REGIONAL QUARRIES

POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN

for

MARTINS PIT QUARRY (EPL 21363)

Regional Quarries Australia Pty Limited

997 Crowley Road, TULLAMORE NSW 2874

Contact (02) 5852 1800

Version History

Rev	Description	Originator	Reviewed	Approved	Date
1	Draft for review Version 1	S Murphy	17/09/20	Richard Tomkins	17/09/20
2	Review	A Webb	5/05/2022	Alasdair Webb	5/5/2022
3	Review & Update	A Irwin	12/04/2023	Peter Hewson	17/04/2023

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1 PURPOSE

Regional Quarries Australia (RQA) is committed to the prevention, in so far as is reasonably practicable, of harm to the natural environment and the local community through the identification and control of environmental hazards. In the course of operations, incidents and other events may occur that require a response in order to either prevent the incident from re-occurring or to minimise negative and/ or maximise positive impacts of the incident.

This Pollution Incident Response Management Plan (PIRMP) for **Martins Pit Quarry** ("the Quarry"), located at 997 Crowley Road, Tullamore, satisfies the statutory obligations of Section 153A (Part 7.5A) of the *NSW Protection of the Environment Operations Act 1997* (POEO Act).

The PIRMP has been prepared to ensure the effective response to pollution incidents as follows.

- Comprehensive and timely communication to staff at the premises, the Environmental Protection Authority (EPA), other relevant authorities as specified in the POEO Act, and people outside the facility who may be affected by the impact of the pollution incident.
- Risk minimisation and control of a pollution incident at the premises by identifying risks, and the development of planned actions to minimise and manage those risks.
- Proper implementation by trained staff, and regular testing for accuracy, currency and suitability.

The PIRMP applies to all activities, products and services on the site over which RQA has operational control.

Figure 1 provides the premises boundary of the Quarry, approved by development consent DA 1995/0082 and Environment Projection Licence (EPL) 21363, and identifies the approved operational areas and features.

The Quarry has yet to commence and the content of this PIRMP reflects this status.

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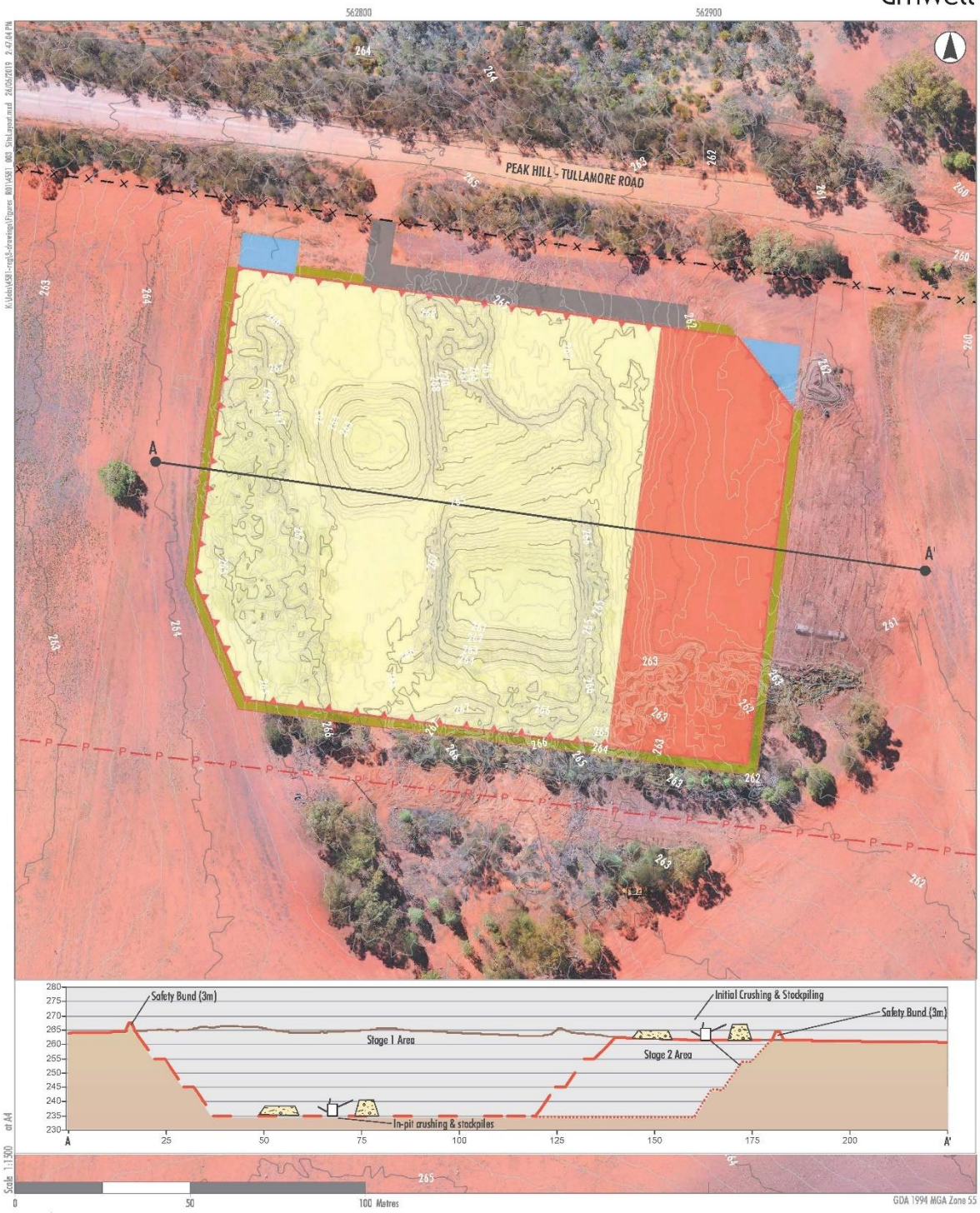

FIGURE 1
Quarry Site Layout

Image Source: Longford and Rowe (April 2019) Data source: Longford and Rowe (April 2019); NSW LPI (June 2019)

2 LEGISLATIVE REQUIREMENTS

Specific legislative requirements for the development and implementation of this PIRMP are provided in the following:

- Part 5.7A of the *Protection of the Environment Operations Act 1997* (POEO Act)
- Chapter 4 of the *Protection of the Environment Operations (General) Regulation 2022* (POEO Regulation) and
- Environment Protection License (EPL) 1379.

In summary, the key provisions of the above require the following.

- All holders of environment protection licences must prepare a pollution incident response management plan (section (s) 153A, POEO Act).
- The plan must include the information detailed in the POEO Act (s153C) and POEO Regulation (clause (cl) 72).
- Licensees must keep the plan at the premises to which the environment protection licence relates (s153D, POEO Act) and make available to regulatory officers, responsible persons and the general public (cl74, POEO Regulation).
- Licensees must test the plan in accordance with the POEO Regulation (cl75).
- If a pollution incident occurs in the course of an activity so that material harm to the environment is caused or threatened, licensees must immediately implement the plan (s153F, POEO Act).

The requirements of s153C of the POEO Act and cl72 of the POEO Regulation are reproduced in **Table 1**.

Table 1: Content Requirements

Requirement	Section
Section 153C POEO Act	
A pollution incident response management plan must be in the form required by the regulations and must include the following:	
(a) the procedures to be followed by the holder of the relevant environment protection licence, or the occupier of the relevant premises, in notifying a pollution incident to:	
(i) the owners or occupiers of premises in the vicinity of the premises to which the environment protection licence or the direction under section 153B relates;	4.2.2
(ii) the local authority for the area in which the premises to which the environment protection licence or the direction under section 153B relates are located and any area affected, or potentially affected, by the pollution; and	4.2.1
(iii) any persons or authorities required to be notified by Part 5.7.	4.2.1
(b) a detailed description of the action to be taken, immediately after a pollution incident, by the holder of the relevant environment protection licence, or the occupier of the relevant premises, to reduce or control any pollution.	6
(c) the procedures to be followed for co-ordinating, with the authorities or persons that have been notified, any action taken in combating the pollution caused by the incident and, in particular, the persons through whom all communications are to be made.	4.2 / 6

Requirement	Section
(d) any other matter required by the regulations.	Below
Clause 72 POEO Reg	
(1) The matters required under section 153C (d) of the Act to be included in a plan are as follows:	
(a) A description of the hazards to human health or the environment associated with the activity to which the licence relates.	5.4 / Table 7
(b) The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood.	5.4 / Table 7
(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.	5.2 / 5.3 / Table 5
(d) An inventory of potential pollutants on the premises or used to carry out the relevant activity.	5.1 / Drawing FRBS-03
(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.	Table 4
(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.	5.2 / Table 5
(g) The names, positions and 24-hour contact details of those key individuals who: • Are responsible for activating the plan. • Are authorised to notify relevant Authorities under section 148 of the Act. • Are responsible for managing the response to the pollution incident.	3 / Table 2
(h) Contact details of each relevant authority referred to in section 148 of the act.	4.2.1
(i) Details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of the premises in the vicinity of the premises to which the licence relates.	4.2.2
(j) The arrangements for minimising the risk of harm to any persons who are present where the scheduled activity is being undertaken.	5 / 6
(k) A detailed map 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 pollutants on the premises, and the location of stormwater drains on the premises.	Drawing FRBS-04
(l) A description of how any identified risk of harm to human health will be reduced, including as a minimum, means of early warnings, updates and the action to be taken during or immediately following a pollution incident to reduce the risk.	5 / 7
(m) The nature and objectives of any staff training program in relation to the plan.	5.3.2
(n) The dates on which the plan has been tested and the name of the person who carried out the test.	7.2 / App 1
(o) The dates on which the plan is updated.	Vers. History
(p) The manner in which the plan is to be tested and maintained.	7.2 / 7.3

3 PLAN MANAGEMENT AND KEY CONTACT DETAILS

Table 2 identifies the names, position titles and contact details of the key individuals who are responsible for activating the PIRMP and managing the response to a pollution incident.

Table 2 Key Contact Details

Responsibility	Name	Position	Contact
Plan Activation and Management	Andrew Apolony	Operations Manager	0400 165 204
Incident Notification and Communications	Andrew Apolony	Operations Manager	0400 165 204

The key functions of PIRMP activation and implementation are provided in **Section 6**.

4 POLLUTION INCIDENT NOTIFICATION REQUIREMENTS

4.1 Definitions

A pollution incident is defined by the EPA's Guideline: pollution incident response management plans (EPA, 2022) as:

> *"… an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise*."

Notification is required **immediately** 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 practical measures to prevent, mitigate or make good harm to the environment.*

4.2 Notification Procedures

4.2.1 RELEVANT AUTHORITIES TO BE NOTIFIED

In accordance with Section 147 of the POEO Act, the Quarry Manager (or delegate) will report pollution incidents immediately, i.e. promptly and without delay, as follows.

- Call **000** if the incident presents an immediate threat to human health or property.

  Fire and Rescue NSW, the NSW Police, and the NSW Ambulance Service are the first responders, as they are responsible for controlling and containing incidents.

If the incident does not require an initial combat agency or following the call to 000 the following must be notified:

- The Environment Protection Authority (EPA) – **131 555**
- Parkes Shire Council – **(02) 6861 2373**
- NSW Ministry of Health (Dubbo Office – which diverts to Dubbo Base Hospital) – on **02 6885 8666** (ask for Public Health Officer on call)
- SafeWork NSW – **13 10 50**; and
- Fire and Rescue NSW – **1300 729 579** (if not contacted already).

Notification is to commence as soon as the source of pollution has been stabilised (refer to Section 6 - PHASE 2 - STOP) and safety of all personnel and surrounding landowners confirmed.

Depending on the nature of the incident, the following Authorities will be notified:

- NSW Resources Regulator – **1300 814 609**
- NSW State Emergency Service – **132 500**

Complying with these notification requirements does not remove the need to comply with any other obligations for incident notification, for example, those that apply under other environment protection legislation or legislation administered by SafeWork NSW.

When notifying the incident to the regulatory authorities the following information has to be provided:

A. Time, date, nature, duration and location of the incident
B. Location of the place where pollution is occurring or is likely to occur
C. The nature, the estimated quantity or volume and the concentration of any pollutants involved, if known
D. The circumstances in which the incident occurred (including the cause of the incident if known)
E. Action taken or proposed to be taken to deal with the incident any resulting pollution or threatened pollution, if known, and
F. When the information relating to items c), d) or e) is not known at the time of verbal notification, this information must be provided once it becomes available.

4.2.2 COMMUNICATING WITH NEIGHBOURS AND THE LOCAL COMMUNITY

Communicating with neighbours and the local community is an important element in managing the response to any incident and shall be undertaken if offsite environmental impacts and/or human health is threatened, under the determination of Quarry Manager.

Figure 2 and **Table 3** identify the properties in close proximity to the Quarry boundary which could be affected by a pollution incident, namely:

- “Rosewood”
- “Water View”
- “Norong”

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Figure 2
Surrounding Properties

Image Source: Google Earth (December 2016); ESRI Basemaps (2019) Data source: NSW LPI (2019); NSW OEH (2017)

If an imminent risk to human health of safety is assessed, neighbours will be notified immediately following notification of emergency services.

Under all other circumstances, stakeholders that are potentially affected by a material harm event will be notified by one of the following methods:

- Door knocking by company representatives or emergency services personnel (dependant on nature of event), or
- Phone call by company representative

Information provided to the community will be relevant to the incident and may include the following details.

A. Type of incident that has occurred

B. Potential impacts local landholders and the community

C. Site contact details; and

D. Advice or recommendations based on the incident type and scale.

5 DESCRIPTION AND LIKELIHOOD OF HAZARDS

5.1 Inventory of Pollutants

The Quarry does not currently store, handle or use potential pollutants.

5.2 Safety and Pollution Response Equipment

The Quarry is currently inactive and no pollution response equipment is maintained.

5.3 Pre-emptive Management

5.3.1 Inductions

On commencement, general information relating to incident management and emergency response shall be included in all site inductions. All personnel must complete the induction prior to gaining access to site. Records of inductions are maintained within the main office.

5.3.2 Staff Training

The objective of pollution and incident management training is to ensure that all employees receive the information and instruction required to:

- perform their daily tasks in a safe and productive manner,
- recognise and minimise the risk of pollution incident, and
- activate and implement the PIRMP as necessary.

On commencement, training shall be provided in Toolbox meetings. The training will include the following:

- Awareness of all hydrocarbons stored and used on site and how they impact the environment.

- Correct storage and handling of hydrocarbons, including refuelling procedures.
- Awareness of dust emission controls and the need for regular review of their effectiveness.
- Awareness of surface water / erosion and sediment control management measures and controls.
- Pollution incident management, including roles and responsibilities when responding to an incident.
- Evacuation procedures.
- Incident reporting requirements.

The Quarry Manager will be responsible for ensuring the appropriate training is included in a site induction and revised every 12 months to ensure skills are updated.

5.3.2 Inspections

On commencement, inspections of pollutant storage and transfer locations, as well as sites under construction, will be undertaken by supervisory or managing personnel. Inspections will be undertaken at least monthly or following significant rainfall.

5.3.2 Other Material

On commencement, Material Safety Data Sheets (MSDS) will be retained for all hazardous materials, dangerous goods or chemicals at the site office.

5.4 Pollution Hazard Identification and Assessment

In order to develop and implement pre-emptive and responsive controls for pollution hazards, the likelihood of occurrence, and any circumstances in which the likelihood may be increased, should be identified. **Table 3** provides the definitions used to classify the likelihood of a pollution hazard resulting in a pollution incident.

Table 3: Qualitative Likelihood Rating

Level	Descriptor	Description
A	Almost Certain	Is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Could occur
D	Unlikely	Could occur but not expected
E	Rare	Occurs only in exceptional circumstances

RQA has completed an assessment of pollution hazards, the relevant sources, situations or conditions that would result in pollution and the pre-emptive controls that are in place to reduce the likelihood of a pollution incident. **Table 4** presents the results of this assessment.

For the purpose of the pollution hazard assessment, future pollution hazards associated with the Quarry once operational have been considered. For each pollution incident, the general response requirements are identified in **Section 6**. **Table 4** identifies any specific response measures to each incident.

Table 4: Potential hazards with their associated likelihood, pre-emptive and response actions

Potential Hazard	Source, Situation or Condition	Potential Impacts	Extenuating Conditions / Events	Likelihood	Pre-emptive Actions and Controls	Specific Response Actions
Diesel Fuel Spill	Vehicle accident involving a diesel delivery truck or a field service truck.	Spill could penetrate soil and contaminate water. Spilled fuel could discharge to local creeks and tributaries.	Extreme weather conditions (fog / heavy rainfall / extreme winds)	E	Preparation and implementation of a Quarry Traffic Management Plan. Personnel inductions and training. Storage of diesel in AS 1940 compliant bunded areas. Maintenance of spill kits at workshop and portable spill kits kept in pit area. Regular (at last monthly) inspections of storage areas, transfer areas and vehicles.	Contain released hydrocarbons with spill containment booms, mats, etc, or cutting a sump/ pushing up bunding. Where possible, prevent hydrocarbons entering drainage lines or from leaving site. Recover liquid waste (vacuum truck to be hired via waste contractors) and ensure disposal via licenced waste contractor. Implement soil and water sampling program to delineate hydrocarbon impacted area. Recover all hydrocarbon impacted material and dispose of accordingly.
	Spillage of diesel during transfer (refuelling)			D		
Blasting *(Dust, Fly-rock, NOx)*	Excessive dust or fly-rock from blast.	Dust emissions may impact air quality amenity of nearby residences.	High wind conditions	D	Impacts are mainly preventatively managed through careful blast planning. All blasting operations are undertaken by a licensed contractor. Monitoring of meteorological conditions, to plan blasting schedules.	Complete an inspection of surrounding lands and document any dust deposition or fly rock. Review and update blast procedures.
	Blasting can also cause clouds of visible oxides of Nitrogen (NOx) fumes, which	Potential detrimental impacts on human health.	Unfamiliar ground conditions	E		
Uncontrolled discharge of water	Failure of sediment retention structures	Elevated sediment loads can reduce oxygen levels of watercourses, inhibit plant growth and cause impacts upon aquatic habitats.	High rainfall / flood conditions Ground clearing activities	D	Regular monitoring and maintenance of sediment structures in accordance with the Quarry Water Management Plan.	Inspect failure and extent of sediment deposition downstream. Remove excess sediment where possible while recognising other environmental values.
Dust Emissions	Earthworks associated with Quarry development and construction of roads and infrastructure resulting in increased dust emissions.	Excessive dust emissions may impact air quality amenity of nearby residences.	Low rainfall / high temperatures High wind conditions Construction campaigns	C	Areas of clearing and surface disturbance are restricted to only that necessary for the works. Water cart operation. Establishment of groundcover on stockpiled material Regular inspections and modification to operations when visible dust observed.	Complete inspection of dust emitting activities. Implement additional dust suppression to emission sources. Modify work practices to reduce emissions (e.g. relocation of activities, reduced rate of stripping). Cease activities where air emissions cannot be reduced until weather conditions become favourable or dust suppression effective.

6 Pollution Incident Response Management

In the event of an incident that is suspected may cause material environmental harm, the response will be managed in accordance with the following seven (7) phases.

PHASE 1 - ASSESSMENT

A. Identify the severity, risks and extent of the incident:

- What is the substance emitted?
- What are its properties?
- Is there a risk to health and safety?
- Do you have the necessary PPE to manage the emission?
- What is the nature of the surrounding area?
- What is the volume of the emission?
- If workers are at risk implement the emergency evacuation procedure and clear site of personnel.

B. If the emission has the potential to cause material harm, execute the next phase of the plan (Notify)

PHASE 2 - STOP

- Stop the source of the emission
- Ensure that necessary emergency materials are on hand to control larger emissions
- Examples
  - Restore drums to upright position
  - Close open valve causing spill
  - Isolate feed line
  - Plug the leak
  - Construct an earthen bund

PHASE 3 - NOTIFY

Individuals responsible for activating and co-ordinating plan are to notify authorities and neighbours as per **Section 4.2** of this plan.

PHASE 4 - CONTAIN

All incidents raised as risks require the “Contain” considerations

- Utilise barriers (absorbent booms, banks of soil or any other safe objects) or spill absorbent to prevent the emission from spreading.

- When an emission is on a hard surface, use appropriate absorbent materials i.e. absorbent granules or sand.
- The main priority is to prevent the emitted material from discharging off site.

PHASE 5 - MITIGATE

- Implement environmental controls at and away from the pollution source to prevent/minimise further impact to the local receiving environment.

  Example – A fuel spill discharged into quarry dam. Mitigation controls to ensure this spill in not spread may include closing of weirs or outlets, ensuring water does not fill from affected dam etc

PHASE 6 – CLEAN UP

- Clean up and remedial actions to restore the environment
- Disposal of the pollutants in accordance with regulations

PHASE 7 – REVIEW

- Investigate the event and assist the EPA and investigators with external enquiries.
- Test the effectiveness of the PIRMP annually and within one month of an incident to ensure controls are replenished and plan is effective.

7 Plan Evaluation and Review

7.1 Evaluation

Within 14 days of the pollution incident response (including testing of the PIRMP) a de-briefing of all relevant personnel will be undertaken to determine the lessons learned from the operation.

- The de-briefing will include a meeting with the relevant personnel involved in the incident to collate any comments, issues and views on any changes that could be implemented to improve emergency and incident response procedures within the PIRMP.
- The Quarry Manager or delegated personnel, e.g. Regional Group Compliance Manager, will be responsible for the co-ordination of any de-briefing following a pollution response incidence.

7.2 Testing

Testing of the PIRMP will commence on commencement of operations at the Quarry. Until commencement, an annual desktop review of the PIRMP will be undertaken.

Following commencement, the PIRMP will be tested routinely at least once every 12 months, to ensure that the information included in the plan is accurate and up to date, and that each plan is capable of being implemented in a workable and effective manner.

Each test, which may be completed as a desktop or field scenario, will involve all critical site personnel (for that scenario).

Each test will be documented with the scenario, personnel involved, process followed and findings documented and appended to the PIRMP (refer to **Appendix 1**).

The results of the test will be provided to Regional Group's Compliance Manager for review with any significant findings or recommendations managed in accordance with Continual Improvement procedures (refer to **Section 7.3**).

7.3 Continual Improvement

All information and comments compiled from an Incident Debriefing (**Section 7.1**) or Test Review (**Section 7.2**) will be assessed and reviewed to determine the areas of improvement and the updating and implementation of new procedures to improve the outcomes of any pollution incident response.

- Improvement will be recommended to the Quarry Manager.
- The Quarry Manager will provide feedback on feasibility of recommendations and provide advice to Regional Group Operations Manager and General Manager.
- Agreed recommendations will be included in an updated PIRMP.

The Quarry Manager be responsible for the implementation of the recommended improvements and instruction / training of personnel.

All personnel will be responsible for the implementation of the recommended improvement and continual improvement in performance.

7.4 Availability

The PIRMP will be maintained, in written form, at the Site Office, and shall be made readily available to those responsible for its implementation and to an authorised officer on request, as well as to anyone requesting the plan in writing generally within 14 days of the request being made.

7.5 Review

The PIRMP will be reviewed:

- after each test or actual incident
- as roles and responsibilities of personnel change
- in the event of legislative changes, and/or
- every 12 months.

The Quarry Manager will be responsible for the PIRMP review.

Appendix 1: PIRMP Test Evaluation Template

REGIONAL QUARRIES

PIRMP Test Evaluation form

Name of person/s completing test / evaluation: Date:

SCENARIO

REGIONAL QUARRIES

STEPS TAKEN BY:

Personnel:

Quarry Manager:

Evaluation Questions	Yes	No	N/a
Was the incident / potential for pollution correctly identified?			
Did personnel notify the Quarry Manager?			
Did personnel take / Was personnel aware of appropriate initial steps to take?			
Did the Quarry Manager follow PIRMP notification procedures?			
Was communication with neighbours required / undertaken? Are contact details up to date (check)?			
Did the PIRMP provide clear instructions for the pollution incident?			

IF ANSWERS ARE "NO" What remedial actions are to be completed?

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