



**Building
something
great**

Pollution Incident Response Management Plan



Marulan South Limestone Version 14: 11 October 2024

Document Control Sheet

Version	Change Date	Summary of Change	Prepared by	Approved By
Rev.0	1 September 2012	New document	Alex Wnorowski	Debbie Cook
Rev.1	19 December 2012	New Fire & Rescue NSW number for Pollution Incident notifications (replacing calls to 000)	Alex Wnorowski	Alex Wnorowski
Rev.2	1 September 2013	Incorporating company structure changes. Formatting changes.	Alex Wnorowski	Alex Wnorowski
Rev.3	1 September 2014	Annual review.	Alex Wnorowski	Alex Wnorowski
Rev.4	29 July 2015	Update HSEQ references and site contacts	Alex Wnorowski	Alex Wnorowski
Rev.5	11 November 2016	Update contacts and recommendations from PIRMP drill with Environmental Compliance Services	Rob Lasker	Belinda Prideaux
Rev.6	24 October 2017	PIRMP Drill changes. More dust references, Boral Legal inclusion in notification flowchart	Rob Lasker	Belinda Prideaux
Rev.7	27 September 2018	Neighbour and Boral management details update	Rob Lasker	
Rev.8	23 October 2019	Annual Review	Belinda Prideaux	Belinda Prideaux
Rev. 9	18 December 2020	Annual Review, update contact details	Greg Johnson	Greg Johnson
Rev. 10	14 December 2021	Annual Review, update contact details	Greg Johnson	Greg Johnson
Rev. 11	14 October 2022	Annual Review, update purpose, legislative requirements, definition of a pollution incident, PIRMP drill table, contact details	Therese Thomas	Ben Williams
Rev. 12	20 January 2023	Review following precautionary enactment of PIRMP on 25/11/22. Updated Site contacts, logo, incident #3	Therese Thomas	Ben Williams
Rev. 13	03 November 2023	Annual Review, PIRMP drill table, pollution incident emergency response, update contact details	Therese Thomas	Jamie Whittaker
	30 July 2024	Reviewed per IEA recommendations. No changes	Crystal Perry	Les Longhurst
Rev. 14	11 October 2024	Updated Table 2 responsible person and date. Updated Table 3 to include incident #5 smoke from fire and incident #6 slip.	Crystal Perry	Anne Champon
	20 December 2024	V14 Updated to include the PIRMP drill exercise page 27.	Crystal Perry	Anne Champon

Contents

1. General Information	4
1.1. Purpose	4
1.2. Legislative requirements	4
1.3. Definition of a Pollution Incident.....	7
2. Risk Assessment and Preventive Actions	8
2.1. Environmental Registers.....	8
2.2. Harm Reduction.....	16
2.2.1. Prevention	16
2.2.2. Maintenance.....	16
2.2.3. Site Maps	16
2.2.4. Safety Equipment.....	20
3. Immediate Notifications	21
3.1. Internal Notification	21
3.2. Notification of Government Authorities	21
3.3. Notification of Neighbours.....	23
4. Pollution Incident Emergency Response.....	24
5. PIRMP Training Testing and Review	28
6. Appendix A Pollution Incident Notification Form.....	30
7. Appendix B Immediate Notification Contact Numbers.....	32

1. General Information

1.1. Purpose

The purpose of the Boral Cement Marulan Pollution Incident Response Plan (PIRMP) is to:

- Provide clear direction on responding to pollution incidents at Boral Cement Marulan.
- Ensure the immediate communication of this PIRMP enactment to staff, neighbours and relevant authorities.
- Minimise and control the risk of a pollution incident at Boral Cement Marulan.
- Detail the requirements for this plan, including training, review, testing, public and internal display and implementation responsibilities.

This plan forms a part of the overall site Emergency Response Plan and is available onsite and publicly displayed on the website.

1.2. Legislative requirements

The specific requirements for a Pollution Incident Response Management Plan (PIRMP) are set out in Division 1, Part 5.7A of the POEO Act and Chapter 4 of the Protection of the Environment Operations (General) Regulation 2022. Table 1 summarises the location of these requirements in the document.

Table 1 Summary of Legislative Requirements of a PIRMP

Section/Clause	Requirement	Location in PIRMP
Part 5.7A POEO Act 1997		
147	(1) For the purposes of this Part— (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. (2) For the purposes of this Part, it does not matter that harm to the environment is caused only in the premises where the pollution incident occurs.	Section 1.3

150	<p>(1) (1) The relevant information about a pollution incident required under section 148 consists of the following—</p> <p>(a) the time, date, nature, duration and location of the incident,</p> <p>(a) harm to the environment is material if the location of the place where pollution is occurring or is likely to occur,</p> <p>(c) the nature, the estimated quantity or volume and the concentration of any pollutants involved, if known,</p> <p>(d) the circumstances in which the incident occurred (including the cause of the incident, if known),</p> <p>(e) the action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution, if known,</p> <p>(f) other information prescribed by the regulations.</p> <p>(2) (2) The information required by this section is the information known to the person notifying the incident when the notification is required to be given.</p> <p>(3) (3) If the information required to be included in a notice of a pollution incident by subsection (1) (c), (d) or (e) is not known to that person when the initial notification is made but becomes known afterwards, that information must be notified in accordance with section 148 immediately after it becomes known.</p>	<p>Section 3</p> <p>Section 3.2</p> <p>Section 3.2</p>
153A	<p>The holder of an environment protection licence must prepare a pollution incident response management plan that complies with this Part in relation to the activity to which the licence relates.</p>	<p>EPL 944 and this document</p>
153C	<p>A pollution incident response management plan must be in the form required by the regulations and must include the following—</p> <p>(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—</p> <p>(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, and</p> <p>(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</p> <p>(iii) any persons or authorities required to be notified by Part 5.7,</p> <p>(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,</p> <p>(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,</p> <p>(d) any other matter required by the regulations.</p>	<p>Section 3, Appendix A and B</p> <p>Section 3.3 Appendix B</p> <p>Section 3.1 Appendix B</p> <p>Section 3 Appendix B</p> <p>Section 4</p> <p>Section 4</p> <p>Section 1.2</p>
153D	<p>A person who is required to prepare a pollution incident response management plan under this Part must ensure that it is kept at the premises to which the relevant environment protection licence relates, or where the relevant activity takes place, and is made available in accordance with the regulations.</p>	<p>Section 1.1</p>

153E	A person who is required to prepare a pollution incident response management plan under this Part must ensure that it is tested in accordance with the regulations	Section 5
153F	If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 147) is caused or threatened, the person carrying on the activity must immediately implement any pollution incident response management plan in relation to the activity required by this Part	Section 3 and 4
72 (a)	a description of the hazards to human health or the environment associated with the activity to which the licence relates (the relevant activity),	Table 2
72 (b)	the likelihood of the hazards occurring, including details of conditions or events that could, or would, increase the likelihood,	Table 3
72 (c)	details of the pre-emptive action to be taken to minimise or prevent a risk of harm to human health or the environment arising out of the relevant activity,	Section 2.2, Table 3
72 (d)	an inventory of potential pollutants on the premises or used in carrying out the relevant activity,	Table 2, Section 2.1
72 (e)	the maximum quantity of a pollutant likely to be stored or held at particular locations, including underground tanks, at or on the premises to which the licence relates,	Table 2, Section 2.1
72 (f)	a description of the safety equipment or other devices used to minimise the risks to human health or the environment and to contain or control a pollution incident,	Table 2, Section 2.2.3 Section 2.2.4
72 (g)	The names, positions and 24-hour contact details of individuals who— are responsible for activating the PIRM plan, and are authorised to notify relevant authorities under the Act, section 148, and are responsible for managing the response to a pollution incident,	Section 3.1, Appendix B
72 (h)	the contact details of each relevant authority referred to in the Act, section 148,	Section 3.2, Appendix B
72 (i)	details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises near the premises to which the licence relates or where the scheduled activity is carried on,	Section 2.2, Section 3.3
72 (j)	the arrangements for minimising the risk of harm to persons who are on the premises or who are present where the scheduled activity is being carried on,	Section 2.2
72 (k)	a detailed map, or set of maps, showing the location of the premises to which the licence relates, the surrounding area likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of stormwater drains on the premises,	Section 2.2.3
72 (l)	a detailed description of how an identified risk of harm to human health will be reduced, including, as a minimum, by early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce the risk,	Section 2.2, Table 3
72 (m)	the nature and objectives of a staff training program in relation to the PIRM plan,	Section 5
72 (n)	the dates on which the PIRM plan has been tested and the name of the person who carried out the test,	Section 5
72 (o)	the dates on which the PIRM plan is updated,	Document Control Sheet
72 (p)	the way in which the PIRM plan must be tested and maintained.	Section 5

1.3. Definition of a Pollution Incident

The dictionary of the POEO Act defines pollution as either ‘water pollution’, ‘air pollution’, ‘noise pollution’ or ‘land pollution’. It goes on to provide definitions for each of these types of pollution.

As per the POEO Act, ‘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.’

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).

Examples would include events such as highly alkaline water escaping catchments after a heavy rain event, dust severely impacting on a neighbour's property or a large hydrocarbon spill that cannot be contained. Weather conditions and geographic features can increase the risk of a pollutant spreading throughout the environment, increasing the risk of material harm being triggered.

Industry is required to report pollution incidents immediately to the EPA, NSW Health, NSW emergency services, Safe Work NSW and the local council. ‘Immediately’ has its ordinary dictionary meaning of promptly and without delay. These strengthened provisions will ensure that pollution incidents are reported directly to the relevant response agencies so they will have direct access to the information they need to manage and deal with the incident in a faster time.

There are new associated offences, for individuals and corporations, for not preparing a plan, not keeping the plan at the premises to which it relates, not testing the plan in accordance with the Regulations and not implementing the plan in the case of an incident.

2. Risk Assessment and Preventive Actions

2.1. Environmental Registers

Potential environmental pollutants are summarised in a site risk register entitled “Environmental Aspects and Impacts, located in *Sharepoint AUS_HSE_ECement>Documents>Cement Sites>Marulan>Green Folder*. This document considers; Aspect, Impact, Controls and Improvements for the site’s known environmental hazards in the following areas:

- Fugitive dust emissions from plant and mining areas
- Spills of liquids (e.g. diesel, oil) or powdered solid materials (e.g. Lime), potentially leaving the site. Large spill of powdered solids may result in significant dust nuisance or lead to deposition of significant quantities of high pH particulate matter in the natural water courses.
- Fire
- Blasting/Explosives
- LPG Incidents.

Marulan has a Hazardous Substance and Dangerous Goods Register located at; ‘*Dcmaru01 (G:)/0.13 SHE Management System/2 Identifying and Managing SHE effects and hazard/2.14 Risk Register/2.14.1 Marulan/Risk Profile Marulan V4*

Each Hazardous Substance/Dangerous good has an associated Safety Data Sheet which contains a description of the hazards to both human health and the environment. A current set of SDS’s is available through the intranet application; ChemAlert <http://vabndc09:8080/chemalert/> and are available in hard copy in the Lab. Safety Data Sheets are displayed in all areas which use or store products of this nature. Supporting signage is also displayed where required.

Hazardous Chemicals and Dangerous Goods are managed onsite in line with the *Standard/Protocol for Hazardous Chemicals and Dangerous Goods GRP-HSEQ-4-04*, which addresses:

Determining the level of risk via;

- SDS;
- Product labelling;
- Hazardous Substances and Dangerous Goods register;
- Risk Assessments;
- Controlling the risk via;
- Purchasing controls;

- Storage Handling and transportation;
- Storage Cabinets;
- Transporting and handling Hazardous substances and Dangerous Goods;
- PPE;
- Atmospheric Monitoring and Health Surveillance;
- Dangerous Goods Manifest;
- Dangerous Goods Audit;
- Hazardous Substance Inspections;
- Appropriate disposal;
- Spill prevention and management.

To satisfy the requirements of Clause 72 (d) (e) and (f) an initial assessment of polluting substances is detailed in Table 2. A risk assessment detailed as per requirements of Clause 72 (a) and (b) is detailed in Table 2.

Table 2 List of Polluting Substances and Storage

Table 2: LIST OF POLLUTING SUBSTANCE STORAGES/USES AT SITE: INITIAL ASSESSMENT (all Chemicals listed in this sheet are to be subjected to a risk assessment located in Table 3)							
Site Name: Boral Cement Marulan South Limestone						Responsible Person: Jamie Whittaker	Date: 11/10/2024
Description of Hazard	Covered under Haz Chemicals/ MSDS?	Estimated Amount stored (amounts vary depending on operations)	Location of storage	Map reference	Likelihood of Impact on neighbours	Current controls/safety equipment (Pre-emptive Actions)	See Risk Assessment (see Below)
CHEMICALS/FUELS/LUBRICANTS (diesel, Oils, lubricants etc)							
Uncontrolled loss of Diesel or other hydrocarbon products that could result in material harm to the environment or human health	Class C1	Diesel Storage 92,000L Waste Oil 3,000L Packaged Oils 3,000L Lubricant, gases 3000L Please note that exact volumes may vary dependent on operations and are estimates only	Diesel Storage tank at Go-line and Workshop	Figure 2	LOW Only if substances enter waterways and is transported off-site	Self-bunded tank Bunding Lined filling area Training Spill Kits Flammable Cabinets SOP's Inductions Fire Fighting Equipment Security	Incident #1
AIRBOURNE DUST (eg stockpiles, silos, Haul Roads etc)							
Excessive airborne dust from stockpiled material, mobile plant or traffic areas causing material harm to the environment or significant impact to community	N/A	Overburden, Product Stockpile, Rail Bins, Silo, Stack Emissions and haul roads	Dedicated on site stockpile areas	Figure 1	LOW Only if excessive dust is spread off-site during high winds	Water sprays Water Cart Maintain manageable levels Security Reduced speed Weather forecast early notification	Incident #2

Table 2: LIST OF POLLUTING SUBSTANCE STORAGES/USES AT SITE: INITIAL ASSESSMENT (all Chemicals listed in this sheet are to be subjected to a risk assessment located in Table 3)

Site Name: Boral Cement Marulan South Limestone						Responsible Person: Jamie Whittaker	Date: 11/10/2024
Description of Hazard	Covered under Haz Chemicals/ MSDS?	Estimated Amount stored (amounts vary depending on operations)	Location of storage	Map reference	Likelihood of Impact on neighbours	Current controls/safety equipment (Pre-emptive Actions)	See Risk Assessment (see Below)
AQUEOUS (eg dams, wastewater tanks, other water storage area)							
Uncontrolled release of sediment or sediment laden water from storage dams or emplacements causing material harm to the environment	TSS, EC	Southern Haul Road Check Dam (0.08ML) Main Gully Sediment Basin 1 (5.8ML) Main Gully Sediment Basin 2 (0.2ML) Main Gully Sediment Basin 3 (0.8 ML) Plant Sediment Basin (0.3ML)	Dedicated Sediment Basins within operational area	Figure 3	LOW Only if excessive sediment enters waterways and is transported off-site during significant rain events	Continue to use for dust suppression Ensure pumps are maintained through scheduled maintenance Discharge monitoring Straw Bales Rubber and Earthen Berms Audits and Inspections	Incident #3
FUMES (substances relating to blast fume from explosives)							
Excessive blast fume from blasts causing significant and unexpected impact to the community	N/A	Blast fume containing NOX, SOX	Active production pit area onsite	Figure 1	LOW Only if explosives are dormant for excessive periods of time and exposed to water during blasting and prevailing winds push fumes towards community	Blast Management Plan and Blast Pack Procedures/Training PMP Don't sleep shots for excessive periods (i.e. 7 days) Avoid loading wet holes	Incident #4

Table 3 Risk Assessment of Incidents and Corrective Control Measures

Table 3 Hazard and Likelihood Risk Assessment and Corrective Control Measures								
Site: Boral Cement Marulan South Limestone					Responsible Person: Jamie Whittaker		Review Date: 14 October 2022	
Name / ref of pollutant/ chemicals	Description of Hazard / Incident leading to hazard	Consequence	Likelihood	Risk	Factors which could increase risk	Residual Risk after implementation of controls. (See Table 2 for list of current controls).	Responsible person	Action date
Diesel/ Hydrocarbons	Incident #1 Uncontrolled loss of Diesel or other hydrocarbon products that could result in material harm to the environment or human health	2	2	L4	Dry, windy conditions (increase fire danger) or heavy rain/flood conditions (will increase potential for spill to spread to catchment drainage areas)	Consequence: (Minor 2): 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 2): Diesel Tanks are self banded double walled fuel tanks. 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. Drain valve, hoses and refuelling equipment are maintained in good structural integrity with low risk of failure The drain valve is locked at all times. Risk Assessment = Minor 2 Vs Unlikely 2 = L4	As per PIRMP action plan	When required
Airborne dust	Incident #2 Excessive airborne dust from stockpiled material, mobile plant or traffic areas causing material harm to the environment or significant impact to community	2	2	L4	Dry, windy conditions (increase wind erosion and dust transport). Summer months with long periods of extended	Consequence: (Minor 2): Excessive dust from stockpile during high winds causing nuisance to surrounding area. Likelihood: (Unlikely 2): Stockpiles are maintained to a manageable level on a monthly basis. Use of water sprinklers and water cart onsite during windy periods. Extensive land reserves act as buffer land from surrounding communities. Surrounding land is rural with sparse distribution of neighbours.	As per PIRMP action plan	When required

					dry conditions.	Risk Assessment = Minor 2 Vs Unlikely 2 = L4		
Sediment laden stormwater	Incident #3 Uncontrolled release of sediment and sediment laden water from storage dams and emplacements causing material harm to the environment	2	2	L4	Extended periods of rain increase the risk. Late Summer/early Autumn is typically the wettest part of the year on site.	<p>Consequence: (Minor 2): 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.</p> <p>Likelihood: (Unlikely 2): Dams are frequently monitored and inspected for levels and integrity.</p> <p>Risk Assessment = Minor 2 Vs Unlikely 2 =L4</p> <p>Note: For PIRMP purposes overflow events during extreme wet weather will be reported under POEO Licence obligations and not Immediate Reporting.</p>	As per PIRMP action plan	When required
Blast fume	Incident #4 Excessive blast fume from blasts causing significant and unexpected impact to the community	2	1	L2	Windy conditions will increase potential for blast fume to leave site. Excessive periods of sleeping shots (>7 days) loading into wet holes	<p>Consequence: (minor 2): Blast fume would be localised and dispersed with high winds, of short duration and not cause long term impacts.</p> <p>Likelihood: (rare 1): Blast Management Plan in place to reduce the likelihood of shots being slept for extended periods of time and not loaded into wet holes.</p> <p>Risk Assessment = Minor 2 Vs Rare 1 = L2</p>	As per PIRMP action plan	When required
Smoke from Fire	Incident #5 Release of smoke from an on-site fire involving flammable materials from tyres, rubber belts	2	2	L4	Windy conditions will increase potential for excessive fume smoke to leave site.	<p>Consequence: (minor 2): Fire suppression system through part of the plant, separation of all main fuel sources, training on storage best practice, buffer zones between fuel sources, water cart on site and emergency plan in place reduce consequence category to minor.</p>	As per PIRMP action plan	When required

	and flammable goods.					<p>Likelihood: (minor 2): Regular maintenance of plant, vegetation, machinery and buildings, training of staff and audits in storage best practice and disposal of dangerous goods reduces likelihood to minor.</p> <p>Risk Assessment = Minor 2 Vs Unlikely 2 =L4</p>		
Slip/Erosion event	Incident #6 Slip/Erosion event leading to loose materials entering the waterways, damaging vegetation or creating an aspect that affects the wider community aesthetically.	2	3	M	Heavy rain for extended periods of time.	<p>Consequence: (Minor 2): All faces of the external pit walls are either heavily vegetated, rock faces, under remediation or rehabilitation or are far enough away from water sources that reduce the rating to a minor.</p> <p>Likelihood: Possible. Old tip faces on the outside of the mine are legacy of the mine's history.</p> <p>Risk assessment: Minor 2 Vs Possible 3 = M2</p>	As per PIRMP action plan	When required

2.2. Harm Reduction

2.2.1. Prevention

The risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried out is reduced by measures outlined in “GRP-HSEQ-8-07 Spill Management”. These measures include:

- Placement of spill-risk facilities away from sensitive environments (sufficient to allow for effective intervention prior to pollution occurring in the event of a spill);
- Use of secondary spill containment facilities such as bunding around all storage tanks and other areas where hazardous substances are stored;
- Ensuring that areas where risky activities such as storage tank/silo loading are undertaken are bunded and sealed;
- Ensuring drainage structures can be sealed to halt passage of spilt fluids or powdered solids;
- Training of employees and contractors in good environmental practice;
- Ensure that the local deluge procedure includes possible overflows and excursions off-site;
- Automatic forecast notifications from Weatherzone for wind, rain and lightning events when agreed thresholds are likely to be exceeded. Risky activities can be avoided or managed.

The bunded areas must be capable of preventing the migration of any spillage or leakage to the surrounding environment. The requirement for bunding is relative to the level of risk and type of area. Bunding specifications are summarised in Australian Standard AS 1940:2004.

2.2.2. Maintenance

All bunds, silos, tanks, pipe-work and stores/magazines are inspected monthly and at least annually for signs of damage. Any defect in the bund wall or lining is repaired immediately using appropriate techniques. Damage to the tank or transfer hoses is dealt with immediately to prevent failure.

Any liquid in the bund must be promptly removed in an appropriate manner – usually as contaminated matter. Do not allow spilt liquid or stormwater to remain in the bund – it may accumulate and lead to overflowing. Rainwater entering the sump or bunded area should be regarded as potentially contaminated and must be disposed of in an authorised manner.

Any accumulated debris should be promptly removed and disposed of in the correct manner.

2.2.3. Site Maps

An aerial map overleaf Figure 1 shows the location of the premises to which the licence relates together with the current environmental monitoring points. Figure 2 shows location of Hazardous Chemicals and spill kits on the site.

Figure 3 details the site drainage of the site. Stormwater entering the site is channelled/directed to a series of catchment dams which are designed to accommodate a 95th percentile 5 day rain event and typically does not escape to the environment.



Figure 1 Site Location and Operational Area



- Kiln Mechanical Workshop**
- Ball Mill**
- Laboratory**
- Kiln Weighbridge**
- Production Weighbridge**
- Site Store**
- Firing Floor Kiln**



- Maintenance Workshop**
- Jaw Crusher Control Room**
- Temporary Fuel Bay**

Figure 2 Spill Kit and Fuel Depot Location

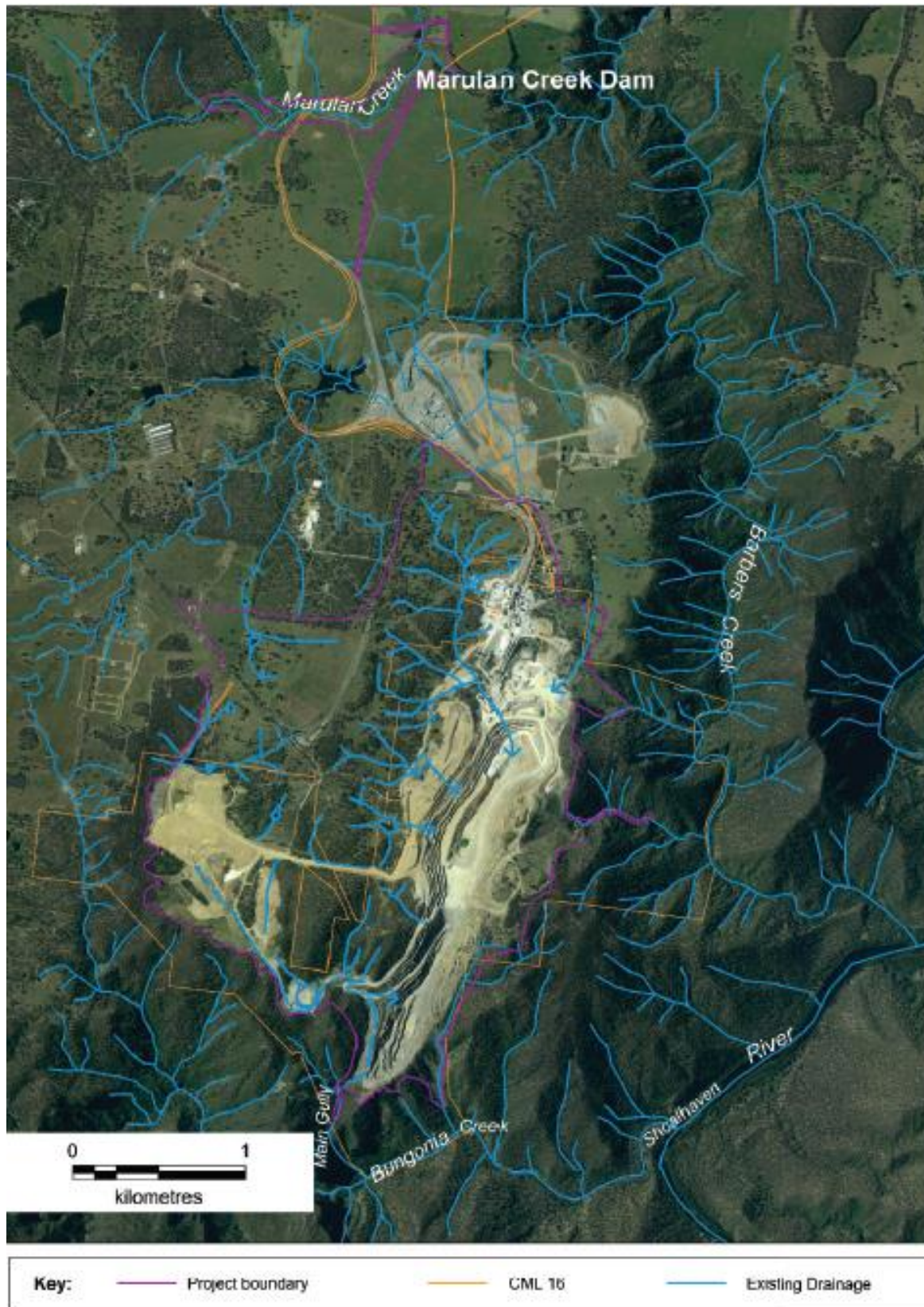


Figure 3 Site Drainage

2.2.4. Safety Equipment

The site utilises 3M spill kits purchased from Blackwoods. The site HSE staff replenish the kits as required but personnel are encouraged to do so themselves post-incident. These kits are capable of containing large spills of hydrocarbon liquids.

A spill kit is a 240L wheelie bin that may contain the following:

- 25 x 3M™ HP156 Oil & Petroleum Sorbent Pads (0008 7006)
- 2 x 3M™ P-FL550DD Oil & Petroleum Folded Sorbent Rolls (0082 7747)
- 2 x 3M™ T280 Oil & Petroleum Double Booms (0116 1379)
- 5 x Contaminated Waste Bag (0120 6293)
- 2 x 3M™ 4251 Disposable Half Face Respirator (0034 1020)
- 2 x pair Solvent & Oil Resistant gloves (0403 8056)
- 2 x 3M™ Fahrenheit Goggles (0105 5946)
- 2 x 3M™ 4530+ Protective Coveralls
- 1 x Spill Response Procedure

Fire response on site is addressed in the Marulan Mine & Lime Plant Emergency Management Plan. The type of fire extinguishers used on site are appropriate for their application. Fire extinguishers are fitted to all buildings, mobile plant and light vehicles.

3. Immediate Notifications

3.1. Internal Notification

Any pollution incident satisfying the material harm threshold must be immediately reported to relevant statutory authorities by either the HSE Regional Manager, or Regional Environment Manager.

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:

Table 4 Internal Reporting List

Staff	Position	Office Number	Mobile Number
	Site Manager		
	Maldon and Marulan Lime Operations Manager		
	Operations Administrator		
	Environmental Representative		
	Senior Environmental Business Partner NSW		

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

4. Jamie Whittaker or in case of his unavailability one of the Senior Management personnel listed above, is to immediately notify the Senior Environmental Business Partner.
5. Senior Environmental Business Partner is to immediately notify all Appropriate Regulatory Authorities specified in Appendix A.

3.2. Notification of Government Authorities

Any pollution incident that causes or threatens “**material harm**” to the environment or people **must be notified to government authorities immediately** upon becoming aware of the incident by the Environmental and Sustainability Manager. The **notification should be restricted to facts only**.

When **new information comes to hand following the initial notification, this information must also be communicated immediately**. For the definition of “material harm” caused by a pollution incident refer to Section 1.3.

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. 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.

The contact list of Compulsory Authorities is presented in Appendix A who must be notified in ALL cases requiring environmental notification. Other Authorities may need to be notified as appropriate. **All immediate notifications and updates are to be recorded** in the Pollution Incident Immediate Notification Log (In Appendix A).

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 (Appendix A).

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, time and duration of the pollution incident;*
- *nature of the incident (spill, fire, unlicensed harmful discharge, etc);*
- *estimated quantity or volume and concentration of any pollutants involved, if known;*
- *assessed level of incident gravity: “it seems to be...” (e.g. “a relatively minor spill”, “major fire”, “explosion limited to one building”, etc.);*
- *action taken and 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. All notifications are to be in line with standard operation procedure *CMT-ENV-001 – Marulan Pollution Incident Notification*, located in the site Sharepoint *AUS_HSE_ECement>Documents>Cement Sites>Marulan>Green Folder*.

Boral’s Senior Corporate Management must be informed promptly of the fact of immediate notification to the Authorities. This includes environmental personnel listed above, Scott Carter and Rajeev Ramankutty.

3.3. Notification of Neighbours

In case of pollution incidents that may **potentially pose threat to the health and safety of the neighbours** (e.g. toxic fumes, fire, fuel spill into the street or to coastal verge, release of a thick dust cloud, etc.), **the neighbours must also be urgently notified**.

The early warning of the neighbourhood notification will be undertaken by phone or door knock. The current contact list for neighbours is attached in Appendix B. The initial notification should be brief and contain only a description of the environmental threat together with instructions what to do. For example:

- *Due to a dust collector's failure, we are experiencing elevated dust emissions from the site. Please keep your doors and windows closed until further notice.*
- *An accidental trade effluent discharge occurred from the site to a local creek. Please refrain from recreational use of the area until testing confirms that the water is safe.*
- *Due to a diesel spillage on the site, a cleanup operation is being organised. Please be watchful for road traffic in relation to this operation.*
- *Potentially hazardous blast fumes have been released, please keep your doors and windows closed until further notice*

A follow up information on the resolution of emergency situation would be timely conducted on the phone or by means of a letterbox drop.

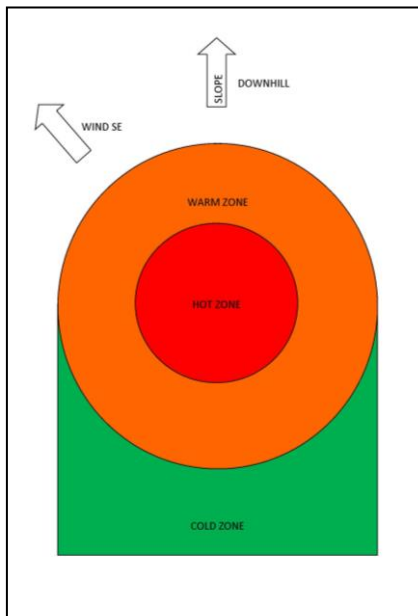
4. Pollution Incident Emergency Response

In the event of a pollution incident the risk of harm to human health and the environment will be minimised by engaging an appropriate pollution response as outlined below:

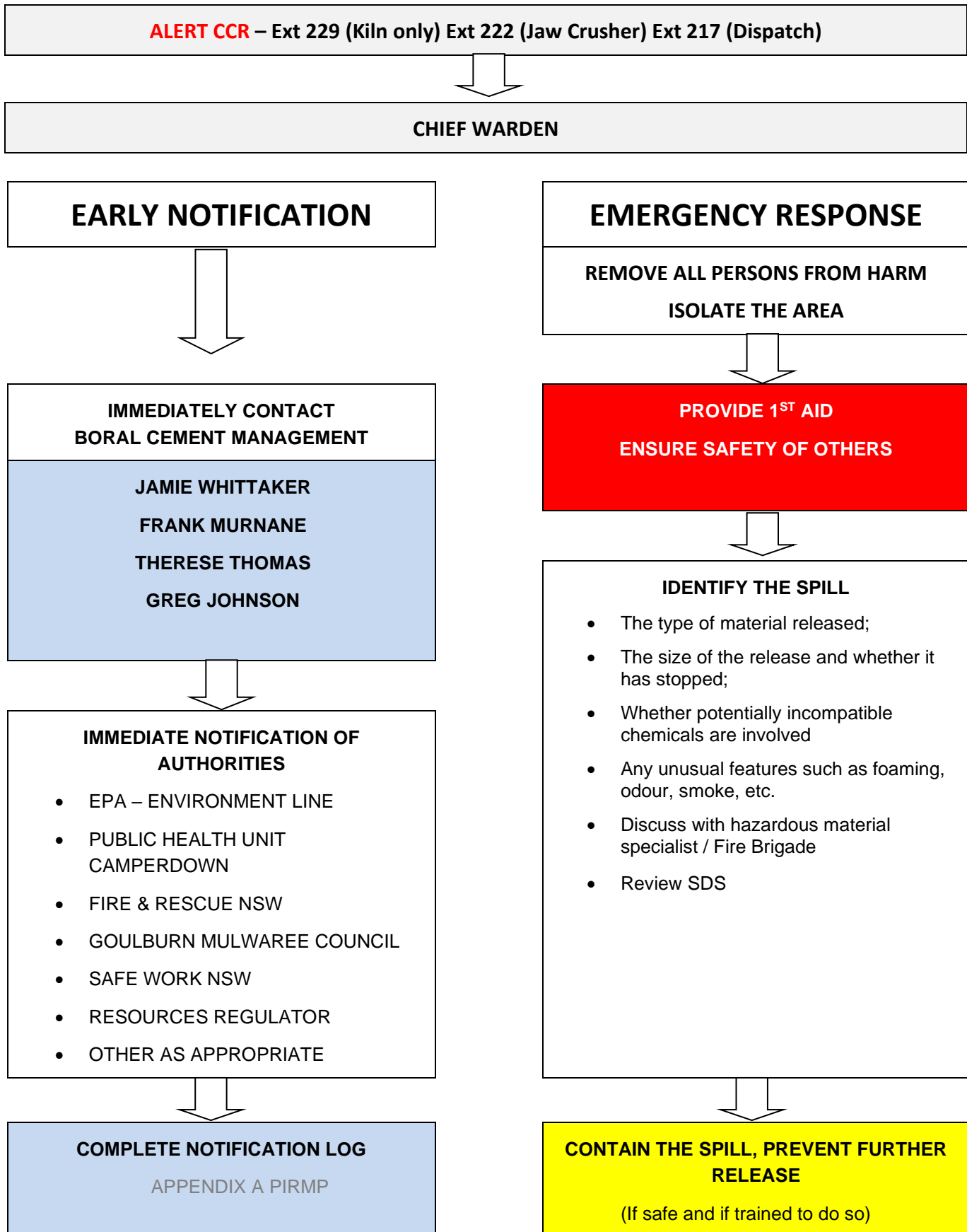
- 1) **Safety First**; Ensure emergency services are contacted immediately in the event to harm of any personnel.
- 2) **Stop the source**: If it's safe to do so, stop the process causing the spill/leak or other environmental incident.
- 3) **Isolate the area**: The first person to notice the spill or leak should remove themselves from the immediate area and take measures such as barricading the area to reduce the risk of exposure to others. This must occur without exposure to danger.
- 4) **Commence early notification**: The Manager or Supervisor must be notified immediately of the environmental incident. They in turn must immediately inform one of the persons nominated for notification of Authorities (see Appendix A). If the environmental incident is significant, the nominated person implements early notification procedures to the relevant Authorities including emergency services. Alerting the potentially affected neighbours may also be required (see Appendix B), with regular updates provided as needed.
- 5) **Provide a 1st aid response** (if required): First aid kits including instruction on use are available at the locations indicated in the Site Emergency Response Plan. Emergency shower and eye wash bays are suitably located, easily accessible and in good working order. Appropriate PPE is worn by all staff during periods of potential exposure as outlined in relevant SDS.
- 6) **Identify the release to the greatest extent possible**: Do so without being at risk. This includes identifying:
 - i) the type of material released;
 - ii) Class 1 Explosives;
 - iii) Class 2 Gases - compressed, liquefied or dissolved under pressure;
 - iv) Class 3 Flammable Liquids;
 - v) Class 4 Flammable Solids, Substances liable to spontaneous combustion and Substances which in contact with water emit flammable gases;
 - vi) Class 5 Oxidizing Agents and Organic Peroxides;
 - vii) Class 6 Toxic and Infectious Substances;
 - viii) Class 7 Radioactive Substances;
 - ix) Class 8 Corrosive Substances;
 - x) Class 9 Miscellaneous Dangerous Goods;
 - xi) The label and Safety Data Sheet for the product should give information on safe cleanup (available in the ChemAlert application on the Boral Intranet);
 - xii) The size of the release and whether the release has stopped;
 - xiii) Whether chemicals involved may be potentially incompatible; and
 - xiv) Any unusual features such as foaming, odour, smoke, etc.
- 7) **Determine the level of emergency**: review chemical risk assessments, seek internal advice from area specialists, review SDS's and seek professional advice from the fire brigade and/or hazardous material specialists.
- 8) **Determine if evacuation is required** and assess whether the impact of wind, rain, local geographical features such as hills and stormwater drainage systems may increase the risk of pollutants spread. Adapt zones accordingly. If in doubt commence evacuation to "cold zones" **Following a Pollution / Hazardous Material Incident the Emergency Site is to be divided into Hot, Warm and Cold Zones - for management purposes.** The Chief Warden is responsible for the management of the COLD ZONE, all personnel are to be evacuated from the hot/warm zone.
 - a) **Hot Zone**: This is the area of likely contamination. Only personnel wearing the appropriate level of protective clothing and equipment are to enter this zone. The area of the Hot Zone is defined, controlled and co-ordinated by the Hazmat Controller (FIRE BRIGADE).
 - b) **Warm Zone**: This is the area immediately surrounding the Hot Zone where decontamination takes place and personnel and equipment are prepared for deployment. Only personnel wearing the appropriate level of

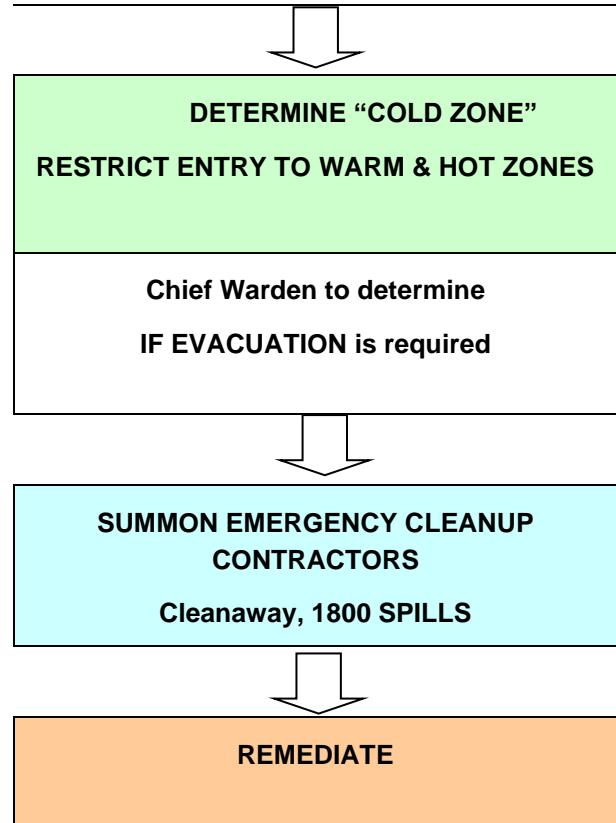
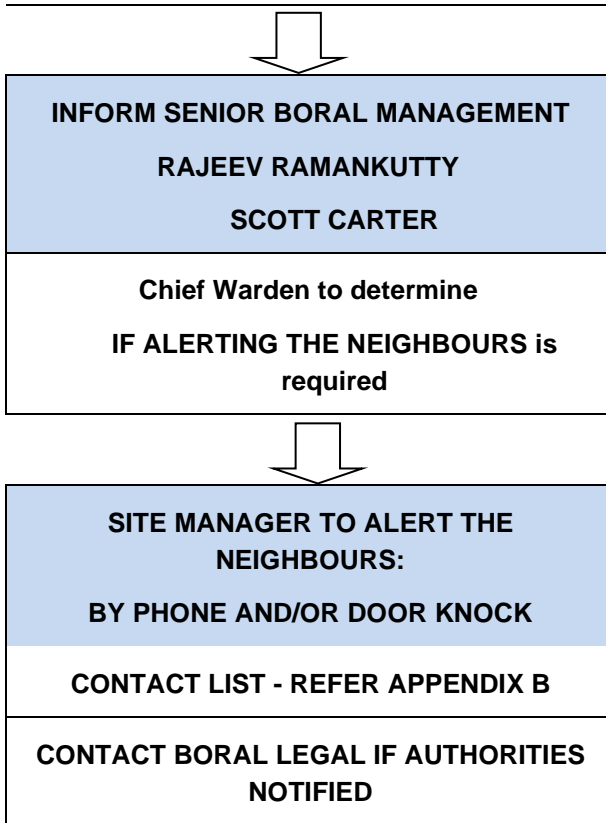
protective clothing and equipment are to enter this zone. The area of the Warm Zone is defined, controlled and co-ordinated by the Hazmat Controller (FIRE BRIGADE).

- c) **Cold Zone:** This is the area immediately surrounding the warm zone. It is the support area where access is limited to support agencies personnel and equipment. This zone contains the Site Control, triage and treatment facilities and other marshalling and assembly areas. The Cold Zone is free of contamination and personnel protective clothing is not required. The area of the cold zone is defined by the site controller in consultation with the Hazmat Controller and managed by the CHIEF WARDEN.



- 9) **Stop further release** (if not done prior): prevent further release by isolating the source of the release. (Trained personnel only with suitable PPE)
- 10) **Stop the release from spreading** (if safe to do so):
- 11) **Prevent off-site release of contaminated stormwater:** Protect stormwater drainage lines and grates with booms, covers or drain socks or in large-scale events, temporary overburden mound bunding.
- Liquid spills: Deploy spill kits to prevent further contamination dispersal, using appropriate absorbent/containment materials such as loose absorbent, socks or pads (land) and booms (water). See also "GRP-HSEQ-8-07 Spill Management".
 - Powdered solid spills: Lower down the silo rolling doors to minimise dust, cover stormwater grates to prevent ingress of solids.
 - Releases of pollutants into the air: Shut down ventilation systems to keep gases, vapours and dust from spreading.
 - Large spills: Summon specialist spill emergency response contractors (e.g. Cleanaway Solutions (1800 774 557, 1800 SPILLS).
 - Fire: If possible, endeavour to prevent fire-fighting water from entering the stormwater drains as it typically carries contamination. If possible, divert fire from areas containing materials that may generate toxic fumes when burned (e.g. stores of chemicals, cleaning aids, motor oil, etc.).
- 12) **Dispose of contaminated spill response materials and wastes** using a licensed contractor.
- 13) If required, **remediate** the site.





5. PIRMP Training Testing and Review

The Emergency Planning Committee (EPC) and Environmental Representative will be responsible for testing the contents of the Pollution Incident Management Plan annually. Pollution incident testing will also be undertaken within 1 month of any pollution incident occurring to ensure the plan is capable of being implemented in a workable and effective manner.

Testing can be completed through the following methods:

- Simulated environmental emergency drills/exercises, or
- Desktop simulations.

Training or information will be provided on an annual basis 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.

Staff training is recorded in the site Training Matrix. Site inductions for visitors and sub-contractors also advise individuals to report any environmental incidents or spills to site supervisors and key personnel immediately. A summary of the PIRMP Drills undertaken at Boral Cement Marulan is shown below in Table 5.

Responsibilities of the EPC are outlined under: *Organisational Arrangements and Contacts - 2.1 Emergency Planning Committee.*

Table 5 PIRMP Drill Dates

Test Date	Version tested	Incident Drilled	Drill Team Lead
17/10/2018	V6	Hydrocarbon Spill	Dean Beltrame, Rob Lasker
12/11/2019	V7	Hydrocarbon Spill	Mark McCarthy, Belinda Prideaux
17/11/2020	V8	Hydrocarbon Spill	Mark McCarthy, Wayne Beattie
14/12/2021	V9	Land slip/erosion event	Mark McCarthy, Garth Nagle, Greg Johnson
10/10/2022	V10	Hydrocarbon Spill	Ben Williams, Therese Thomas
25/11/2022	V11	PIRMP Enacted as precaution - Land Slip	Greg Johnson, Ben Williams, Therese Thomas
03/11/2023	V12	Workshop Oil Fire	Therese Thomas, Jody Oakley, Jamie Whittaker
12/12/24	V14	Hydrocarbon Spill	Crystal Perry, Jody Oakley, Anne Champon

Revisions are to be coordinated by the Site Manager and Environmental Representative on an annual basis and within 1 month of material harm incident. The review will include a review of legislation, approval and licence changes. 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.

6. Appendix A Pollution Incident Notification Form

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				
Safework NSW				
Resources Regulator				
Other: (including neighbours)				
Other: (including neighbours)				
Other: (including neighbours)				
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				
Safework NSW				
Resources Regulator				
Other:				
Summary of additional communication				

7. Appendix B Immediate Notification Contact Numbers

Boral Staff	Position	Office Number	Mobile Number
	Site Manager		
	Maldon and Marulan Lime Operations Manager		
	Operations Administrator		
	Environmental Representative		
	Senior Environmental Business Partner NSW		

Whilst personal contact details for the following are available in the controlled version of the Pollution Incident Response Management Plan they do not appear in this public document

Government Authority - Compulsory Notifications	Emergency notification phone number
EPA – Environment Line	131 555
Public Health Unit (Sydney South West) – Camperdown Office	BH: 02 9515 9420 AH: 02 9515 6111 Ask for Public Health Officer on call
Fire & Rescue NSW	1300 729 579
Goulburn Mulwaree Council	02 4823 4444 A/H 02 4822 1080
Resources Regulator	Notify through portal https://nswresourcesregulator.service-now.com/regulator after calling 1300 814 609
Government Authority - ring if relevant	Emergency notification phone number
Roads and Maritime Services	132 701
NSW Office of Water	8838 7885
Bush Fire Control Officer	1800 049 933
Poisons Information Centre	131 126

Direction	Neighbours	Address	Emergency Notification	Method
North/East				Phone/Door knock
				Phone/Door knock
West				Phone
				Phone/Door knock
				Phone/Door knock
				Phone/Door knock
				Phone/Door knock
				Phone/Door knock
				Phone/Door knock
				Phone/Door knock
South				Phone

Whilst personal contact details for the following are available in the controlled version of the Pollution Incident Response Management Plan they do not appear in this public document