

PETERSONS QUARRY POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

Prepared for:
Quarry Solutions Pty Ltd

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FIGURES

Nearby Sensitive Receptors
Potential Pollutant Emissions Plan

(Drawing No. 1837.DRG.043r1)
(Drawing No. 1837.DRG.048r1)

1.0 Introduction

Quarry Solutions Pty Ltd (Quarry Solutions), as holders of Environment Protection Licence (EPL3397) for the Petersons Quarry site (the Site), which includes the recently approved Coraki Quarry, have prepared this Pollution Incident Response Management Plan (PIRMP) to ensure compliance with the provisions of the *Protection of the Environment Operations Act 1997* (POEO Act).

The PIRMP has been prepared in accordance with the NSW Environment Protection Authority - Environmental Guidelines: *Preparation of Pollution Incident Response Management Plans 2012*.

The objectives of the PIRMP are to:

- Ensure comprehensive and timely communication about a pollution incident to staff at the premises, the EPA, other relevant authorities specified in the Act (such as local Councils, NSW Ministry of Health, WorkCover NSW, and Fire and Rescue NSW) and people outside the facility who may be affected by the impacts of a pollution incident.
- Minimise and control the risk of a pollution incident at the facility by requiring identification of risks and the development of planned actions to minimise and manage those risks.
- Ensure that the plan is properly implemented by trained staff, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

1.1 Legislative Requirements

The specific requirements for PIRMPs are set out in Part 5.7A of the POEO Act and the *Protection of the Environment Operations (General) Regulation 2009* (POEO(G) Regulation). In summary, this provision requires the following of Quarry Solutions:

- Prepare a PIRMP (section 153A, POEO Act).
- The PIRMP must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Keep the PIRMP at the premises to which the EPL relates and where the relevant activity takes place (section 153D, POEO Act).
- Must test the PIRMP in accordance with the POEO(G) Regulation (clause 98E). If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, immediately implement the plan (section 153F, POEO Act).

The plan must include the following requirements:

1. Description and likelihood of hazards.
2. Pre-emptive actions to be taken.
3. Inventory of pollutants.
4. Safety equipment.
5. Contact details.
6. Communications with adjoining properties and the community.
7. Minimising harm to persons on the premise.
8. Maps.
9. Actions to be taken during or immediately after pollution incident.
10. Staff training.

1.2 The Site Activity and Surrounds

Premises:	<p>Petersons Quarry Petersons Quarry Road, Coraki 2471</p> <ul style="list-style-type: none">• Lot 1 DP 310756• Lot A DP 389418• Lot A DP 397946• Lot 405 DP 632493• Lot 406 DP 632493• Lot 3 DP 701197• Lot 402 DP 802985• Lot 403 DP 802985• Lot 1 DP 954592• Lot 2 DP 954593• Lot 401 DP633427
Scheduled Activity: Environment Protection Licence	<p>Extractive Activities Licence Number: 3397 Anniversary Date: 28 April</p>
Extractive Activities (application to land)	<p>As per Condition A1.2 of EPL 3397 extraction of quarry products is not to exceed 1,000,000t per annum from Lot 401 DP633427, and 250,000t per annum from Lot 402 DP802985 and Lot 408 DP1166287.</p> <p>The Site is enclosed by RU1 Primary Production and E2 Environmental Conservation zoned land.</p> <p>Land use in the vicinity of the quarry consists of the following:</p> <ul style="list-style-type: none">• Industry (to the south)• Rural dwellings

2.0 Description and Likelihood of Hazards

Pollution hazards on-Site include chemical and fuel spills, dust emissions and water contamination. These are shown in Table 1 – Pollution Hazard Identification, Likelihood and Pre-emptive Actions with the likelihood of the incidence and the pre-emptive actions taken by the Site to reduce the risk or prevent an incidence from occurring.

Table 1 – Pollution Hazard Identification, Likelihood and Pre-emptive Actions

Hazard	Likelihood	Pre-emptive Actions Taken
Hydrocarbon spills during maintenance and refuelling	Moderate	<ul style="list-style-type: none"> • A permanent fuel installation is located on-Site. • Fuel or hazardous material is used for its intended use only (as specified on the Safety Data Sheets (SDS)). • SDS are reviewed and available for reference for the correct clean up procedures. • Compliance with the Workplace Health and Safety Management Plan. • Maintenance activities and refuelling are undertaken on a concrete slab, where practicable. • Supervision is provided when refuelling to ensure that overfilling does not occur. • Vehicles are maintained in good condition and as per manufactures' specifications. • Pre-start checks are completed on plant and equipment daily which include inspection for oil leaks. • Good housekeeping and tidy work areas are kept to help prevent accidents and spills.
Stored chemicals leakage and/or spillage causing contamination	Low	<ul style="list-style-type: none"> • Hazardous materials are stored in a covered area and on appropriate drip trays where practicable. • Fuel is stored in accordance with the requirements of AS1940. • Fuel or hazardous material is used for its intended use only (as specified on the SDS). • SDSs are reviewed and available for reference for the correct handling and clean up procedures. • Compliance with the Workplace Health and Safety Management Plan. • Good housekeeping and tidy work areas are kept to help prevent accidents and spills. • See Table 2 – Hazardous Materials Inventory for list of chemicals stored on-Site)
Fire	Low	<ul style="list-style-type: none"> • Store flammable and combustible liquids in an undercover area on appropriate drip trays. • Fuel is stored in accordance with the requirements of AS1940. • Refuelling is undertaken only in designated areas where possible. • Provision of appropriate spill kits and staff trained in their use. • SDS are reviewed and available for reference for the correct fire prevention and fighting procedures. • Compliance with the Workplace Health and Safety Management Plan. • Good housekeeping and tidy work areas are kept to help prevent accidents and spills. • Fire extinguishers are provided and staff are trained in their use. • Staff and visitors to Site are instructed of the emergency procedures and evacuation points.

Hazard	Likelihood	Pre-emptive Actions Taken
Discharge of water with elevated suspended solid levels	Low	<ul style="list-style-type: none"> Settling time is provided for waters within the settlement ponds prior to discharge. Clean and contaminated runoff is segregated. Sediment control measures are implemented and maintained. Water monitoring is undertaken in accordance with licence conditions.
Dust emissions from operations	Low	<ul style="list-style-type: none"> Hardstand areas and roads are kept in a damp state with the use of a water truck. Crushing and screening plant has water sprays operating at transfer points. All loads are covered during transport.
General waste generated on-Site incorrectly managed and entering the surrounding environment	Low	<ul style="list-style-type: none"> General waste and recycle bins are provided at the office and lunch room. General waste is taken to Council Landfill as necessary. Waste oil from machinery maintenance is stored correctly and disposed of at an oil recycler. Unserviceable machinery parts are reused or recycled where possible or waste metal sold to scrap metal merchant. Wastewater from the on-Site sewage and amenities waste water treatment tank is chlorinated and used to irrigate the office garden.

Drawing 1837.DRG.043r1 – Nearby Sensitive Receptors shows the location of the Site relative to the surrounding sensitive receptors. This drawing shows that there are four (4) sensitive receptors (farm dwellings) within 500 metres of the Site.

Drawing 1837.DRG.048r1 – Potential Pollutant Emissions Plan shows the location and source of potential pollutant emissions on and from the Site.

3.0 Pre-Emptive Actions to be taken

Quarry Solutions Petersons Quarry Workplace Health and Safety Management Plan and Environmental Management Plan (EMP) identifies and outlines all necessary pre-emptive actions to prevent, minimise and manage all potential safety and environmental hazards. Quarry Solutions has in place WorkCover compliant methods for the following:

1. Chemical storage.
2. Chemical spill management.
3. Schedule of Safety Equipment and Personal management of pollution incidents:
 - I. Spill kit.
 - II. Safety Data Sheet Register.
 - III. Fire Extinguishers.
 - IV. Hard Hats.
 - V. Steel Cap Boots.
 - VI. Dust Mask.
 - VII. Eye protection.
 - VIII. Rigger Gloves.
 - IX. Long Sleeve Shirts.

4.0 Inventory of Pollutants (over 20 Litres or 20 Kilograms)

A Hazardous Materials Storage register is kept on-Site and updated as necessary. The current hazardous substances stored on-Site are shown in Table 2 – Hazardous Materials Inventory.

Table 2 – Hazardous Materials Inventory

Chemical Name	Use	Approximate Amount (Litres)
Diesel	Mobile and stationary equipment fuel	20,000
Engine oil	Machine maintenance	60
Hydraulic oil	Machine maintenance	400
Transmission oil	Machine maintenance	40
Gear oil	Machine maintenance	40
Engine Coolant	Machine maintenance	40
Grease	Machine/plant maintenance	80 kg

4.1 Inventory of pollutants identified by the current EPA licence

The current EPL attached does not specify any pollutants to be monitored.

5.0 Incident Contact details

External Contacts

1. Emergency Services – 000
2. Environment Protection Authority – 13 15 55
3. Public Health Unit — Lismore — 02 6620 7585 or (0417 244 966 after hours)
4. Richmond Valley Council - 02 6660 0300
5. Essential Energy – 13 20 80

Internal Contacts

1. Site Manager
Murray Payne
Ph: 0427 978 964
murray.payne@quarrysolutions.com.au
2. General Manager
Terry Woods
Ph: 02 6671 2300

6.0 Communications with adjoining properties and the community

In the event of an incident occurring the following methods of communication shall be employed depending on the severity and nature of the incident.

6.1 Communications to adjoining landowner occupiers

The surrounding land is primary production/grazing properties with the closest residence approximately 500m away. Due to the near distances of surrounding residences, should a severe incident occur, a door knock would be more appropriate and timely to advise neighbours of events.

6.2 Communications with the community

- Local Newspaper.
- Door knock.

The extent of the communications with the neighbours and the community will depend on the:

- Magnitude of the incident.
- Type of pollutant.
- What that pollutant may impact - water, land, air.
- The potentially impacted area.
- Weather conditions.
- Potential duration of the impact.

These factors will be considered in determining who will be contacted.

7.0 Minimising harm to persons on the premise

Emergency Management Key Responsibilities (pre-emergency)

The Quarry Manager or delegate is responsible for:

- The effectiveness and accuracy of the Emergency Plan, procedures and relevant emergency documentation.
- Maintenance of staff training in emergency preparedness, emergency information lists and emergency-related plant and equipment necessary for emergency evacuation compliance.
- Co-ordination of evacuation exercises.
- Post-emergency/exercise review.

Emergency Management Methods

- The Site has an emergency plan.
- A complete copy of the plan shall be displayed in all the main work areas.
- This plan forms part of the Workplace Health and Safety Plan.

Chief Emergency Controller (during and post-emergency)

The Emergency Controller for Quarry Solutions Petersons Quarry is:

- Quarry Manager – Murray Payne 0427 978 964.

Responsibilities include:

- Immediately responding to any emergency situation.
- Ascertaining the nature of the emergency and determining appropriate actions.
- Ensuring the appropriate emergency services have been notified.
- Co-ordinating the deployment of staff and any internal specialist resources.
- Where safe to do so take steps to contain or control the hazard.
- Ensuring that appropriate senior management are kept updated on the situation.
- Co-ordinating post-incident recovery strategies.

Staff, Employees and Contractors

Responsibilities include:

- Attendance of any emergency preparedness training.
- In the event of emergency event, report all emergency incidents to the Quarry Manager
- Follow instructions given in the event of an emergency.
- Co-operate with emergency personnel in the event of an emergency.
- When safe to do so take steps to contain or control the hazard.

7.1 Emergency Resources

Emergency Warning and Communications System

- Radios in all plant, weighbridge and vehicles, mobile phones, verbal.
- Communication with staff.
- In the event of a failure of the radio, landline telephone, emergency warning system and messages may be relayed via mobile phone or runner/driver.

Fire-Fighting Appliances

The Site facilities are equipped with various fire-fighting appliances which are strategically located throughout the Site offices and plant as per the Emergency Response Plan.

Location of Extinguishers

Fire extinguishers are found in the following locations:

- On plant and in all Site offices as required.
- Next to fuel installation.
- The equipment shall comply with the relevant Australian Standards and be appropriately signposted.

All employees and contractors shall be competent in the use of the equipment.

All fire-fighting equipment shall be regularly checked and serviced. This will involve both internal inspections as well as external tests conducted by approved experts.

The Quarry Manager acts as the Fire Warden.

Incident and Accident Reporting

In the event that an injury is sustained to an employee or an incident occurs, contractor or visitor, the following contingencies have been put into place:

- Trained and accredited First Aid Officers will be in the workplace and shall be present on every shift.
- Contact number of the First Aid Officer is displayed on the Site office.
- All injuries shall be reported to the supervisor immediately and recorded on the injury report form as soon as practicable after injury.
- All injuries will also be investigated immediately and corrective actions instigated in accordance with Quarry Solutions Workplace Health and Safety Management Plan.

First Aid Equipment Locations

- Site Office.
- Quarry Vehicle (light).
- Loader.

7.2 Emergency Response and Evacuation Plan

Discovering a Dangerous Situation

- Move persons away from danger if safe to do so.
- Contact relevant emergency services (i.e. Ambulance/Fire/Police).
- Announce evacuation if dangerous situation requires (Radio/Runner).
- Contact the Quarry Manager.

Reporting an Emergency Externally

When reporting an emergency to an external agency, the following information should be included:

- Name of organisation.
- Exact nature of emergency - are there any casualties?
- Exact location (including address and location on Site).
- Name of person reporting emergency.
- Contact number (where applicable).

This information is on display in the Site office.

External reporting is to be carried out by the Quarry Manager, but, in that person's absence, may be effected by their delegate.

Evacuation Alert

Verbal instructions for evacuation are effected by calling out "emergency, emergency, emergency" over the radio system or verbal directive issued by the appropriate personnel from the Quarry Manager will constitute the evacuation signal.

Assembly Areas

In the event of an evacuation, persons should assemble at the nearest safe assembly area as stated in the Quarry Workplace Health and Safety Management Plans.

First Aid

If First Aid assistance is required contact the relevant First Aid attendant. First Aid attendant lists can be found in the Site office.

Any injured people who can be moved safely should be taken to the nearest assembly area (whichever is more appropriate) for treatment. Those people who are trapped or unable to be removed immediately must be protected and given First Aid on the spot (providing it is safe to do so).

Media Liaison

No person other than the following can authorise or divulge any information to the media:

- Terry Woods – General Manager

Any form of contact from the media should be referred to those mentioned above under all circumstances.

Should any staff be approached by media representatives for comment, the staff member must refer them to the Quarry Manager or the person authorised to speak on their behalf such as a media officer.

8.0 Actions to be Taken During or Immediately After Pollution Incident

During a Pollution Incident

All actions taken during and after a pollution incident will vary depending on the nature of the pollutants and severity of the incident.

Any action taken shall be in accordance with any Work Health and Safety requirements and the SMP.

Detailed records/evidence collection shall be carried out, provided it is safe to do so and with approval of the person in control of the Site. Evidence may include photographs or samples taken and written notes.

Follow all directives given by the Emergency Controller.

Follow only safe work practices.

Emergency Termination

Only the Emergency Controller may deem the emergency terminated. This action shall take place once all emergency services have concluded their involvement.

Only the Emergency Controller may deem the Site safe to enter.

Post Incident Reporting

Reporting of the incident to the EPA shall include the following information.

- The time, date, nature, duration and location of the incident.
- The location of the place where the pollution is occurring or is likely to occur.
- The nature, the estimated quantity or volume and the concentration of any pollutants involved if known.
- The circumstances in which the incident occurred (including the cause of the incident if known).
- The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution if known.

Site Personnel Competency

Management to ensure staff are competent in key functional areas, that ongoing training will be provided and currency of training monitored throughout their period of employment with Quarry Solutions.

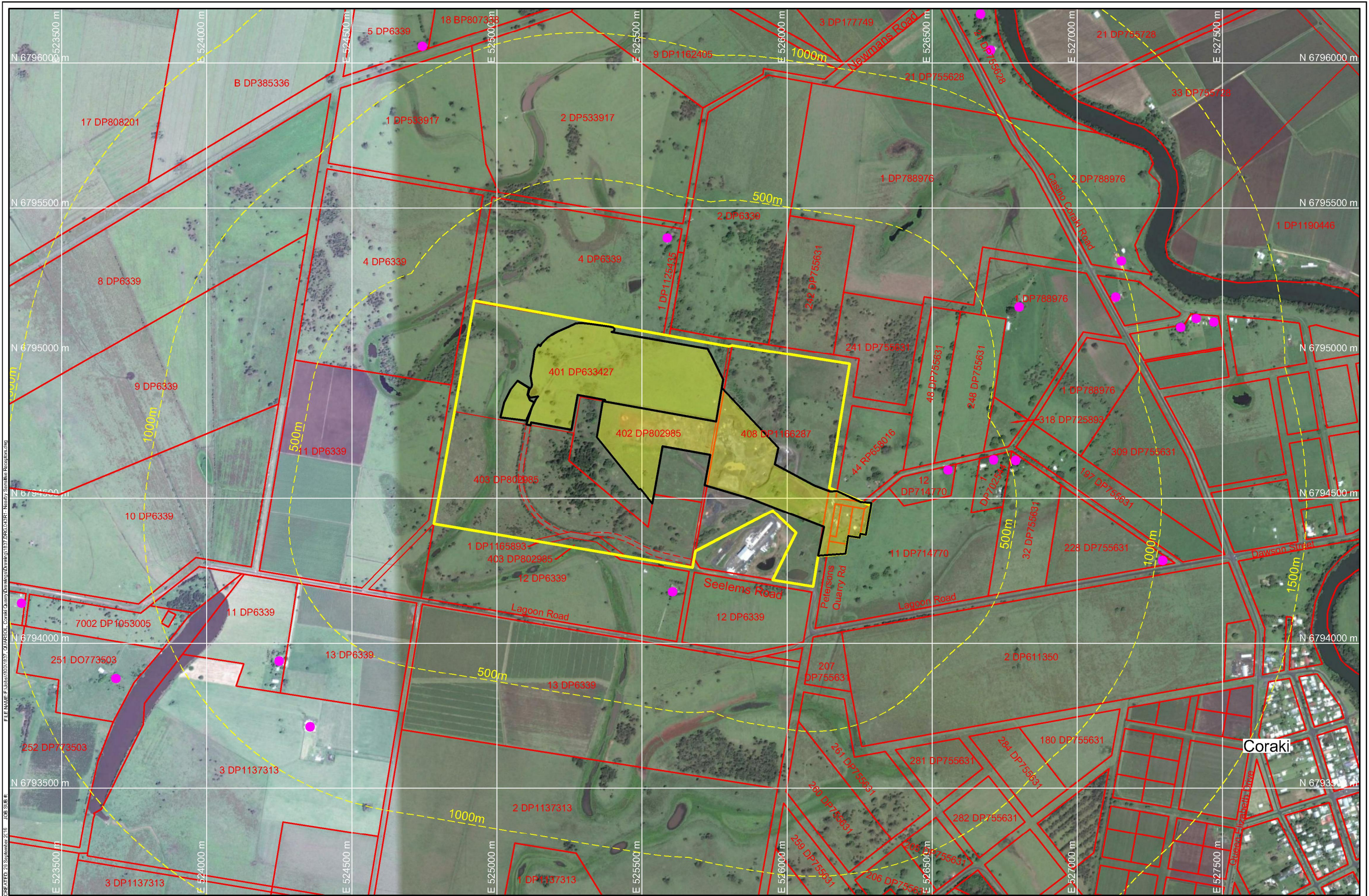
Records of training currency are maintained by the Quarry Manager. The Quarry Manager tracks expiry dates and arranges appropriate training as necessary and annual employee reviews are conducted to identify all required training needs.

Management will ensure Contractors are competent in key functional areas. Ongoing currency of skills will be monitored throughout the period of the contract with Quarry Solutions.

All personnel are trained in general and Site specific Safe Work Method Statements.

Weekly tool box meetings are undertaken for quarry activities. All new Site employees and contractors shall be made aware of the PIRMP.

fi gures



REV	DESCRIPTION	DATE	BY
1	Operations Area Updated	29/09/16	JS
Data Sources:			
Photography: Google, Image date: 2014-12-18			
Topography: Cadastre			
Ecosystem: Other			
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- Legend:**
- Site Boundary
 - Cadastral Boundary
 - Nearby Sensitive Receptor
 - Operations Area
 - Distance from Site



PROJECT:	Petersons Quarry	TITLE:	Nearby Sensitive Receptors
CLIENT:	Quarry Solutions Pty Ltd	SCALE:	1:12,000
		When Printed On A3	0 240
		DATE:	29 September 2016
		DRAWN:	JS
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REV	DESCRIPTION	DATE	BY
1	Operations Area Amended	29/09/16	JS

Data Sources:
Photography: UAV Survey 2015-07-02; Google, Image date: 2014-12-18
Topography: UAV Survey 2015-07-02
Cadastral:
Ecosystem:
Other:

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Legend:

- Site Boundary
- Cadastral Boundary
- Petersons Quarry Footprint



PROJECT:	Petersons Quarry	TITLE:	Potential Pollutant Emissions Plan
CLIENT:	Quarry Solutions Pty Ltd	SCALE:	1:4,000
		DRAWING NUMBER:	1837.DRG.048
		REVISION:	1
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