

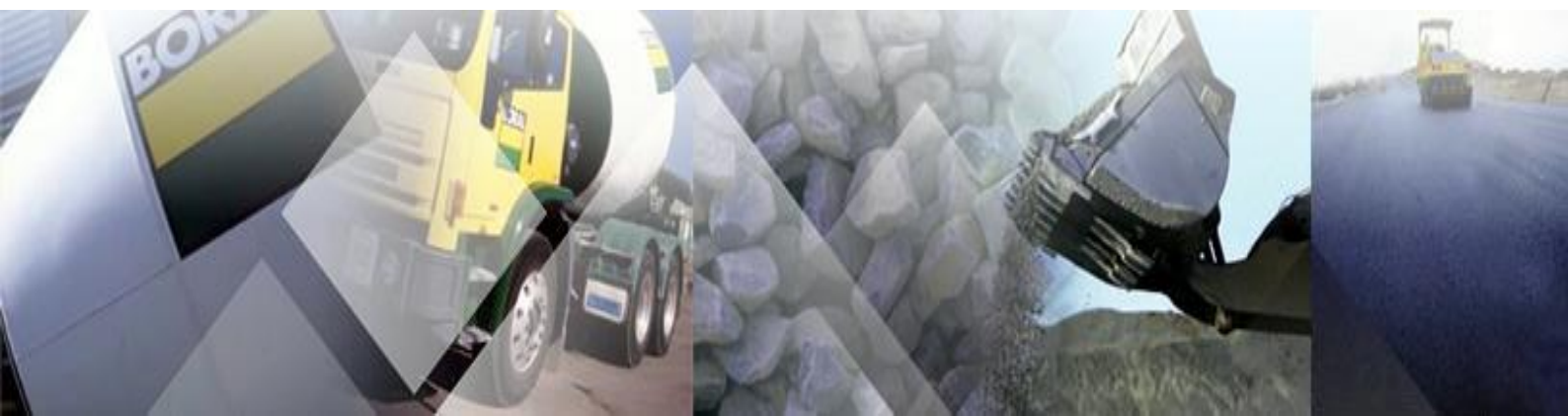


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Pollution Incident Response Management Plan

TERRAMUNGAMINE QUARRY

Version Five: 19 August 2016



DOCUMENT CONTROL SHEET

Rev.	Date	Prepared by	Approved By	Revision Details
01	20 Aug 2012	Rod Johnson	Rod Johnson	Document Created
02	22 Apr 2013	Nathan Jeffery	Rod Johnson	Document control sheet added Format Changes Added additional maps Added quantities of substances stored
03	12 Sep 2014	Rod Johnson	Rod Johnson	Format Changes Update contact details
04	18 Aug 2015	Danielle Griffiths	Danielle Griffiths	Update contact details Update matrix to 5 x 5
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Current Rev.	Date Implemented	PIRMP Test Schedule	Date for Next Review
05	19 August 2016	12 months	19 August 2017

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1. PURPOSE

The purpose of the Terramungamine Quarry Pollution Incident Response Plan is to:

- Provide direction to the staff at Terramungamine Quarry in responding to pollution incidents at the Terramungamine operations;
- Ensure timely communication about a pollution incident is provided to staff at the premises, the Environment Protection Authority (EPA), other relevant authorities specified in the Protection of the Environment Legislation Amendment Act (POELA Act) (including Dubbo City Council, NSW Ministry of Health, Work Cover NSW, and Fire and Rescue NSW) and persons outside the operations who may be affected by the impacts of a pollution incident;
- Minimise and control the risk of a pollution incident at Terramungamine Quarry by identifying key risks and planned actions to minimise and manage those risks;
- Detail the training requirements for this plan, identifying persons responsible for implementing it, and ensuring that the plan is regularly tested for accuracy, currency and suitability.

2. LEGISLATIVE REQUIREMENTS

The specific requirements for a PIRMP 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:

- All holders of environment protection licences must prepare a pollution incident response management plan (section 153A, POEO Act).

- The plan must include the information detailed in the POEO Act (section 153C) and be in the form required by the POEO(G) Regulation (clause 98B).
- Licensees must keep the plan at the premises to which the environment protection licence relates (section 153D, POEO Act).
- Licensees must test the plan 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, licensees must immediately implement the plan (section 153F, POEO Act)

3. DEFINITION OF 'POLLUTION INCIDENT'

The definition of a pollution incident is:

“pollution incident means 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.”

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which 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.

Terramungamine Quarry is now required to report pollution incidents immediately to the EPA, NSW Health, Fire and Rescue NSW, WorkCover NSW and the local council.

4. SCOPE

This PIRMP must be followed by employees, contractors and visitors of Terramungamine Quarry, to assist in the early response to and reporting of a pollution incident.

5. POTENTIAL POLLUTING SUBSTANCES

The main hazards to human health and the environment at Terramungamine Quarry are included in the following table.

LIST OF POLLUTING SUBSTANCE STORAGES/USES AT SITE: INITIAL ASSESSMENT (all Chemicals listed in this sheet are to be subjected to a risk assessment)							
Site Name: Terramungamine Quarry					Responsible Person: Quarry Manager		Date: 20/08/12
Name / description	Covered under Haz Chemicals/MSDS?	Amount stored	Location of storage	Map reference	Need for early warning ¹	Current controls	See Risk Ass & PIRMP Response Action (see Below)
CHEMICALS/FUELS/LUBRICANTS (raw materials and products which can cause pollution)							
Diesel	Class 3	10 000 ltrs	Diesel Storage Area	Ref No #1	N/A	<ul style="list-style-type: none"> • Bunding • PMP • Training • Spill Kits • SOP • Inductions • Fire Fighting Equipment • Security 	Incident #1-2
Oils/Solvents	Class 3	Packaged goods up to 1 500 ltrs Waste Oil (AST) up to 2 000 ltrs	Oil Storage Shed at Workshop	Ref No #2	N/A	<ul style="list-style-type: none"> • Bunding • PMP • Training • Flammable Cabinet • Spill Kits • Inductions • Fire Fighting Equipment • Security 	Incident #4
Lubricants, Gases	Class 2	Variable	Maintenance Workshop	Ref No #2	N/A	<ul style="list-style-type: none"> • Fire Extinguishers • Concrete Floor • Enclosed Shed 	Incident #4

¹ Early warnings relate to informing neighbours who may be affected by the emission of this substance. If this substance is of a type and quantity which may reach neighbours then early warning assessment of actions is required to be undertaken.

						<ul style="list-style-type: none"> • Containment Cages and Cabinets 	
Oils/Fuel	Class 3	Variable	Plant and Equipment (Workshop area)	Ref No #2	N/A	<ul style="list-style-type: none"> • PMP • Training • Spill Kits • SOP • Inductions • Fire Fighting Equipment • Security 	Incident #4
MATERIALS (eg stockpiles, silos, bulk solids etc)							
Product Stockpiles	N/A	Variable	Dedicated on site	Ref No #8 & #9	N/A	<ul style="list-style-type: none"> • Water sprays • Water Cart • Maintain manageable levels • Security 	Incident #5
AQUEOUS (eg dams, wastewater tanks, other water storage area)							
Water Storage Dams (Sediment)	N/A	Variable		Ref No #6	N/A	<ul style="list-style-type: none"> • Continue to use for dust suppression • Ensure pumps are maintained through scheduled maintenance • Discharge monitoring 	Incident #6
Storm Water Drains	N/A	Variable	Site	N/A	N/A	<ul style="list-style-type: none"> • Straw Bales • Rubber and Earthen Berms • Audits and Inspections 	Incident #6
SUBSTANCES IN PROCESSES (substances which could be emitted from operational process i.e. treatment plants, vehicles etc)							
Name /	Covered under	Amount	Location of	Map	Need for	Current controls	See Risk Ass & PIRMP

description	Haz Chemicals/MSDS?	stored	storage	reference	early warning ²		Response Action (see Below)
Mobile Plant (onsite) BORAL	Class 3	Up to 10 MP on site	Dedicated on site	N/A	N/A	<ul style="list-style-type: none"> • Spill Kits • Pre start checks • PMP • Training 	Incident #7
Mobile Plant Contractor/visitor	Class 3	Variable	Variable Locations	N/A	N/A	<ul style="list-style-type: none"> • Spill Kits • Training • Inductions 	Incident #8
Car Parking up to 20 vehicles	Class 3	Variable	Site Office	Ref No #4	N/A	<ul style="list-style-type: none"> • Spill Kits • Training 	Incident #9
Traffic Areas (dust, chem. leaks & loss)	Class 3	N/A	Dedicated on site	N/A	N/A	<ul style="list-style-type: none"> • Training • Water cart • Spill Kits 	Incident #10

² Early warnings relate to informing neighbours who may be affected by the emission of this substance. If this substance is of a type and quantity which may reach neighbours then early warning assessment of actions is required to be undertaken.

6. ROLES AND RESPONSIBILITIES

Position	Responsibility
<i>Employees and Contractors</i>	<p>Following the procedures outlined in the PIRMP and related documents</p> <p>Immediately alerting Supervisor or Team Leader of any environmental incidents or near-misses.</p>
<i>Team Leaders / Front Line Supervisors</i>	<p>Following the procedures outlined in the PIRMP and related documents</p> <p>Immediately alerting Site/Quarry Manager or, in case of their unavailability, Environmental Representative or Environment Manager of any potentially material environmental incidents or near-misses.</p> <p>Conducting incident investigations.</p>
<i>Site / Operations Manager and/or Site Environmental Coordinator and/or Environment Manager</i>	<p>Authorisation of the PIRMP</p> <p>Administration, maintenance and implementation of the PIRMP</p> <p>Assessing whether the incident has caused or threatens “material environmental harm” and, if so, immediately notifying all Appropriate Regulatory Authorities.</p> <p>Ensuring that investigations are undertaken to a level corresponding to the level of risk and impact.</p>

7. INTERNAL POLLUTION INCIDENT REPORTING

Any pollution incident satisfying the **material harm** threshold must be immediately reported to relevant statutory authorities by either the Site/Operations Manager, or Environment Manager.

In cases where “material harm” level cannot be immediately assessed or insufficient information comes to hand on the severity of the incident, the general advice is to err on the side of caution and notify the Relevant Authorities with a qualification that the situation could not yet be fully assessed.

Until further notice the following procedure needs to be followed:

1. When a pollution incident occurs, a person who has become aware of it must immediately bring it to the attention of his/her immediate Supervisor or Manager
2. If necessary, first ring “ 000 ” for Emergency Services
3. At least one of the following BCM personnel must be contacted **immediately**:

Whilst personal contact details for the following are available in the Controlled on site Pollution Incident Response Management Plan they do not appear in this public document.

Name	Function	Phone number	Mobile number
	Western Quarry Manager		
	Country Operations Manager		
	HSE Advisor		
	Environment Manager – NSW/ACT		

4. Jake Horsfall or in case of his unavailability one of the Senior Management personnel listed above, is to **immediately** notify all Appropriate Regulatory Authorities specified in Section 4.3.
5. In borderline situations, where the exceedance of the trigger level of “material harm” of a pollution incident may not be clear, a quick assessment including consultation with Boral environmental personnel should be undertaken to help the decision whether to notify or not.

6. Boral's Senior Management must be informed promptly of the fact of immediate notification to the Authorities. This includes environmental personnel listed above, as well as Michael Holz, David Bolton and Greg Price .

8. EXTERNAL POLLUTION INCIDENT REPORTING

As the legislation requires that notification must be done immediately upon becoming aware of the pollution incident, it is unlikely that a detailed picture will be available for reporting. Notwithstanding, it seems that some of the Government Authorities prepared a detailed questionnaire which is being filled at the time of this initial notification. Under the stress of incident handling it could be easy to provide a hasty, inaccurate estimate of the situation when answering these questions.

Therefore, the notification should be restricted to the facts known and nothing should be assumed or guessed. The details will be provided to the asking Authority later when more information comes to hand.

The initial notification should include as much of the following information (if known) as possible:

- location and time of the pollution incident
- type of the incident (spill, fire, unlicensed harmful discharge, etc)
- assessed level of incident gravity: "it seems to be..." (e.g. "a relatively minor spill"; "major fire", "explosion limited to one building", etc.)
- whether the Emergency Services have been required to attend.

Unless known for a fact, the answers to other questions should be politely deferred until a better assessment of the situation can be made.

The Boral person who is responsible for notifying the Authorities (Site/Operations Manager or Environment Manager) about the incident must prepare a Notification Log (a suitable form is attached) with the details of time of notifications and the persons who took to the call. The

Authorities are expected to log the calls but early indications are that this is not always the case.

Notification of all Appropriate Government Authorities (at least 5 entities) may take considerable time. Delays may be experienced connecting to the right person or no contact may be possible after hours. All such instances should be recorded in the Notification Log.

9. POLLUTION INCIDENT AUTHORITY CONTACT LIST

Government Authority - compulsory notifications	Emergency notification phone number
EPA – Environment Line	131 555
Fire and Rescue NSW (FRNSW)	1300 729 579
Dubbo City Council	6801 4000
NSW Public Health – Dubbo Office	Ph: 02 6885 8666 (Dubbo Base Hospital) - ask for Public Health Officer on call, if no answer: Mob: 0418 866 397 - ask for Public Health Officer on call
WorkCover Authority of NSW	131050 Company ABN asked: 51 000 187 002
Government Authority - ring if relevant	Emergency notification phone number
NSW Police & Ambulance	000
Roads and Maritime Services (road spills)	132 701
NSW Office of Water	8838 7885
Bush Fire Control Officer	1800 049 933
Poisons Information Centre	131 126
Essential Energy (power line emergencies)	13 23 91

Communication with the local community may also be undertaken depending on the circumstances of the pollution incident. Terramungamine Quarry would consider the following options for providing Early Warning and ongoing information to the community on pollution incidents:

- Direct phone contact with any local residents directly impacted by the pollution incident
- Letter Box drops of incident information and site contacts to local residents impacted by the pollution incident
- The inclusion of incident details within the relevant Quarry Community Newsletter

The Stakeholder Relations Manager can assist in the process of communicating with the community, as per the Stakeholder Engagement Plan for the site.

10. INCIDENT RESPONSE TRAINING

Terramungamine Quarry will implement the Pollution Incident Response Management Plan by training or providing information to relevant employees and contractors in relevant areas of the Plan.

Training or information will be provided on the following;

- The contents and intent of this PIRMP,
- The roles and responsibilities of site staff in relation to this PIRMP
- Spill response procedures;
- General environmental awareness; and / or
- Hazardous materials awareness.

11. PIRMP AUDIT

The objectives of an audit are to maintain compliance with this plan. Internal audits of this Plan will be undertaken every 3 years.

Routine testing of the plan will be conducted annually, and can be completed through the following methods:

- Simulated environmental emergency, or
- Desktop simulations.

12. PIRMP REVIEW

Revisions are to be coordinated by the Site Manager and Environmental Representative.

The objectives of a review are:

- To maintain compliance with the statutory requirements, and
- To identify opportunities for improvement in the Plan, and reduce the risk to human health and the environment

12.1. EVENT BASED

Events which may trigger a review of this Plan or its associated documents include:

- Within 1 month of reporting to the nominated parties in accordance with the plan, after a pollution incident, or
- Modification/Improvement to the system

12.2. TIME BASED

Terramungamine Quarry will review this management plan routinely every 12 months. The Plan review will include:

- This Document, and
- Legislation, Approval and Licence changes.

APPENDIX 1.

RISK ASSESSMENT on POTENTIAL IMPACTS

Hazard and Likelihood Risk Assessment and Corrective Control Measures									
Site: Terramungamine Quarry				Responsible Person: Quarry Manager/Supervisor			Review Date: 12 th September 2014		
Name / ref of pollutant/ chemicals	Description of Hazard / Incident leading to hazard	Consequence	Likely hood	Risk	Impact on neighbours ³	Control Measures Corrective Action Coverage under other Plans	Responsible person	Action date	
Diesel	Incident #1 Catastrophic failure of one/both above ground tanks	1	2	L	N/A	Consequence: (incidental): Failure resulting in loss of all or substantial volume of tanks would be captured entirely by existing primary bund with no release to soil or water. Likelihood: (unlikely): Tanks is a double walled self bunded storage tank. Due to location of tank damage to tanks is unlikely to occur from external equipment. In addition tanks are maintained in good structural integrity with low risk of failure through corrosion.	As per PIRMP action plan	When required	
	Incident #2 Loss of diesel outside bund during refuelling/fuelling operations.	2	3	M	N/A	Consequence: (minor): Failure resulting in loss/leakage from fuelling or re-fuelling from hose, nozzle or plant/equipment would be captured by a self bunded fill point or spill kill with minimal release to soil. Likelihood: (likely): Due to location within the tank structure an incident while re-fuelling and fuelling is likely to occur on some occasions. Hoses and refuelling equipment are maintained with low risk of failure.	As per PIRMP action plan	When required	
Oils/Solvents	Incident #4 Loss of oils solvents inside bund during	1	2	L	N/A	Consequence: (incidental): Failure resulting in loss of oils/solvents from packaged goods would be captured entirely by existing primary bund with no release to soil or water.	As per PIRMP action plan	When required	

³ If the incident may impact on neighbours then it will need to trigger the early warnings assessment and actions

	delivery and or use					Likelihood: (unlikely): Due to location within the bund, spillage during delivery and use is unlikely to occur. In addition hoses and decanting equipment are maintained in good structural integrity with low risk of failure.		
Product stockpiles	Incident #5. Excessive airbourne dust from stockpiled material	1	2	L	Y	Consequence: (incidental): Excessive dust from stockpile during high winds causing nuisance to surrounding area. Likelihood: (unlikely): Stockpiles are maintained to a manageable level on a monthly basis. Use of water sprinklers and water cart onsite during windy periods.	As per PIRMP action plan	When required
Mobile Plant	Incident #7 Mobile plant, hydraulic hose or fuel tank failure	1	2	L	N	Consequence: (incidental): Failure from fuel tank or hydraulic hoses would be maintain to a small localised area on site. Likelihood: (unlikely): Hose or fuel tank failure from mobile plant would be minimal as prestart and regular maintenance programs are in place to capture and prevent such occurrences. Spills kits also maintain and available in various areas.	As per PIRMP action plan	When required
Mobile plant/ Contractor, Visitor	Incident #8 Mobile plant, hydraulic hose or fuel tank failure	1	2	L	N	Consequence: (incidental): Failure from fuel tank or hydraulic hoses would be maintain to a small localised area on site. Likelihood: (unlikely): Hose or fuel tank failure from mobile plant would be minimal as prestart and regular maintenance programs are in place to capture and prevent such occurrences. Spills kits also maintain and available in various areas. Inductions for all contractors demonstrating their accountabilities and responsibilities for reporting environmental incidents.	As per PIRMP action plan	When required
Car Park	Incident #9 Ruptured fuel tank	1	2	L	N	Consequence: (incidental): Failure from fuel tank or hydraulic hoses would be maintain to a small localised area on site. Likelihood: (unlikely): Hose or fuel tank failure from employee or visitor car would be minimal. Car park area is fully sealed. Spill kits also maintain and available in various areas	As per PIRMP action plan	When required
Traffic areas (dust)	Incident # 10 Surface dust from mobile plant	1	2	L	Y	Consequence: (incidental): Dust created form continuous mobile plant operations across site Likelihood: (unlikely): Main areas watered with water cart in high wind conditions	As per PIRMP action plan	When required

APPENDIX 2.

PIRMP RESPONSE ACTIONS

Incident No 1

Incident #1	<p>Catastrophic failure of one/both diesel tanks.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> • Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) • Ensure bunds are capturing full volume of diesel • Ensure bund integrity is sound throughout the entire period of incident (i.e. periodic inspections) • Contact service provider (Caltex No. 1800033111 or Transpacific 02 96007185) to pump-out bund contents • Area to be restricted to Incident Response Personnel • Ensure spill kit available for any release from bund • If any release from bund onto unsealed soil/surface water - Environmental Consultants to be engaged to investigate and remediate contamination. • Repair/replace tanks • Refuel tanks <p>Inspect bund for ongoing serviceability</p>
Alarm raising	<p>Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.</p>
Emergency Controller	<ul style="list-style-type: none"> • Quarry Manager • Call service provider (Quarry Manager) • Spill Kit manager (Supervisor) • Periodic inspections and update reporting of site and bund (Quarry Manager)
Scale of incident	<p>Incident would be restricted to Diesel/Precoast storage area with minimal external impact, however, potential for bund overflow or failure may result in soil and surface water contamination that will require specialist investigation/remediation.</p>
Evacuate	<p>Only if fire or explosion potential exists. Quarry Manager and any advice provided by Fire Dept as part of attendance after immediate notification.</p>
Communications	<p>Internal:</p> <ul style="list-style-type: none"> • Quarry Manager • Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> • Immediate Reporting Contact Sheet to be used

	External non-mandatory: N/A
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Service Provider to dispose of diesel and advise on required clean-up.
Reporting and re-preparedness	See SOPs: <ul style="list-style-type: none"> Incident Notification SOP (BCM NSW-ENV-009)

Incident No 2

Incident #2	<p>Loss of Fuel due to filling and refueling from one/both diesel tanks.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) Ensure bunds are capturing full volume of diesel Ensure bund integrity is sound throughout the entire period of incident (i.e. periodic inspections) Contact service provider (Caltex No. 1800033111 or Transpacific 02 96007185) to pump-out bund contents Area to be restricted to Incident Response Personnel Ensure spill kit available for any release from bund If any release from bund onto unsealed soil/surface water - Environmental Consultants to be engaged to investigate and remediate contamination. Repair/replace tanks Refuel tanks <p>Inspect bund for ongoing serviceability</p>
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> Quarry Manager Call service provider (Quarry Manager) Spill Kit manager (Supervisor) Periodic inspections and update reporting of site and bund (Quarry Manager)
Scale of incident	Incident would be restricted to Diesel/Precoat storage area with minimal external impact. However, potential for bund overflow or failure may result in soil and surface water contamination that will require specialist investigation/remediation.
Evacuate	Only if fire or explosion potential exists. Quarry Manager and any advice provided by Fire Dept as part of attendance after immediate notification.

Communications	<p>Internal:</p> <ul style="list-style-type: none"> • Quarry Manager • Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> • Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Service Provider to dispose of diesel and advise on required clean-up.
Reporting and re-preparedness	<p>See SOPs:</p> <ul style="list-style-type: none"> • Incident Notification SOP (BCM NSW-ENV-009)

Incident No 4

Incident #4	<p>Loss off oil/solvents, packaged goods.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> • Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) • Ensure bunds are capturing full volume of oil/solvents • Ensure bund integrity is sound throughout the entire period of incident (i.e. periodic inspections) • Contact service provider (Caltex No. 1800033111 or Transpacific 02 96007185) to pump-out bund contents • Area to be restricted to Incident Response Personnel • Ensure spill kit available for any release from bund • If any release from bund onto unsealed soil/surface water - Environmental Consultants to be engaged to investigate and remediate contamination. • Inspect bund for ongoing serviceability
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> • Quarry Manager • Call service provider (Quarry Manager) • Spill Kit manager (Supervisor)

	<ul style="list-style-type: none"> Periodic inspections and update reporting of site and bund (Quarry Manager)
Scale of incident	Incident would be restricted to chemical storage area with minimal external impact. However, potential for bund overflow or failure may result in soil and surface water contamination that will require specialist investigation/remediation.
Evacuate	Only if fire or explosion potential exists. Quarry Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> Quarry Manager Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Service Provider to dispose of diesel, oil, grease and advise on required clean-up.
Reporting and re-preparedness	<p>See SOPs:</p> <ul style="list-style-type: none"> Incident Notification SOP (BCM NSW-ENV-009)

Incident No 5

Incident #5	<p>Excessive airbourne dust from stockpiled material.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> Employees, Contractor/Visitor to notify site representative of issue immediately. (induction) Daily monitoring to be undertaken to assess weather and site conditions Contact all relevant people/departments (refer to Immediate Reporting Contact Sheet) Dust suppression activity to commence immediately on stockpiles
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> Quarry Manager Call service provider (Quarry Manager)

	<ul style="list-style-type: none"> • Spill Kit manager (Supervisor) • Periodic inspections and update reporting of site and bund (Quarry Manager)
Scale of incident	Incident would be localised to the area surrounding stockpile area, with minimal external impact.
Evacuate	Only if fire or explosion potential exists. Quarry Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> • Quarry Manager • Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> • Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Service Provider to dispose of diesel and advise on required clean-up.
Reporting and re-preparedness	<p>See SOPs:</p> <ul style="list-style-type: none"> • Incident Notification SOP (BCM NSW-ENV-009)

Incident No 6

Incident #6	<p>Failure of one or more sediment dams.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> • Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) • Ensure bund integrity is sound throughout the entire period of incident (i.e. periodic inspections) • Contact local neighbours if going to be inundated by rise of water • Area to be restricted to Incident Response Personnel • If any release from site onto unsealed soil/surface water - Environmental Consultants to be engaged to investigate and remediate contamination if any
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	<ul style="list-style-type: none"> Contact local contractor to rebuild dams immediately
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> Jake Horsfall – Quarry Manager Call service provider Spill Kit manager (Supervisor) Periodic inspections and update reporting of site and bund (Jake Horsfall)
Scale of incident	Catastrophic failure of one or more sediment dams are likely to result in off-site impacts to water courses which would predominantly reduce water quality over a short period of time. As such, impact to the environment/human health is not considered to be significant.
Evacuate	Only if flood potential exists. Quarry Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> Jake Horsfall - Quarry Manager Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Consultants to be contacted to advise on required clean-up.
Reporting and re-preparedness	<p>See SOPs:</p> <ul style="list-style-type: none"> Incident Notification SOP (BCM NSW-ENV-009)

Incident No 7

Incident #7	<p>Mobile plant, hydraulic hose or fuel tank failure.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> • Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) • Area to be restricted to Incident Response Personnel • Ensure spill kit available for any release from mobile plant & equipment • If any release from mobile plant onto unsealed soil/surface water is investigated and remediated immediately • Call service provider to inspect plant & equipment for serviceability
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> • Quarry Manager • Call service provider (Quarry Manager) • Spill Kit manager (Supervisor) • Periodic inspections and update reporting of site and bund (Quarry Manager)
Scale of incident	Incident would be localised to the area with no external impact.
Evacuate	Only if fire or explosion potential exists. Quarry Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> • Quarry Manager • Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> • Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and	Service Provider to dispose of diesel and advise on required clean-up.

Waste disposal	
Reporting and re-preparedness	See SOPs: <ul style="list-style-type: none"> • Incident Notification SOP (BCM NSW-ENV-009)

Incident No 8

Incident #8	<p>Mobile plant, hydraulic hose or fuel tank failure from contractors / visitors.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> • Contractor/Visitor to notify site representative of issue immediately. (induction) • Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) • Area to be restricted to Incident Response Personnel • Ensure spill kit available for any release from mobile plant & equipment • If any release from mobile plant onto unsealed soil/surface water is investigated and remediated immediately • Call service provider to inspect plant & equipment for serviceability
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> • Quarry Manager • Call service provider (Quarry Manager) • Spill Kit manager (Supervisor) • Periodic inspections and update reporting of site and bund (Quarry Manager)
Scale of incident	Incident would be localised to the area with no external impact.
Evacuate	Only if fire or explosion potential exists. Plant Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> • Jake Horsfall - Quarry Manager • Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> • Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting

Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Service Provider to dispose of contaminates.
Reporting and re-preparedness	See SOPs: <ul style="list-style-type: none"> Incident Notification SOP (BCM NSW-ENV-009)

Incident No 9

Incident #9	<p>Car Park/ fuel tank failure.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> Contractor/Visitor to notify site representative of issue immediately. (induction) Area to be restricted to Incident Response Personnel Ensure spill kit available for any release from mobile plant If any release from mobile plant onto unsealed soil/surface water is investigated and remediated immediately
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> Quarry Manager Spill Kit manager (Supervisor)
Scale of incident	Incident would be localised to the area with no external impact.
Evacuate	Only if fire or explosion potential exists. Plant Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> Quarry Manager Environment Manager NSW/ACT & HSE Advisor <p>External mandatory:</p> <ul style="list-style-type: none"> Immediate Reporting Contact Sheet to be used <p>External non-mandatory: N/A</p>
Rescuer / respondent + safety checks	As per Site Emergency Plan or Fire Department as part of Immediate Reporting

Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	Service Provider to dispose of contaminate
Reporting and re-preparedness	See SOPs: <ul style="list-style-type: none"> • Incident Notification SOP (BCM NSW-ENV-009)

Incident No 10

Incident #10	<p>Dust from traffic areas.</p> <p>Actions Required:</p> <ul style="list-style-type: none"> • Employees, Contractor/Visitor to notify site representative of issue immediately. (induction) • Daily monitoring to be undertaken to capture whether and site conditions • Contact all relevant people/department (refer to Immediate Reporting Contact Sheet) • Dust suppression activity to commence immediately on unsealed roads & dusty areas of site
Alarm raising	Any personnel involved or witnessing incident to report to immediate supervisor and PIRMP actions to be implemented.
Emergency Controller	<ul style="list-style-type: none"> • Quarry Manager • Quarry Manager to instruct site personnel (Quarry Manager)
Scale of incident	Incident would be localised to the area with minimal external impact.
Evacuate	Only if fire or potential exists. Plant Manager and any advice provided by Fire Dept as part of attendance after immediate notification.
Communications	<p>Internal:</p> <ul style="list-style-type: none"> • Quarry Manager <p>External mandatory:</p> <ul style="list-style-type: none"> • Immediate Reporting Contact Sheet to be used if required <p>External non-mandatory: N/A</p>
Rescuer / respondent +	As per Site Emergency Plan or Fire Department as part of Immediate Reporting

safety checks	
Rescue + First Aid	As per Site Emergency Plan or Fire Department as part of Immediate Reporting
Clean up and Waste disposal	N/A
Reporting and re-preparedness	See SOPs: <ul style="list-style-type: none">• Incident Notification SOP (BCM NSW-ENV-009)

Public Document

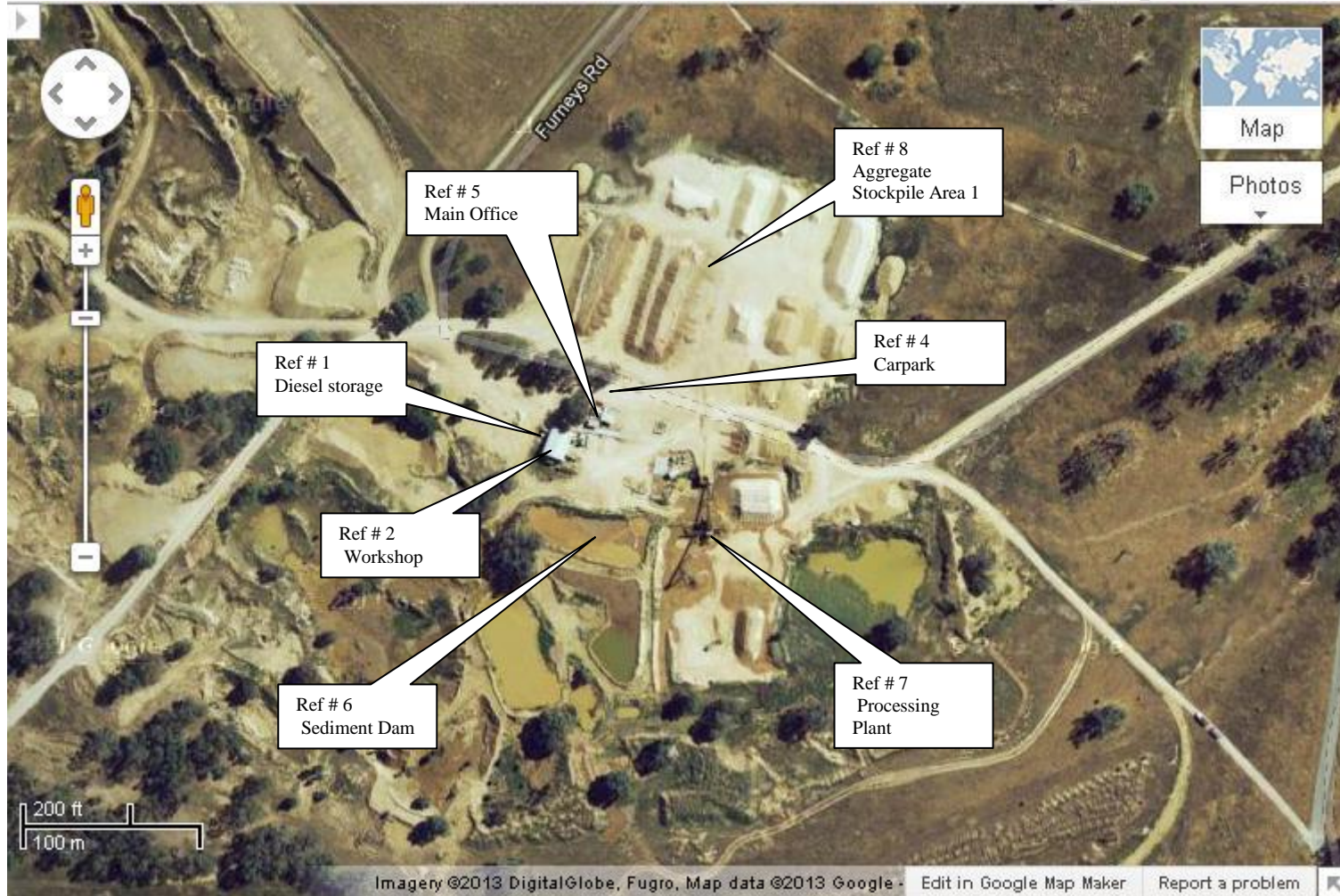
APPENDIX 3.

TERRAMUNGAMINE QUARRY LOCATION MAP



APPENDIX 4.

TERRAMUNGAMINE QUARRY REFERENCE MAP



APPENDIX 5.

TERRAMUNGAMINE QUARRY – MAP OF AFFECTED AREAS



APPENDIX 5.

POLLUTION INCIDENT NOTIFICATION LOG

Person undertaking notification (Name/Function):		
Date and time when first become aware of the incident:		
Incident type:		
Comments:		

Initial immediate notification log				
Appropriate Regulatory Authority	Time of call	Respondent's name/function	Approximate call duration	Comments
EPA				
Public Health Unit				
Fire and Rescue NSW				
Local Council				
WorkCover				
Other:				
Other:				
Summary of initial communication:				

Person undertaking notification (Name/Function):		
Date and time when additional information become available:		
Comments:		

Immediate notification of further pertinent information (if applicable)				
Appropriate Regulatory Authority	Time of call	Respondent's name/function	Approximate call duration	Comments
EPA				
Public Health Unit				
Fire and Rescue NSW				
Local Council				
WorkCover				
Other:				
Other:				
Summary of additional communication				