HOLCIM

2023 Jandra Quarry Pollution Incident Response Management Plan

ie date: November 2022

Jandra Quarry Pollution Incident Response Management Plan (PIRMP)

Revision/ Checking History

Revision Number	Date	Checked by	Issued by
1	Sept 2014	Daniel Lidbetter- NSW/ACT Planning & Environment Coordinator Matt Neil- Quarry Manager	Daniel Lidbetter
2	Oct 2015	Daniel Lidbetter- NSW/ACT Planning & Environment Coordinator Matt Neil- Quarry Manager	Daniel Lidbetter
3	Oct 2016	Daniel Lidbetter- NSW/ACT Planning & Environment Coordinator Matt Neil- Quarry Manager	Daniel Lidbetter
4	Oct 2017	Amy Nelson - NSW/ACT Planning & Environment Coordinator Matt Neil- Quarry Manager	Amy Nelson
5	Oct 2018	Hema Vignaraja – SHE Reporting Analyst Matt Neil- Quarry Manager	Hema Vignaraja
6	May 2019	Hema Vignaraja – SHE Reporting Analyst Shilpa Shashi - NSW/ACT Planning & Environment Coordinator	Hema Vignaraja
7	September 2020	Shilpa Shashi - NSW/ACT Planning & Environment Coordinator	Shilpa Shashi
8	September 2021	Shilpa Shashi - NSW/ACT Planning & Environment Coordinator	Shilpa Shashi
		Matt Neil – Quarry Manager	

9	November 2022	Rob Townsend - Acting environment manager-NSW David Saville – Quarry Manager	Rob Townsend
10	October 2023	Dozie Egeonu - Environment manager - NSW & ACT David Saville – Quarry Manager	Dozie Egeonu

Table of Contents

1.	Purpose	5
2.	Scope	7
3.	Definitions	7
4.	Associated Documentation	7
5.	Responsibility	8
6.	Record Retention	8
7.	Procedure	8
7.1	Environmental Impact and Hazard Register	8
	Table 1: Holcim SHE Risk Score Matrix	9
	Table 2: Holcim Quarry Environmental Impact and Hazard Register	11
7.2	Pollutant and Safety Equipment Information	19
7.3	Emergency Response Map	40
7.4	PIRMP Review	42
7.5	Typical Holcim Response process	42
7.6	7.6 Communication Strategy	44
7.7	Staff Training	46
7.8	Continual Improvement	46

Appendices

А	Emergency Contact Details
В	Pollution Incident Response Test Checklist
С	Community Notification Strategy

Glossary of Acronyms

- PIDS- Pollution Information Data Sheet
- PPE- Personal Protective Equipment
- SDS- Safety Data Sheets
- PEOA- Protection of the Environment Operations Act 1997

1. Purpose

The purpose of this document is to detail the pollution incident response management plan for the Jandra Quarry, to comply with Section 5.7A of the Protection of the Environment Operations (POEO) Act:

Protection of the Environment Operations Act 1997 No 156

Part 5.7A Duty to prepare and implement pollution incident response management plans

153A Duty of licence holder to prepare pollution incident response management plan

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.

Maximum penalty:

- (a) in the case of a corporation—\$1,000,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues, or
- (b) in the case of an individual—\$250,000 and, in the case of a continuing offence, a further penalty of \$60,000 for each day the offence continues.

153B EPA may direct other persons to prepare pollution incident response management plan

- (1) The EPA may, in accordance with the regulations, require the occupier of premises at which industry is carried out to prepare a pollution incident response management plan that complies with this Part in relation to activities at the premises.
- (2) A person must not fail to comply with such a requirement.

Maximum penalty:

- (a) in the case of a corporation—\$1,000,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues, or
- (b) in the case of an individual—\$250,000 and, in the case of a continuing offence, a further penalty of \$60,000 for each day the offence continues.
- (3) The regulations may make provision for or with respect to:
 - (a) the class or classes of premises, or industries carried out at premises, that may be the subject of a requirement to prepare a pollution incident response management plan, and
 - (b) the circumstances in which some or all premises within those classes may be the subject of a requirement to prepare a pollution incident response management plan.

153C Information to be included in plan

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, and
 - 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
 - (iii) any persons or authorities required to be notified by Part 5.7,
- (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
- (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,
- (d) any other matter required by the regulations.

153D Keeping of plan

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.

Maximum penalty:

- (a) in the case of a corporation—\$1,000,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues, or
- (b) in the case of an individual—\$250,000 and, in the case of a continuing offence, a further penalty of \$60,000 for each day the offence continues.

153E Testing of plan

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.

Maximum penalty:

- (a) in the case of a corporation—\$2,000,000 and, in the case of a continuing offence, a further penalty of \$240,000 for each day the offence continues, or
- (b) in the case of an individual—\$500,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues.

153F Implementation of plan

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.

Maximum penalty:

- (a) in the case of a corporation—\$2,000,000 and, in the case of a continuing offence, a further penalty of \$240,000 for each day the offence continues, or
- (b) in the case of an individual—\$500,000 and, in the case of a continuing offence, a further penalty of \$120,000 for each day the offence continues.

2. Scope

The scope of this management plan includes:

Pollution Incident Response Management Plan (PIRMP) for environmental pollution generated at the Jandra Quarry;

3. Definitions

- Pollution Incident 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.
- Material Harm -(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), It does not matter that harm to the environment is caused only in the premises where the pollution incident occurs, and

Loss - 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.

4. Associated Documentation

- Protection of the Environment Operations Act 1997
- Protection of the Environment (General) Amendment (Pollution Incident Response Management Plans) Regulation 2012
- Appendix A: Emergency Contact Details

- Appendix B: Pollution Incident Response Test Checklist
- Appendix C: Community Notification Strategy

5. Responsibility

The following personnel are responsible for the PIRMP;

- 1) Activating the plans and managing the response: Matthew Neil Site Manager
- 2) Notifying and coordinating relevant authorities Matthew Neil Site Manager , David Saville Quarry supervisor
- 3) Implementation and management of this document: NSW/ACT Planning & Environment Coordinator
- 4) Annual review and testing of PIRMP NSW/ACT Planning & Environment Coordinator

6. Record Retention

A copy of all Quarry pollution incident response records will be retained on site in accordance with SHE guideline 1.4 – Administrative and Legal Requirements. A copy will also be saved electronically on google drive in the 'Site PIRMPs Final' folder and linked with the site's SHE schedule.

Records must be made available to EPA officers and any person responsible for the PIRMP.

7. Procedure

The following section outlines the management procedures for pollution incident response management. The protocol is split into three sections:

- 1) Key environmental hazards and mitigation measures
- 2) Pollutant and Safety equipment information and management of Pollution Incidents
- 3) Emergency Response Maps

7.1 Environmental Impact and Hazard Register

In order to effectively plan for a potential pollution event, a register of environmental hazards has been created. Each hazard has been assessed in accordance with the Holcim SHE Risk Assessment tool (see Table 1 below).

The hazards have been grouped according to the area of environmental impact. By identifying these hazards ahead of time, mitigation measures can be identified and implemented through site procedures to minimise the risk of a pollution event occurring (table 2 below).

Step 1 - Consider the Consequence

What are the consequences of the most reasonable worst case scenario considering a credible failure of existing controls?

Consequence	Disaster	Severe	Serious	Significant	Minor
Environment On Site & Off Site	Major event, unconfined impact, severe permanent damage with low likelihood of recovery.	Significant permanent damage; reversible damage with recovery time of years; high potential for prosecution	Minor permanent damage; temporary damage that is widespread or that has moderate impact	Damage that is near source confined, temporary and minor	No measurable damage to environment
Compliance With Legal and Other Requirements	Blatant or serious breach of legal requirement, leading to operation being suspended or severely reduced. Prosecution expected.	Breach of external requirement (license, legislation, regulation, contract etc.) with high potential for prosecution and/or high impact.	Non-compliance with external requirement with moderate potential for impact.	Repeated non-compliance with internal procedure, non-compliance with external requirement with low potential impact	Minor non-compliance with internal procedures.
Community Perception and Reputation	Significant adverse media attention (state or national level), loss of reputation or work nationally or across product groups.	Prosecution, significant impacts on social license to operate, loss of reputation or ability to secure work across product groups.	Local adverse media attention, loss of reputation or ability to secure work in local area, complaints that result in changes to external requirements.	Multiple community complaints or complaints that require changes to internal operating procedures.	Community complaint resolved with no changes to existing operating procedures.

Note: Temporary environmental damage has a duration of up to approximately one week to rectify

	Step 2 - Consider the Likelihood														
	What is the likelihood that the proposed consequence will occur with a credible failure of existing controls?														
Likelihood	Certain	Likely	Possible	Unlikely	Rare										
Description	Event that is expected to occur on multiple occasions	Event that is likely to occur at least once	Event that may occur	Event that is unlikely to occur	Event that may occur only in exceptional circumstances										
Frequency	Event is likely to occur more than twice a year.	Event is likely to occur once or twice a year.	Event is likely to occur more than once or twice in a 10 year period	Event is likely to occur once or twice in a 10 year period	Event is likely to occur once or twice in a 100 year period										

Step 3 - Determine Risk Rating from the Risk Matrix														
Liklihood	Consequences													
Likilloou	Disaster	Severe	Serious	Significant	Minor									
Certain	High	High	High	Medium	Medium									
Likely	High	High	Medium	Medium	Low									
Possible	High	Medium	Medium	Low	Low									
Unlikely	Medium	Medium	Low	Low	Low									
Rare	Medium	Low	Low	Low	Low									

10

Table 2: Holcim Quarry Environmental Impact and Hazard Register

Ko	/ Environmental Hazards	Risl	ĸ		Mitigation Measures	Revised Risk		
-		L				L	С	R
A 1	r Quality Excessive dust emissions	P o s i b l e	S e r i u s	M e d i u m	 Complete monitoring & assess results monthly Review results & monitoring program quarterly Water carts/spraying Minimise disturbed areas Stop dust generating activities as necessary Progressively rehabilitate disturbed areas Restrict works during periods of high wind Dust minimisation training Maintenance of dust control equipment Report on ICARE 	U n i k e I y	S i g n i f i c a n t	L o w
2	Health issues off site	R a r e	S e v e r e	L o w	 As per (1) Complaints hot line Issue monitoring results Communicate construction activities to neighbours plus potential for dust 	R a r e	S e r i o u s	L o w
3	Equipment exhaust emissions exceed limits	U n i k e	S i g n i f i	L o w	 Inspect equipment engine emissions regularly All equipment is serviced and maintained to OEM requirements Excessive equipment emissions to trigger out of service procedures 	R a r e	S i g i i f i	L o w

			C				C	
		у	a				a	
			n 1					
4	Release of dry powder emissions due to silo overpressure event	U n i k e I y	t S e r i o u s	L o w	 Installation of reverse pulse filters and pressure release valves Maintenance of filter units on a three-monthly schedule Maintenance of infill controls on six-monthly schedule. Tanker blow-in inspections Silo hatches and dipping points are air tight Check tank / silo integrity Tool Box Talk and training for Drivers, operators and key personnel 	R a r e	t S i g n i f c a n	L o w
5	Release of dry powder emissions due to silo overfill event	U n i k e J y	S e r i o u s	L o w	 High level sensors installed as part of fail-safe fill system Maintenance of fail-safe fill system on six-monthly schedule Inspection and testing protocol of fail-safe fill system Full silo filtration service and defect check quarterly SRV Valve integrity Dust filtration unit between silos (if connected) 	R a r e	S i g n i f c a t	L o w

1	Groundwater contamination	Unlikely	S e r i o u s	L o w	 Implement Monitoring and response plan Review monitoring results quarterly & action as necessary Ensure storage, handling and transport of dangerous goods are conducted in accordance with Australian Standards Identify, classify, quantify & appropriately store hazardous waste Develop & implement oil & fuel spillage controls Ensure hazardous waste is minimised Licenced contractors to remove hazardous waste from site Keep records of all hazardous waste movements Develop & implement oil & fuel spillage controls Implement bunding to appropriate areas Ensure adequate spill kits are available on site including adequate training Minimise hazardous waste storage quantities on site (Hazard & Risk register) Environmental review and audit for Regulatory Compliance Adherence to Environmental Management Plans Reported on ICARE to capture findings and corrective and preventive actions. 	R a r e	S e r i o u s	L o w
2	Lowering of groundwater table	R a r e	S e r i o u s	L o w	 Monitor & report on ground water levels Comply with Water Management Plan water balance 	R a r e	S i g n i f i c a n t	L o w
3	Acid-sulphate soils	L i k e	S e r i o	M e d i	 Acid sulphate status is known Implement acid-sulphate management plan Regular review of acid-sulphate management plan outcomes 	U n i k	S e r i o	L o w

S u 1	Irface Water Discharge of sediment	I y P s s i b I e	u s S e r i o u s	u m M e d i u m	 Develop & implement Water Management Plan Implement Monitoring Program Review monitoring results quarterly & action as necessary Develop & implement Surface & Groundwater Response Plan Develop & implement Erosion & Sediment Control Plan Implement dust control procedures 	e I y U n I k e I y	u s e r i o u s	L o w
2	Discharge of hazardous materials	R a r e	S e v e r e	L o w	 As per (1) Ensure storage, handling and transport of dangerous goods are conducted in accordance with relevant Australian Standard Review monitoring results quarterly & action as necessary Identify classify, quantify & appropriately store hazardous waste Develop & implement oil & fuel spillage controls Implement bunding to appropriate areas Ensure adequate spill kits are available on site including adequate training for effective use Minimise hazardous waste storage quantities on site Appropriate location of hazardous materials storage areas to prevent off-site discharges Report on ICARE 	R a r e	S e r i o u s	L o w

1	Blasting impacts	U n i k e I y	S e r i o u s	L o w	 Develop & implement Blast Monitoring Program Develop & implement Blast Management Plan Detailed design & predictive modelling for each blast Monitoring of each blast with feedback to model Establish blast monitoring reference locations Notify sensitive receivers in accordance with site blasting plans Establish & advertise blasting hotline Drill accuracy is monitored via bore tracking procedures Establish site blasting procedures & train personnel including sirens etc Clear site to safe areas prior to blasts 	U n l k e l y	S e r i u s	L o w
2	Vibration / airblast damage to off-site structures	R a r e	S e v e r e	L o w	 As per 1 Monitor sensitive areas & review blast design as necessary inspect sensitive areas pre & post all blasts 	R a r e	S e r i u s	L o w
	Damage to local flora	P o s i b I e	S e r i u s	M e d i u m	 Develop & implement Biodiversity Action Plan Put in adequate physical protection measures including signage Monitor & report on site flora health regularly Suitable training regarding flora protection Removal of stock from sensitive areas Implement bushfire hazard reduction tasks Removal of feral animals from sensitive areas Noxious weed control in sensitive areas Reported on ICARE to capture findings and corrective and preventive actions. 	U n l k e l y	S ign if can t	L o w

2	Damage to site fauna	U n i k e J y	S e r i o u s	R a r e	 As per (1) Information regarding local WIRES for distressed or injured fauna 	R a r e	S e r i o u s	L o w
3	Dust pollution onto site sensitive ecological areas	U n i k e J y	S e v e r e	M e d i u m	 As per (1) Comply with site Management Plans Regular review of riparian areas (as per Management Plans) Reported on ICARE to capture findings and corrective and preventive actions. 	U n i k e I y	S i g n i f c a t	L o w
1 1	nd Spill of liquid fuel whilst in storage	P o s s i b l e	S e v e r e	M e d i u m	 Fuels stored according to Holcim's bunding requirements. Measures in place to ensure spills do not leave site boundaries ie diverting flow away from boundaries, stormwater drains. Bunding subject to regular inspection and maintenance 	S i g n i f i c a n t	U n i k e I y	L o w

2	Spill during delivery of fuel to mobile equipment	P o s i b I e	S e v e r e	M e d i u m	 Breakaway couplings installed on mobile fuel delivery vehicles. Drivers stay with vehicle during refuelling Emergency spill kits located on fuel delivery vehicles. Spill response equipment is regularly inspected and maintained Mobile refuelling takes place in the pit Drivers trained in spill response procedures. Refuelling takes place in designated refuelling areas. Spill Management response is activated Reported on ICARE to capture findings and corrective and preventive actions. 	U n l k e l y	S i g n i f i c a n t t	L o w
3	Spill during delivery of fuel to storage tank	P o s i b l e	S e v e r e	M e d i u m	 Supplier's fuel transfer procedure is known Fuel transfer is supervised against suppliers procedure Reported on ICARE to capture findings and corrective and preventive actions. 	U n i k e I y	S i g n i f c a n t	L o w
4	Spill of pre-coat	P o s i b l e	S v e r	M e d i u m	 Monitor production to ensure minimum amount is used Pre-coat aggregate stockpile areas drain through an oil-water separator or similar device Pre-coats stored according to Holcim's bunding requirements. Measures in place to ensure spills do not leave site boundaries ie diverting flow away from boundaries, stormwater drains. Bunding subject to regular inspection and maintenance Reported on ICARE to capture findings and corrective and preventive actions. 	U n i k e I y	S i g n i f i c	L o w

5	Improper storage of cementitious materials	L i k e I y	S i g n i f i c a n t	M e d u m	 Ensure water leachate is contained on site Quantities held on site are minimised or capped Location of stockpiles close to processing point Cementitious materials are managed in accordance with approval conditions Excess cementitious materials are disposed of in accordance with legislative requirements Reported on ICARE to capture findings and corrective and preventive actions. 	U n i k e I y	a n t S i g n i f i c a n t	L o w
6	Land contamination	Likely	S g n f c a n t	M e d i u m	 Holcim land contamination strategy is known and applied Reported on ICARE to capture findings and corrective and preventive actions. 	U n i k e I y	S g n i f c a n t	L o w

7.2 Pollutant and Safety Equipment Information

Legislative requirements under the Protection of the Environment Operations (POEO) Act dictate that the site is to provide information for all pollutants that are used and stored on the site. This information is required as it assists personnel responsible for coordinating spill responses to more effectively manage spills.

This information must be presented as a manifest detailing the pollutants stored at the site, the location of these storage areas, and the safety equipment to be made available at these areas. A Pollution Information Data Sheet (PIDS) has been prepared that includes the following information for each pollutant:

- The intended use for the pollutant
- How the pollutant is stored
- SDS information
- 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
- PPE needed to safely manage a spill of the pollutant
- Procedure for cleaning up a spill of the pollutant.

Refer to table 3 below for detail. In order to ensure the currency and reliability of the information in the PIDS, the information should be reviewed and updated on a monthly basis.

Fuel (Hydrocarbons, oil, petrol, diesel, solvents & Cleaning chemicals)	Undercover Fuel Bay	Yes	Sand, earth, vermiculite	PVS gloves, safety glasses, goggles	Large Spill Assess Quickly assess the spill: Decide whether to handle the situation by yourself or if you require help. Advise your team of the hazard Post a guard or barricade Can you stop the source of the spill? Ensure Personal Safety First priority is to ensure safety of yourself and others in the area Consider evacuation and isolation. Do you or others require PPE Check Safety Data Sheet Secure Secure the spill If hazardous to public or other staff exists

Table 3: Pollutant Information Data Sheet and clean-up methods

		Post a guard immediately
		Enter barricades to prevent unintended access
		<u>Contain</u>
		Contain the spill quickly by surrounding with the booms which should be firmly secured in place. Find the source of the leak and stop it Emergency stop, cap, plug, move, adjust Move other containers from that area to a bunded area
		In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment.
		<u>Prevent</u>
		Prevent spillage to stormwater drains and entry into sewer, water courses, basements or confined areas.
		<u>Absorb</u>

		Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
		Recover product from the surface.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor
		<u>Disposal</u>
		Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor.
		Contaminated absorbent material may pose the same hazard as the spilt product. Monitor its disposal. The spill soiled bags need to be labelled and ear marked and placed in a leak proof
		container which is locked. SDS should be made available.

					<u>Reporting</u>
					Incident and Corrective and Preventative action should be captured on the ICARE.
					Small Spill
					Stop leak without risk.
					Move containers from spill area
					Absorb with an inert material and place in appropriate waste disposal container.
					Use spark-proof tools and explosion-proof equipment.
					Dispose of via a licensed waste disposal contractor.
Vehicle fluids and Lubricants	Lubricants Container	Yes	Sand, earth, vermiculite, barrier	PVC Gloves, safety glasses,	<u>Large Spill</u> <u>Assess</u>
			equipment (booms, floats etc.)	goggles	Quickly assess the spill: Decide whether to handle the situation by yourself or if you require help.

			Advise your team of the hazard
			Post a guard or barricade
			Can you stop the source of the spill?
		Ē	Ensure Personal Safety
		F	First priority is to ensure safety of yourself and others in the area Consider evacuation and isolation. Do you or others require PPE Check Safety Data Sheet
		5	Secure
		ξ	Secure the spill If hazardous to public or other staff exists Post a guard immediately Enter barricades to prevent unintended access
		<u>(</u>	Contain
			Contain the spill quickly by surrounding with the booms which should be firmly secured in place.
			Find the source of the leak and stop it Emergency stop, cap, plug, move, adjust Move other containers from that area to a bunded area

		In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment.
		<u>Prevent</u>
		Prevent spillage to stormwater drains and entry into sewer, water courses, basements or confined areas.
		<u>Absorb</u>
		Contain and collect spillage with non-combustible, absorbent
		material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
		Recover product from the surface.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor
		<u>Disposal</u>

		Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor.
		Contaminated absorbent material may pose the same hazard as the spilt product. Monitor its disposal. The spill soiled bags need to be labelled and ear marked and placed in a leak proof container which is locked. SDS should be made available.
		Reporting
		Incident and Corrective and Preventative action should be captured on the ICARE.
		Small Spill
		Stop leak without risk.
		Move containers from spill area
		Absorb with an inert material and place in appropriate waste

					disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
Truck wash	Undercover Bunded Fuelling Area	Yes	Sand, earth, vermiculite	PVC Gloves, safety glasses	Large Spill Assess Quickly assess the spill: Decide whether to handle the situation by yourself or if you require help. Advise your team of the hazard Post a guard or barricade Can you stop the source of the spill? Ensure Personal Safety First priority is to ensure safety of yourself and others in the area Consider evacuation and isolation. Do you or others require PPE Check Safety Data Sheet

		Secure
		Secure the spill If hazardous to public or other staff exists Post a guard immediately
		Enter barricades to prevent unintended access
		<u>Contain</u>
		Contain the spill quickly by surrounding with the booms which should be firmly secured in place. Find the source of the leak and stop it Emergency stop, cap, plug, move, adjust Move other containers from that area to a bunded area
		In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment.
		<u>Prevent</u>
		Prevent spillage to stormwater drains and entry into sewer, water courses, basements or confined areas.

		Absorb
		Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
		Recover product from the surface.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor
		<u>Disposal</u>
		Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a container according to local legislation.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor.
		Contaminated absorbent material may pose the same hazard as the spilt product. Monitor its disposal. The spill soiled bags need

			to be labelled and ear marked and placed in a leak proof container which is locked. SDS should be made available. Reporting Incident and Corrective and Preventative action should be captured on the ICARE. Small Spill Stop leak without risk. Move containers from spill area Dilute with water and mop up, or absorb with an inert dry material and place in appropriate waste disposal contractor.
Pre-coat Oil	Yes	Sand, earth, vermiculite	Accidental release

Undercover Fuelling Area		PVC Gloves, safety glasses, goggles, overalls	Assess First priority is to ensure safety of yourself and others in the area Consider evacuation and isolation. Do you or others require PPE Check Safety Data Sheet In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the relevant authorities.
			Ensure Personal Safety Wear full protective clothing including eye/face protection. All skin areas should be covered. Stop leak if safe to do so, and contain the spill. Secure

		Secure the spill
		If hazardous to public or other staff exists
		Post a guard immediately
		Enter barricades to prevent unintended access
		Absorb onto sand, vermiculite or other suitable absorbent material.
		If the spill is too large try to create a dike to stop material
		spreading or going into drains or water-ways
		Avoid using sawdust or other combustible material.
		Contain and Disposal
		Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose promptly.
		Use spark-proof tools and explosive proof equipment. Dispose of via a licensed waste disposal contractor.
		If it is possible that material harm to the environment has occurred relevant personnel should be contacted

					Reporting
					Incident and Corrective and Preventative action should be captured on the ICARE.
Hardeners and	Workshop	Yes	Sand, earth, vermiculite	Safety glasses,	Major Spills
Resins				PVC gloves,	Large Spill
				Respirator	
					Assess
					Quickly assess the spill:
					Decide whether to handle the situation by yourself or if
					you require help.
					Advise your team of the hazard
					Post a guard or barricade Can you stop the source of the spill?
					Ensure Personal Safety
					First priority is to ensure safety of yourself and others in the area
					Consider evacuation and isolation.
					Do you or others require PPE
					Check Safety Data Sheet

		<u>Secure</u>
		Secure the spill If hazardous to public or other staff exists Post a guard immediately Enter barricades to prevent unintended access
		<u>Contain</u>
		Contain the spill quickly by surrounding with the booms which should be firmly secured in place. Find the source of the leak and stop it Emergency stop, cap, plug, move, adjust
		Move other containers from that area to a bunded area
		In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment.
		<u>Prevent</u>

courses, basements or confined areas. Absorb Contain and collect spillage with non-combustible, absord material e.g. sand, earth, vermiculite or diatomaceous ear place into a container according to local legislation. Recover product from the surface. Use spark-proof tools and explosive proof equipment. Dist	sewer, water
material e.g. sand, earth, vermiculite or diatomaceous earth place into a container according to local legislation. Recover product from the surface.	
The solution of the solution o	Dispose of
via a licensed waste disposal contractor	
Disposal Contain and collect spillage with non-combustible, absorb material e.g. sand, earth, vermiculite or diatomaceous ear place into a container according to local legislation.	
Use spark-proof tools and explosive proof equipment. Dis via a licensed waste disposal contractor.	. Dispose of

		Contaminated absorbent material may pose the same hazard as the spilt product. Monitor its disposal. The spill soiled bags need to be labelled and ear marked and placed in a leak proof container which is locked. SDS should be made available.
		Reporting
		Incident and Corrective and Preventative action should be captured on the ICARE.
		Minor Spills
		Contain spillage
		Avoid breathing vapours and contact with skin and eyes
		Control contact using PPE
		Contain and absorb with sand, earth, inert material, vermiculite etc.
		Small spills should be covered with inorganic absorbents and disposed of properly. Organic absorbents (ie. sawdust) may ignite when contaminated with amines in closed containers

Dry Powders	Pugmill Silo	Yes	Access to council sweeper, soil, sand, vermiculite	Safety glasses, PVC Gloves,	Accidental Release Measures Emergency procedures: Prevent entry to area by unprotected personnel. Methods and material for containments and clean up Vacuum or wet sweep material avoiding generation of dusts. A fine water spray should be used to suppress dust when sweeping. Product dampened with water may be collected with a clean shovel. Seal all spilled product and wastes in vapour tight labelled plastic containers for reuse/recycle where possible or eventual disposal. Report on ICARE.
Welding gas	Gas Storage Cage	Near Top Weighbridge	Ventilation	Respirator	<u>Occupational Release:</u> Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk.

					Reduce vapours with water spray Keep unnecessary people away, isolate hazard area and deny entry. Remove sources of ignition. Ventilate closed spaces before entering. Report on ICARE
Effluent	Envirocycle System	Near Spares Shed	Access to council commercial vacuum/ pump truck,, soil, sand, bleach, hydrated lime	PVC Gloves, goggles, overalls	Accidental Release Measures Contaminated area must be clearly marked or cordoned off to restrict access. Protective clothing should be worn when cleaning up a sewage spill. If the spilled material can't be recovered using hand tools, a commercial vacuum / pump truck should be called to remove all visible liquid and solid material. When the area is visibly clean, either a chlorine / water solution or hydrated lime should be applied to the spill area to disinfect.

		If a major spill has occurred hydrated lime should be applied to the area in place of chlorine bleach.
		Enough hydrated lime should be applied to raise the pH to at least 12. By raising the pH to 12 for at least 1 hour, the area will be disinfected.
		Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period.
		Report on ICARE.

(1) This information should be drawn from a review of the SDS or Manufacturer / Supplier Technical Information

7.3 Emergency Response Map

In addition to the PIDS the site needs to prepare an emergency response map that provides the following information;

- address of site
- location of pollutant storage
- location of safety equipment
- emergency evacuation / muster points
- stormwater drains / flow paths
- sensitive receivers
- sediment dam overflow locations
- location of SDS
- surrounding area that is likely to be affected by a pollution incident
- discharge location of stormwater drains to nearest water coarse or water body

Existing site maps that have been developed to comply with Holcim SHE system requirement 1.84 may be used if all the required items have been included. If an existing map is not available it should be created.

It is important to clearly identify these items so as to be able to respond in an emergency situation.



JANDRA QUARRY - SITE MAP 5 (JQ002-5) - FIRE & EMERGENCY PROCEDURE MAP

JANDRA QUARRY - SITE MAP 6 (JQ002-6) - INVENTORY OF POLLUTANTS



Legend

Key	Product	Maximum Hold Quantity
00	Oil	8,000 Litres
-	Waste Oil	2,000 Litres
	Diesel Fuel	30,000 Litres
	Precoat Oil	10,000 Litres
T	Paint	1,000 Litres
	Solvents	300 Litres
	Hardeners & Resins	750 Litres
	Lime	40 Tonnes
	Gas	108 Cubic Metres
	Effluent	3,000 Litres

Direction of Natural Drainage

Direction of Underground Drainage Pipes



Author: Holcim Australia

7.4 PIRMP Review

Review of PIRMP will be undertaken to check that the information is accurate and current and that the plan is capable of being implemented in a workable and effective manner. Reviewing shall be undertaken in the following ways:

The PIRMP will be tested annually and any identified updates or changes will be made. The PIRMP will be tested and reviewed within one month from the date of any pollution event that triggers this PIRMP. The review will also consist of assessment of any additional hazards and control measures.

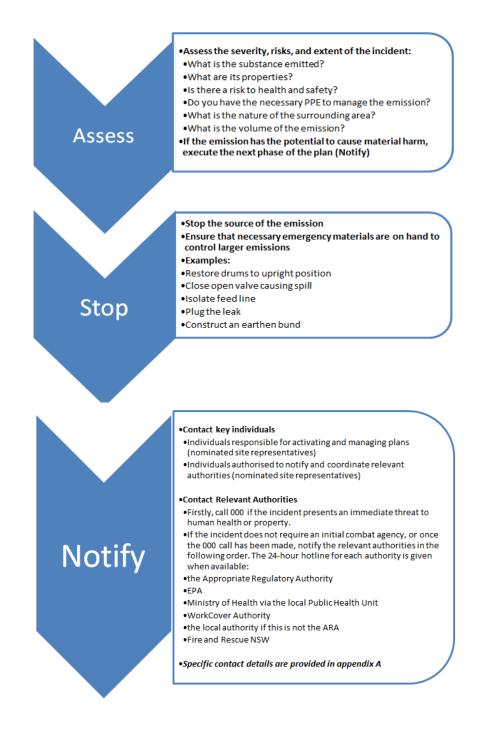
In addition to site evacuation drills, a mock environmental incident will be done once a year to ensure all site personnel are following training and correct procedures. The mock scenario will be set and all the actions will be captured on the check sheet. Based on these mock incidents, the Site manager and the Planning and Environmental Coordinator will review the site personnel preparedness and site procedures to identify gaps or areas for improvement. Records of the drill will be maintained, including follow up of opportunities for improvement identified during emergency drills.

7.5 Typical Holcim Response process

If it is suspected that an incident may cause material environmental harm the Pollution Incident Management Response Plan will be executed. This plan is based on seven phases:

- 1) Assess
- 2) Stop
- 3) Notify
- 4) Contain
- 5) Mitigate
- 6) Clean up
- 7) Review

Details of the requirements and responsibilities for each phase are explained in the following page.



Issue date: October 2023

Contain	 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 ie absorbent granules or sand The main priority is to prevent the emitted material from discharging off site
Mitigate	 Implement environmental controls downstream of pollution source to prevent/minimise further impact to receiving environment Example: A Fuel spill discharged into quarry dam. Mitigation controls to ensure this spill is not spread may include closing of weirs, or outlets, ensuring water cart does not fill from affected dam etc.
Clean -up	 Clean up and remedial actions to restore the environment Disposal of pollutants in accordance with regulations Refer to the Pollution Information Data Sheets (PIDS) for information on handling pollutants and the clean-up process.
Review	 Conduct an investigation into the event and assist the EPA and investigators with external enquiries Complete internal reporting; As per Holcim SHE requirement 5.1 Test the effectiveness of Pollution Incident Response Management Plan annually and one month after the incident to ensure controls are replenished. <i>Testing protocol is provided in appendix B</i>

Issue date: October 2023

7.6 Communication Strategy

It is a legal requirement of the Protection of the Environment Operations (POEO) Act, to notify key stakeholders in neighbouring properties that may been affected by an incident.

Communicating with neighbours and the community in the event of a spill is vital as they have a right to know about any spill that can potentially lead to material harm to their properties or themselves. The communication strategy in the PIRMP provides sites with a method of communicating with key stakeholders.

Key stakeholders can include neighbouring residential and/or commercial properties, sensitive receivers i.e. farms, hospitals schools etc. Consideration must be given to sensitive receivers that may be affected if the emission reaches a water body. For example, a farmer that is cultivating crops down river from your site will need to be informed of a spill to prevent him spraying his crops with polluted irrigation water.

The PIRMP must include details of the mechanisms that will be used for providing early warnings and regular updates to the owners and occupiers of premises who may be affected by an incident occurring at the premises.

The communication strategy should also make reference to any actions or arrangements that will be in place to minimise the risk of harm to any persons who will be on the premises or who are likely to be on the premises at the time of an incident. This is a legislative requirement that needs to be included in the PIRMP.

For a table detailing the communication strategy for this site:

Refer to Appendix C – Community Notification Strategy

7.6 Staff Training

Sites need to develop a toolbox talk based on the PIRMP. This training should be delivered to all appropriate personnel on site.

Frequency of training

Training should be repeated annually, and after each update.

How Records of training are kept

Training records should be stored on site and in the Chris 21 data base. The records are to be made available to relevant authorities on request.

7.7 Continual Improvement

It is a legislative requirement for this plan to be tested and updated on an annual basis and within one month of an incident.

To complete this requirement a Pollution Incident Response Test Checklist has been prepared and provided as Appendix B. The checklist includes the major elements of the plan that require testing:

- Contact numbers
- Evacuation drills
- Desktop assessment
- Environmental controls & PPE

Desktop assessments require site personnel, responsible for testing the plan, to select a scenario from the hazard and impact register (table 2) and ensure that all the required controls for the scenario are in place. During the desktop assessment environmental control and PPE equipment supplies should be inspected to ensure that they are functional and that there are enough materials to ensure that emissions relating to the scenario can be controlled effectively and safely.

Appendix A -Emergency Contact Details

Individuals response Quarry Manager David Saville – 0429 790 983 David Saville – 0429 790 983 Individuals Authorised to Notify and Coordinate Relevant Authorities Quarry Supervisor Peter Wilson – 0429 790 926 Peter Wilson – 0429 790 926 Emergency Services 00 EPA 131 555 The Ministry of Health via the local Public Health Unit Manning Hospital, Taree 26 York St, Taree NSW 2430, Australia (02) 6592 9111 WorkCover Authority 13 10 50 Department of Mines 0447629973 Local Council Greater Taree Council 6592 5399 Great Lakes Council Fire and Rescue NSW 000	Contacts	Phone Number
Individuals Authorised to Notify and Coordinate Relevant Authorities Quarry Supervisor Peter Wilson – 0429 790 926 Peter Wilson – 0429 790 926 Emergency Services 000 EPA 131 555 The Ministry of Health via the local Public Health Unit Manning Hospital, Taree 26 York St, Taree NSW 2430, Australia (02) 6592 9111 WorkCover Authority 13 10 50 Department of Mines 0447629973 Local Council Greater Taree Council 6592 5399 Great Lakes Council 6591 7222 6591 7222		Quarry Manager
Relevant AuthoritiesPeter Wilson – 0429 790 926Emergency Services000EPA131 555The Ministry of Health via the local Public Health UnitManning Hospital, Taree26 York St, Taree NSW 2430, Australia (02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973 (02) 49316638Local CouncilGreater Taree Council 6592 5399Great Lakes Council 6591 7222		David Saville – 0429 790 983
Emergency Services000SES - (02) 6551 2400EPA131 555The Ministry of Health via the local Public Health UnitManning Hospital, Taree26 York St, Taree NSW 2430, Australia(02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973(02) 49316638Local CouncilGreater Taree Council6592 5399Great Lakes Council6591 7222	•	Quarry Supervisor
SES - (02) 6551 2400EPA131 555The Ministry of Health via the local Public Health UnitManning Hospital, Taree 26 York St, Taree NSW 2430, Australia (02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973 (02) 49316638Local CouncilGreater Taree Council 6592 5399Great Lakes Council 6591 7222Great Lakes Council		Peter Wilson – 0429 790 926
EPA131 555The Ministry of Health via the local Public Health UnitManning Hospital, Taree26 York St, Taree NSW 2430, Australia(02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973Local CouncilGreater Taree CouncilLocal CouncilGreater Taree Council6592 5399Great Lakes Council6591 72226591 7222	Emergency Services	000
The Ministry of Health via the local Public Health UnitManning Hospital, Taree26 York St, Taree NSW 2430, Australia(02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973(02) 49316638Local CouncilGreater Taree Council6592 5399Great Lakes Council6591 7222		SES - (02) 6551 2400
26 York St, Taree NSW 2430, Australia (02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973 (02) 49316638Local CouncilGreater Taree Council 6592 5399Great Lakes Council 6591 7222Great Lakes Council	EPA	131 555
(02) 6592 9111WorkCover Authority13 10 50Department of Mines0447629973(02) 49316638(02) 49316638Local CouncilGreater Taree Council6592 5399Great Lakes Council6591 72226591 7222	The Ministry of Health via the local Public Health Unit	Manning Hospital, Taree
WorkCover Authority13 10 50Department of Mines0447629973(02) 49316638(02) 49316638Local CouncilGreater Taree Council6592 5399Great Lakes Council6591 72226591 7222		26 York St, Taree NSW 2430, Australia
Department of Mines0447629973(02) 49316638(02) 49316638Local CouncilGreater Taree Council6592 5399Great Lakes Council6591 72226591 7222		(02) 6592 9111
(02) 49316638Local CouncilGreater Taree Council6592 5399Great Lakes Council6591 7222	WorkCover Authority	13 10 50
Local Council Greater Taree Council 6592 5399 Great Lakes Council 6591 7222 6591 7222	Department of Mines	0447629973
6592 5399 Great Lakes Council 6591 7222		(02) 49316638
Great Lakes Council 6591 7222	Local Council	Greater Taree Council
6591 7222		6592 5399
		Great Lakes Council
Fire and Rescue NSW 000		6591 7222
	Fire and Rescue NSW	000
(02) 6551 5246		(02) 6551 5246
Additional Contacts relevant to the licensee's premises Taree Rural Fire Brigade	Additional Contacts relevant to the licensee's premises	Taree Rural Fire Brigade
133 473		133 473
(02) 6551 5246		(02) 6551 5246

Date:17-10-2023
Site: Jandra Quarry
Address:15284 Pacific Highway Possum Brush 2430

Pollution Incident Scenario:....Oil spill due blown hose on crusher 3

Instructions

1. Select an Environmental Incident applicable to the site to test in a Pollution Scenario (this may include a major spill, equipment failure or breaches of license consent that may cause impacts onsite and to the surrounding community);

2. Using the scenario conduct a desktop review using the Test Checklist as a prompt to ensure that each component of the PIRMP is up to date;

3. Sign off the checklist, scan and send to the NSW Planning & Environmental Coordinator;

4. Planning & Environmental Coordinator will make amendments to the plans and submit these to the site managers for review and approval;

5. Site Managers to hold a tool box talk with staff on the details of the PIRMP and keep a copy of the PIRMP onsite for future reference.

Are all contact details within the plan current and up to date?	Phone Numbers	
	Currency	Updated Number
Individuals responsible for activating the plans and managing the response	Quarry Manager - David Saville	0429790983
Individuals Authorised to Notify and Coordinate Relevant Authorities	Quarry Supervisor - Peter Wilson	0429790926

Emergency Services	000 or SES	(02) 6551 2400
EPA		131 555
The Ministry of Health via the local Public Health Unit	Inside Australia	(02) 9391 9000
WorkCover Authority		13 10 50
Local Council	Greater Taree Council Great Lakes Council	6592 5399 6591 7222
Fire and Rescue NSW		(02) 6551 5246
Additional Contacts relevant to the licensee's premises	Quarry Manager - David Saville Quarry Supervisor's - Peter Wilson - Peter Lovell	0429790983 0429790926 04273092536
Other Organisations or agencies that need to be advised of the incident	n/a	

Environmental Hazards and Control Standards	Yes/ No	Actions
Are the descriptions of environmental hazards up to date?	Yes	

Are the potential and likelihood of incidents that could occur still correct and relevant to the site operations?	Yes	
Are the pre-emptive actions for risk management of the relevant activity correct and relevant to the site?	Yes	
Is there an inventory of pollutants (including quantities of pollutants onsite)?	Yes	
Is the listed safety equipment & PPE correct and up to date?	Yes	
Is there a map/s located onsite detailing the following; - The site and the surrounding area likely to be affected in the event of an incident - The Locations of storage/ holding points of pollutants - Stormwater drains and discharge points offsite	Yes	
Are the nature and objectives of staff training set out in the plan?	Yes	
Are there details of mechanisms for providing early warnings and regular updates to the owners and occupiers?	Yes	
Is there a copy of the plan onsite and up to date?	Yes	

Date:	17/10/2023
Notes:	

Improvements to the Pollution Incident Response Management Plan:

- Keep crushing plants well maintained so we can identify oil leaks.
- Make sure spill kits are locked with small cable ties so the equipment can not be used for general maintenance.

Comments / Recommendations / Review

Pollution Incident Response Test Checklist Assessor:.....David Saville

Signed:.....

•

If there is an Environmental Incident that has the potential to cause harm to the following stakeholders they will be contacted by TELEPHONE

Stakeholder Component	Name	Contact Information
Quarry Neighbours	Leslee and Peter Neville	0409120398
Quarry Neighbours	David Loveday	0403198445
Quarry Neighbours	Ken Taylor	0418210434