y	N	N/A	
1.	Inspect site infrastructure (office, crib rooms, workshop, haul roads etc.) for overgrown vegetation, rubbish and other flammable material (pallets etc.) and ensure housekeeping is up to standard.				
2.	Review weed management requirements for the entire project site.				
3.	Inspect potential ignition sources throughout the site				
4.	Inspect flammable liquid stores and fuel bowser area.				
5.	Inspect site access points of emergency services and ensure they are suitable.				
6.	Inspect Storz fittings on water carts				
7.	Ensure backup systems for pumps, which could supply water for emergency services, are working and available (i.e. generators)				
8.	Review all site fire suppression inspections and ensure they are up to date.				
9.	Review validity of hot work permit template.				
10.	Review contact details of local emergency services and ensure they are up to date				
11.	Review validity of site inductions and emergency management plan.				
12.	<i>Add any further items as required....</i>				
13.					
14.					

Detail any items that require attention and/or remedial action. The Site Manager must monitor progress and completion of actions.

Actions/Comments					
Item No.	Comment	Action Taken	By Who	By When	SIMS No.