



# WARRAH RIDGE QUARRY

## POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN




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## DOCUMENT CONTROL

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## TABLE OF CONTENTS

1	STATUTORY REQUIREMENT	1
2	SITE DESCRIPTION	2
3	HAZARDS	2
3.1	AIR QUALITY	2
3.2	WATER QUALITY	2
3.3	BLAST EXCEEDANCE	2
3.4	FUEL/OIL/CHEMICAL	2
3.5	FIRE	2
4	HAZARD CAUSES AND CONTROLS	3
5	INVENTORY AND QUANTITY OF POLLUTANTS	4
6	EQUIPMENT IN USE TO MINIMISE RISK	4
7	NOTIFICATION PROTOCOL	4
7.1	NOTIFICATION PROTOCOL	5
7.2	KEY PERSONNEL FOR IMPLEMENTATION OF THE PIRMP	<b>Error! Bookmark not defined.</b>
7.2.1	KEY PERSONNEL FOR ACTIVATING THE PIRMP	<b>Error! Bookmark not defined.</b>
7.2.2	PERSONNEL AUTHORISED TO NOTIFY RELEVANT AUTHORITIES	<b>Error! Bookmark not defined.</b>
7.2.3	PERSONNEL RESPONSIBLE FOR MANAGING RESPONSE	<b>Error! Bookmark not defined.</b>
7.3	CONTACT DETAILS OF EACH RELEVANT AUTHORITY	5
8	COMMUNICATION PROTOCOL WITH COMMUNITY	6
9	COMMUNICATION PROTOCOL AND TRAINING FOR STAFF	6
10	SURFACE EMERGENCY PLAN	6
11	MINIMISING HARM TO PEOPLE ON THE PREMISES	6
12	ACTIONS TAKEN DURING AND IMMEDIATELY AFTER THE POLLUTION INCIDENT	7
13	TRAINING OF PERSONNEL FOR INCIDENT RESPONSE	7
14	TESTING THE PIRMP	7
15	AVAILABILITY OF PLAN	8
16	REFERENCES	8



Tables

- Table 1 Requirements of the PIRMP and the location each condition has been addressed
- Table 2 Licenced Activity
- Table 3 Hazard causes, likelihoods, and controls
- Table 4 Neighbour Contact Information

- Appendix 1- Surface Emergency Plans
- Appendix 2- PIRMP Testing and Updates



# 1 STATUTORY REQUIREMENT

In accordance with the requirements of Part 5.7A of the *Protection of the Environment Operations Act 1997* and Part 3A of the *Protection of the Environment Operations (General) Regulation 2009*, holders of an Environment Protection Licence (EPL) must prepare a Pollution Incident Response Management Plan (PIRMP) in relation to the activity to which the licence relates.

This document is to demonstrate compliance with the requirements of the legislation and informs the procedures to be implemented at the Warrah Ridge Quarry (the Quarry) for managing pollution events. The NSW Environment Protection Agency (EPA) provides guidelines for the preparation of a PIRMP, *Pollution Incident Response Management Plans* (NSW EPA, 2020). Table 1 below details the requirements set out in those guidelines, and where in this document each requirement has been addressed.

**Table 5 Requirements of the PIRMP and the location each condition has been addressed**

Requirement	Section Addressed
Clause 98C(1) of the General Regulation states that the PIRMP must include:	
a) a description of the hazards to human health or the environment associated with the activity to which the licence relates,	Section 3
b) the likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood,	Section 4, Table 4
c) details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity,	Section 4, Table 4
d) an inventory of potential pollutants on the premises or used in carrying out the relevant activity,	Section 5
e) the maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates,	Section 5
f) a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident,	Section 6
g) the names, positions and 24-hour contact details of those key individuals who: (i) are responsible for activating the plan, and (ii) are authorised to notify relevant authorities under section 148 of the Act, and (iii) are responsible for managing the response to a pollution incident,	Section 8
h) the contact details of each relevant authority referred to in section 148 of the Act,	Section 7
i) details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on,	Section 9
j) the arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on,	Section 7
k) a detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises,	Section 10
l) a detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk,	Section 11
m) the nature and objectives of any staff training program in relation to the plan,	Section 9
n) the dates on which the plan has been tested and the name of the person who carried out the test,	Section 13
o) the dates on which the plan is updated,	Section 13
p) the manner in which the plan is to be tested and maintained.	Section 13



## 2 SITE DESCRIPTION

This PIRMP is applicable across all Quarry operations subject to Environment Protection Licence (EPL) 20075. The Warrah Ridge Quarry Facility is located on Warrah Ridge Road, approximately 3.2 kilometres west of its intersection with Kamilaroi Hwy. It is approximately 5 kilometres west of Quirindi. The site (Lot 1 DP57068 & Lot 1 DP740477) is accessed via Warrah Ridge Road that provides access to Kamilaroi Hwy.

Table 6 Licenced Activity

SITE	EPL ID	ACTIVITY
Warrah Ridge Quarry	20075	Crushing, grinding or separating > 30000-100000 T annual processing capacity  Extractive activities > 30000-50000 T annual capacity to extract, process or store

## 3 HAZARDS

The following section outlines the potential hazards to human health and the environment that could result from operations at the Quarry:

### 3.1 AIR QUALITY

Excessive dust levels from activities on site and resulting in impacts on health and amenity, and household water supplies.

### 3.2 WATER QUALITY

Discharge of water from site that does not meet concentration thresholds applicable to the EPL and associated impacts on downstream water quality.

### 3.3 BLAST EXCEEDANCE

Blast exceedances resulting in noise and/or vibration levels above the criteria specified within the EPL.

### 3.4 FUEL/OIL/CHEMICAL

Spill of diesel fuel/oil/chemical on site with associated impacts on water quality and ecosystem health downstream.

### 3.5 FIRE

Outbreak of fire on site either from bushfire or other source with associated impacts of smoke/odour and spread of fire on neighbouring properties.



## 4 HAZARD CAUSES AND CONTROLS

The following table defines the hazard, causes, likelihood of occurrence and the relevant controls in place to reduce the risk of hazards occurring at the Quarry.

Table 7 Hazard causes, likelihoods, and controls

HAZARD	CAUSE	LIKELIHOOD	CONTROLS
Air quality impacts caused by operations at the Quarry	Inadequate dust suppression, and/or unfavourable weather conditions	Moderate, and increasing in likelihood during the warmer months and sustained periods of drought or high wind conditions.	Shift inspections; weather station data to confirm wind speed/direction to assess if conditions are likely to be unfavourable.
Discharge of surface water above acceptable water quality criteria	Above average rainfall and inadequate storage on site	Moderate, increasing following periods of sustained heavy rainfall.	Regular inspections of discharge dam storage capacities (including daily inspections during periods of sustained rainfall); pumps on standby to drain storage dams as required. Use of water from sediment dams for onsite dust suppression.
Excessive noise and/or vibration, caused by blasting activities, above the criteria specified within the EPL	Inadequate blast design	Low	Blast monitors in place; blasts designed by qualified personnel with consideration of EPL blasting limits.
Fuel spill	Tanker release during fuel refill operations	Low	Bunding at fuel refill point on transtank; cut-off valve on refill hose to tank.
Oil spill	Rupture of container during transport	Moderate	Hydrocarbon storage area bunded; oil/water separator in place; emergency spill kit in place at site for response to any spills.
Fuel/oil spill during routine servicing	Spill during transfer from service truck to plant item	Moderate	Service truck used with fuel/oil cells for fluid transfer; spill kits available on service truck; operator training for servicing from the service truck.
Chemical spill on site	Rupture of IBC during transport	Moderate	All chemicals used on site are retained within storage area that is either self-bunded (storage container) or is located within the waste oil area/oil farm and drains to oil/water separator. All chemicals delivered to site are accompanied by SDS.
Fire	Bushfire on site causing off-site odour/fume.	Low, increasing in likelihood during the summer months, and following seasons of good growth resulting in heavy fire loads.	Frequent inspections of site to assess fire load; firefighting equipment on site in case of bushfire; slashing of site and weed spraying as required, to minimise bushfire frisk.



## 5 INVENTORY AND QUANTITY OF POLLUTANTS

Minimal chemicals and/or potential pollutants are kept at the site compound. Occasionally chemicals used for weed control and minor maintenance of plant are kept on the site. The quantity of chemicals and other pollutants at any point in time is minimal. In general, it is considered that chemicals and other pollutants stored at the quarry include:

- CAT ELC Coolant: 40L
- Valvoline Coolant: 40L
- ALL FLEET PLUS E900 15W-40 Engine Oil: 40L
- Diesel Fuel: 1000L
- Small quantities of herbicide for spot spraying weed control; and
- Minor household chemicals (cleaning products, pesticides, laundry detergents).

## 6 EQUIPMENT IN USE TO MINIMISE RISK

Equipment in use at the Quarry to minimize risk of impact on humans and or the environment:

- Personal Protective Equipment required for employees onsite (eg, high vis, gloves, safety glasses, hard hats etc)
- Safety data sheets available for hazardous materials onsite
- Emergency spill kits comprising floating booms and absorbent pads to control and contain isolated spill incidents.
- Earthmoving equipment available to undertake remedial actions, if required.
- Oil/water separators to contain and separate oil from water captured.
- Pumps for draw down of settlement ponds and main storage dam to minimize potential for surface water discharge.
- Fire trailers and/or water carts with water cannon for control of bushfires.
- Water level markers in dams to inform water levels.

## 7 NOTIFICATION PROTOCOL

Under Part 5.7 of the Protection of the Environment Operations Act, notification is required if a pollution incident causes or threatens to cause 'material harm to the environment'.

Material harm is defined in section 147 of the POEO Act as:

(a) harm to the environment is material if:

- (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.'

Notification is required even where 'harm to the environment is caused only in the premises where the pollution incident occurs', as specified in section 147(2).





## 7.1 NOTIFICATION PROTOCOL

The protocol for reporting of an incident is as follows:

1. Initiate the Pollution Incident Response Management Plan and take measures to “control, contain and clean-up”.
2. Inform site/shift supervisor. Containment of any spill should be undertaken if it is safe to do so. Immediately on containment, or if containment is not possible, contact your supervisor to inform them of the incident. Any spill/incident must be notified to your supervisor.
3. The supervisor will initiate any additional containment/control of the incident and coordinate required cleanup activities.
4. The supervisor will also contact the Quarry Manager who will determine incident notification requirements.
5. The Quarry Manager, in consultation with the Liverpool Shire Council, will provide the required notification to the relevant agencies, with contact details available in Section 7.2.
6. The Quarry Manager, in consultation with the Liverpool Shire Council, will provide required reports to the relevant agencies relating to the cause, response and mitigation measures enacted to manage the pollution incident.

## 7.2 CONTACT DETAILS OF EACH RELEVANT AUTHORITY

The relevant agencies and order of notification are prescribed as follows:

- If the incident represents an immediate threat to human health and/or property, call 000. Fire and Rescue NSW, NSW Police and NSW Ambulance Service will be the first responders.
- If the incident does not require an initial combat agency, or once the 000 call is made, notify the relevant authorities in the following order:
  1. Environment Protection Authority on the Environment Line: 131 555.
  2. Public Health Unit –Tamworth: (02) 6764 8000.
  3. Safework NSW: 131 050.
  4. Local Government (Liverpool Plains Shire Council): (02) 6746 1755
  5. Fire and Rescue NSW: 1300 729 579

Failure to apply the above notification protocol may result in penalties of up to \$2 million for corporations and up to \$500,000 for individuals.

In addition to the above agencies, notifications may also be made outside of the requirements of the Protection of the Environment Operations Act to the following:

- NSW Department of Planning Industry and Environment – 1300 305 695
- NSW Department of Primary Industries, Division of Resources and Geoscience- 1300 736 122
- NSW Resource Access Regulator 1800 633 362



## 8 COMMUNICATION PROTOCOL WITH COMMUNITY

In the event of a notifiable incident occurring, which impacts or has potential to impact on neighboring properties, the following communication protocol will be followed:

The affected landholder will be notified as soon as possible (via phone call) about the incident and provided the following information:

- The nature of the incident
- The current response status
- Practical advice on what they can do to minimise the risk of harm to their health or property, for example remaining indoors and closing windows to avoid emissions following a blast incident.

In the event of wider community impact (more than 3 landholders affected), notice relating to the incident may be provided by letter drop and/or door knock to the affected parties, with follow up advice issued as required.

In the event of any discharge incident to receiving waters, those properties directly affected by discharge water will be directly informed, with follow up contact provided confirming water quality of the discharge water, and predicted impacts on those users for all water use parameters including domestic, stock and irrigation purposes.

## 9 COMMUNICATION PROTOCOL AND TRAINING FOR STAFF

In the event of an incident that requires an emergency response for site personnel, the emergency procedures for site will be enacted which will comprise:

- Notification to all personnel over the site UHF, “Emergency, Emergency, Emergency”
- All personnel will be asked to report immediately to the Emergency Muster Location where they will be instructed as to any additional information, including any requirement to evacuate site.

## 10 SURFACE EMERGENCY PLAN

Plans of the Quarry including identification of site location and immediate surrounds, key facilities/areas on site most at risk of incident, and discharge locations from site to surrounding waterways are attached as Appendix 1.

## 11 MINIMISING HARM TO PEOPLE ON THE PREMISES

There are a number of controls in place on site targeted at ensuring the health and safety of employees and visitors on site, along with determining potential for pollution incidents.

- All emergency responder roles onsite require training in first aid, operation of emergency equipment, and Chemical Users and Handling Certificates
- Workplace inspections incorporating the LPSC General Workplace Inspection Checklist, conducted on a quarterly basis – this includes consideration of the “prescribed” risks detailed in the Work Health & Safety (Mines and Petroleum Sites) Regulation 2014.
- General workplace inspections that are integral to the site’s safety program, including mobile and fixed plant inspection checklists; equipment inspection checklist including electrical checks; emergency equipment checklists; pressure vessels and lifting; and calibration equipment.



- Management/Employee Discussions (e.g. Pre-Shift Briefings, Toolbox Meetings, Safety Meetings, Job Planning Meetings, Daily Site Inspections, Workplace Health and Safety Committee Meetings, HSRs). Information is communicated in these briefings as to what precautions employees are expected to take to minimise harm to themselves and receiving environments both on site and neighbouring surrounds.
- Implementation of targeted management plans to identify and control risk, including the Mine Safety Management Plan, the Blast Management Plan, the Traffic Management Plan, and the Site Emergency Response Plan.
- Clear signage onsite delineating emergency muster points and evacuation points.

## 12 ACTIONS TAKEN DURING AND IMMEDIATELY AFTER THE POLLUTION INCIDENT

Upon identification of a pollution incident at the Quarry, the number one priority will be to firstly ensure the wellbeing of operational personnel and others in proximity to the incident. Where there is no impediment to personal safety, the following actions will be implemented immediately:

1. Containment at the source (where possible, isolate the source of pollution to prevent further damage). For example, if a leak is occurring from a fuel tank/oil pod – plug the leak where possible.
2. Containment to immediate impact area (where possible, contain the source of pollution to the immediate area to avoid off-site impacts). For example, for a spill, construct a containment sump immediately down gradient to catch spilled material to enable pumping of this material to a suitable containment structure.
3. Clean-up of affected area – any area of direct impact (e.g. soil) from an incident shall be excavated and placed in designated bioremediation area for treatment or collected by a licensed waste contractor for disposal at an appropriately licensed facility.

Depending on the nature of the incident, more specific measures may be undertaken on an as needs basis.

## 13 TRAINING OF PERSONNEL FOR INCIDENT RESPONSE

Upon implementation of this PIRMP, all relevant personnel will be trained as to the key processes relating to the plan. Further, all workers and contractors working on the site will be notified of the location of the PIRMP on site and notified of the requirement to activate the PIRMP in the event of a pollution incident. This training will be captured in the monthly Health, Safety and Environment meeting.

## 14 TESTING THE PIRMP

As per the NSW EPA PIRMP Guidelines, PIRMPs are required to be tested at least once within every 12-month period (so there is less than 12 months between each test of the PIRMP), as well as within one month of a pollution incident occurring. This testing ensures that the PIRMP is maintained with accurate and up-to-date information, and that it can be implemented effectively.

The two usual methods of testing are a desktop exercise or scenario, and practical exercises or drills. Testing must cover all components of the PIRMP, including the effectiveness of training. Any desktop exercise includes working through an incident scenario to ensure the PIRMP is effective. A record of how this PIRMP has been tested, including the date of testing, those personnel involved, and any changes were made as a result, is available in Appendix 1.



## 15 AVAILABILITY OF PLAN

This plan is available at the Warrah Ridge Quarry Site Office in accordance with the requirements of the Act. Relevant sections of the plan are also available on the Liverpool Plains Shire Council Website.

Please note that names, contact details, and property details have been removed from the document for public display on the Liverpool Plains Shire Council Website.

## 16 REFERENCES

Liverpool Plains Shire Council, 2017. Mine Safety Management Plan.

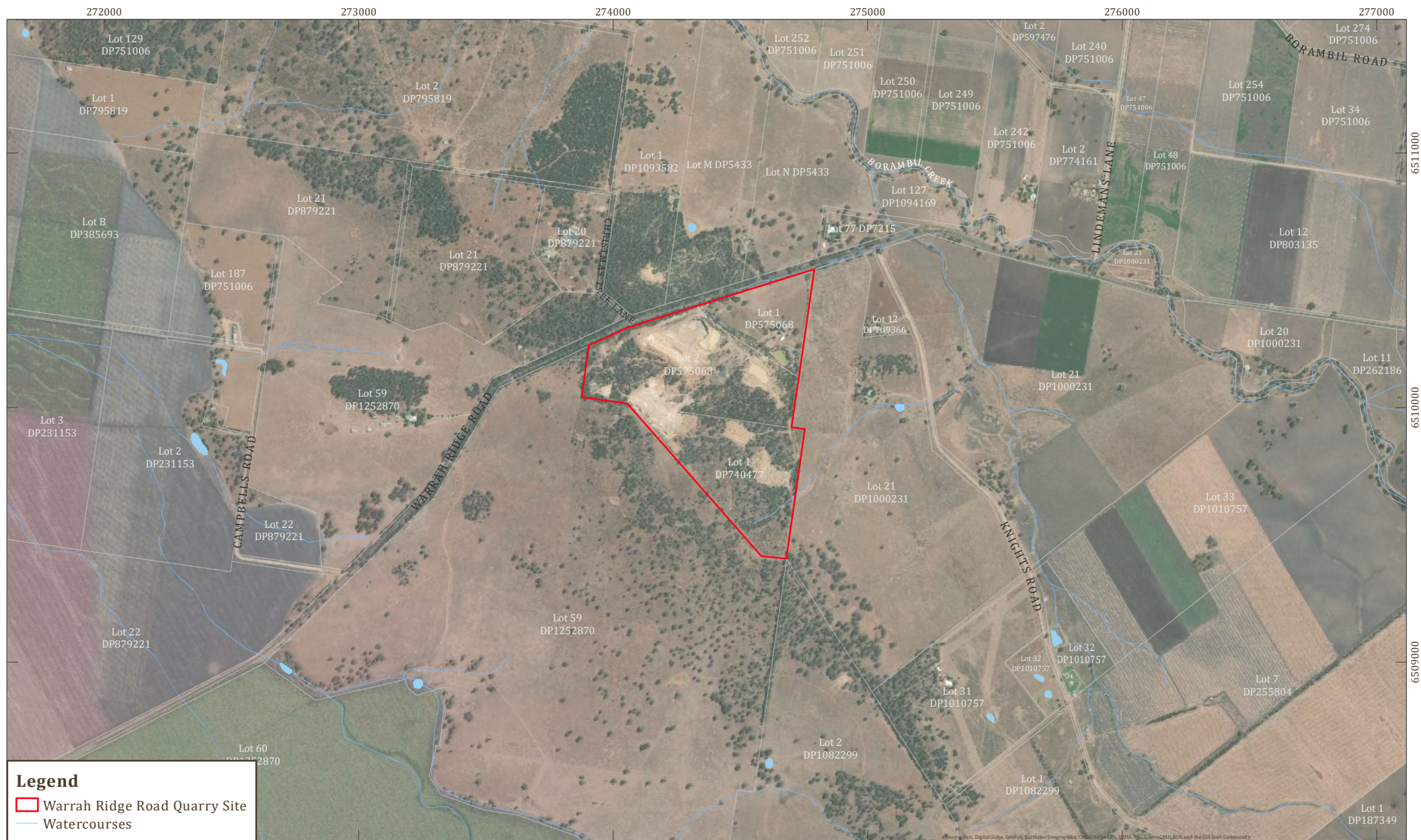
NSW EPA, 2020. Guideline: Pollution Incident Response Management Plans.



## Appendix 1- Surface Emergency Plans







GDA 1994 MGA Zone 56



Scale 1:20000 at A4

**MINESOILS**  
LAND & REHABILITATION SPECIALISTS

Quarry Site & Surrounds

**FIGURE 1**





GDA 1994 MGA Zone 56

**MINESOILS**  
LAND & REHABILITATION SPECIALISTS

0 25 50 100 Meters

Scale 1:7500 at A4

Quarry Details

**FIGURE 2**

## Appendix 2- PIRMP Testing and Updates



## RECORD OF PIRMP TESTING

Date of testing	Names of personnel involved	Details of Test Scenario The test may be either a desktop test/scenario, or a practical drill.	Learnings What worked, what needs did we identify, is an update required to address issues?



## UPDATES TO PIRMP

Edition	Revision	Date	Comments	Author	Authorised by

