Strength. Performance. Passion.

Teven Quarry
Environmental Management Strategy

Holcim Australia
April 2021 Update

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1. Introduction

1.1 Background

This Environmental Management Strategy (EMS) describes the strategic context of the environmental management of operations at the Teven Quarry and the environmental management framework that will be implemented at the quarry.

The EMS describes how Holcim Australia (Holcim) will identify, address and manage the environment at the Teven Quarry. The Teven Quarry EMS has been developed in accordance with International Standards Organisation (ISO) 14001 (AS/NZS ISO 14001:2004) and is consistent with the Holcim EMS.

Implementation of this EMS will assist in minimising the environmental impacts of the Teven Quarry by facilitating continual improvement in environmental performance. The EMS promotes proactive environmental management, which will facilitate ongoing compliance with environmental commitments and legislative requirements. The EMS also details how Holcim proposes to maintain and build its good relationships with the local community and other key stakeholders.

1.2 Objectives and Purpose

The objectives of the EMS are to:

- Provide the overall framework for environmental management at Teven Quarry utilising the principles of ISO 14001 (AS/NZS ISO 14001:2004);
- Ensure compliance with the Teven Quarry Development Consent (SSD 6422), Environmental Protection License (EPL) (License Number 3293), the commitments in the Teven Quarry EIS (EIS, Umwelt 2014) and other Project-specific environmental licences and permits and relevant legal requirements;
- Effectively integrate the requirements of the Holcim Environmental Management System into a site-specific document, detailing environmental management objectives and responsibilities at Teven Quarry;
- Show the relationship and interactions between various operational and environmental components of the Teven Quarry;
- Provide effective mechanisms for external communications, in particular, the development of ongoing relationships with the local community; and
- Assist Teven Quarry staff and contractors to effectively implement the requirements of the Development Consent (SSD 6422), Environmental Management System and supporting environmental management plans (EMPs).

In particular, this Environmental Management Strategy:

- Describes the development in detail, including activities to be undertaken and indicative timing;
- Identifies statutory approvals which apply to the development;
- Provides specific mitigation measures and controls that can be applied on-site to avoid or minimise negative environmental impacts;
- Provides specific mechanisms for compliance with applicable policies, approvals, licenses, permits, consultation agreements and legislation;
- Describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
- States objectives and targets for issues that are important to the environmental performance of the Project; and
- Outlines a monitoring regime to validate the effectiveness of the implementation of controls.

1.3 Overview

Holcim (Australia) Pty Ltd (Holcim) operates the Teven Quarry, an existing hard rock quarry located at Stokers Lane, Teven, approximately eight kilometres north-west of Ballina (**Figure 1**). Teven Quarry has been producing construction and road building materials since the 1940s and has approval to continue operation until 2045.

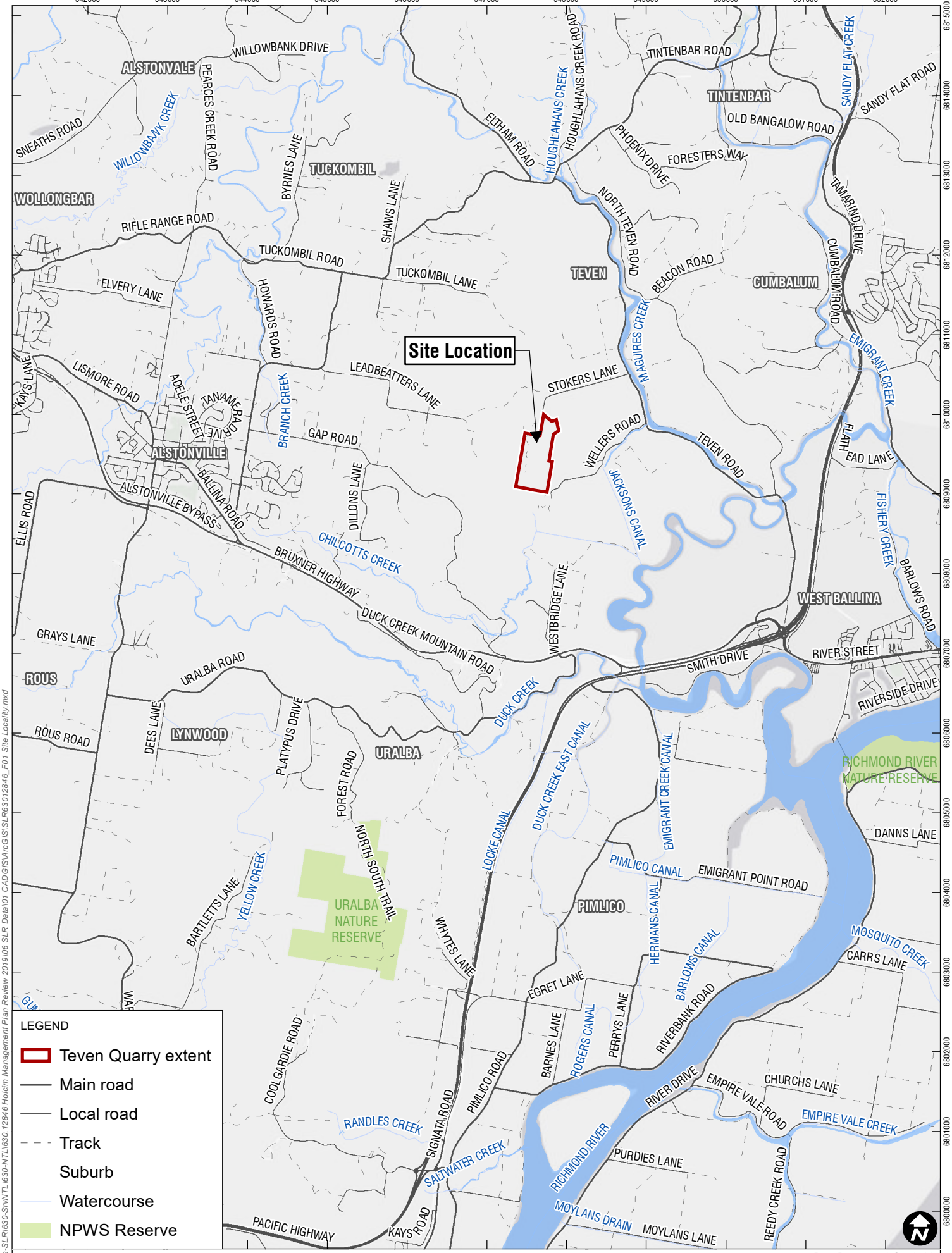
A State Significant Development (SSD) application (SSD 6422) was approved by the New South Wales (NSW) Department of Planning, Industry & Environment (DPIE), formally Department of Planning & Environment (DP&E) on 15th July 2015. The approved extraction area and associated ancillary facilities are shown on **Figure 2**.

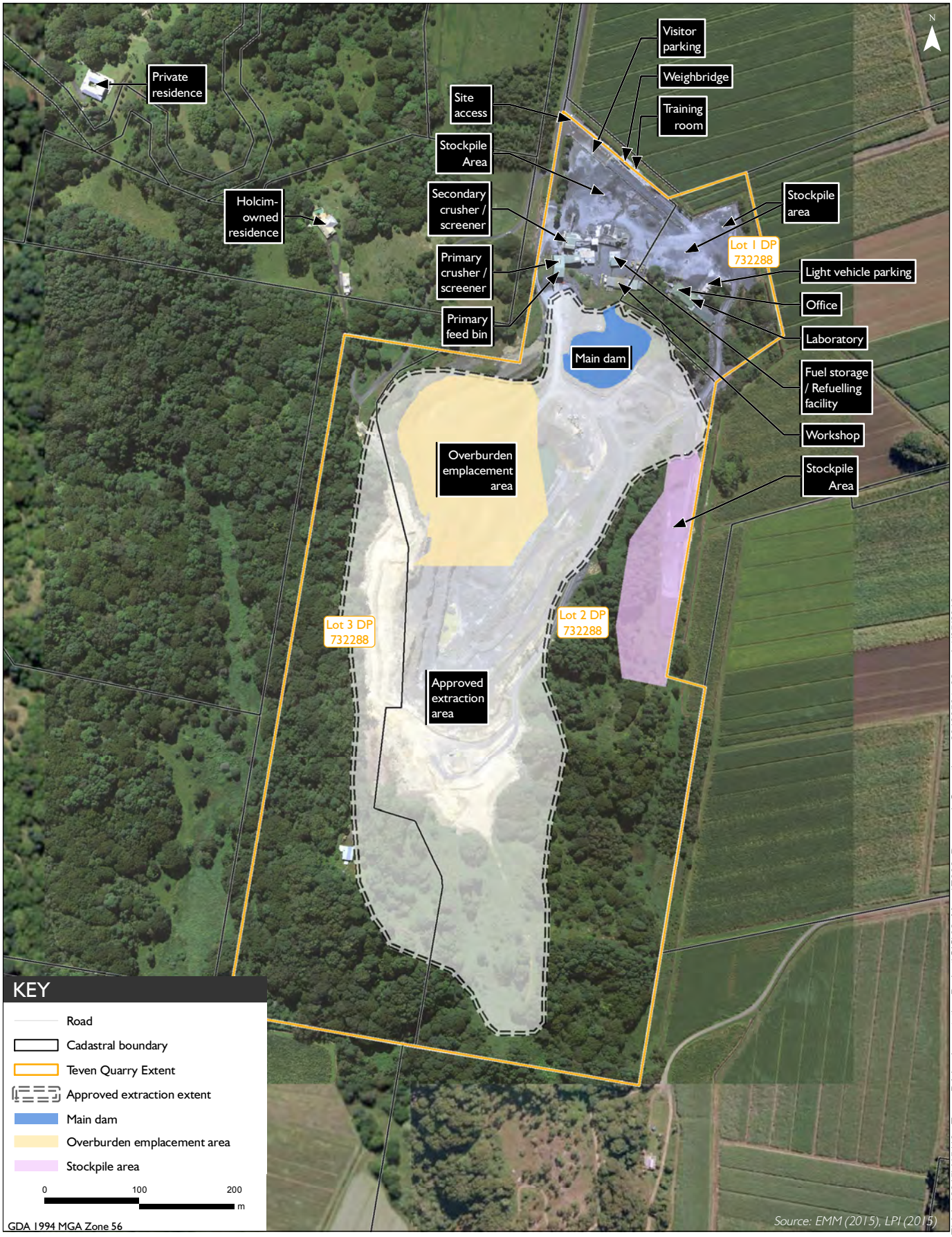
The Environmental Management System (EMS) has been prepared for Teven Quarry to provide the environmental management framework of the quarry. The EMS satisfies Schedule 5 Condition 1 of the Teven Quarry Development Consent (SSD 6422).

A summary of the approved activities is provided in **Table 1.**

Table 1 Approved Activities Development Consent (SSD 6422)

Project Component	Approved Activity
Quarry life	30 years from date of approval (15 July 2015), ie to 15 July 2045
Limits of production	500,000 tonnes per annum (tpa)
Quarry footprint	Shown on Figure 2
Overburden management	Shown on Figure 2
Hours of operation	**Blasting:** 10:00 am–3:00 pm Monday–Friday At no time on Sundays or public holidays **All other activities:** 7:00 am–6:00 pm Monday–Friday 7:00 am–4:00 pm Saturday At no time on Sundays or public holidays **Extended hours for product loading and transport, stockpile management and maintenance:** 7:00 am–10:00 pm Monday–Friday 7:00 am–4:00 pm Saturday At no time on Sundays or public holidays
Transport	Road transport at approved production level
Employment	11 full time equivalent positions
Infrastructure	Fixed primary, secondary and tertiary plants with the addition of a mobile crushing and screening plant, and a mobile pug mill
Site access	Off Stokers Lane
Concrete recycling for re- use	Recycling of up to 10,000 tonnes per annum (tpa) of clean surplus concrete material on site using existing and proposed processing infrastructure for re-use as product


Site Location
ALSTONVALE
WILLOWBANK DRIVE
PEARCES CREEK ROAD
SNEATHS ROAD
WILLOWBANK CREEK
WOLLONGBAR
RIFLE RANGE ROAD
TUCKOMBIL
BYRNES LANE
SHAWS LANE
TUCKOMBIL ROAD
TUCKOMBIL LANE
ELVERY LANE
HOWARDS ROAD
KAYS LANE
LISMORE ROAD
ADELE STREET
TANAMERA DRIVE
ALSTONVILLE
BRANCH CREEK
GAP ROAD
LEADBEATTERS LANE
ALSTONVILLE BYPASS
BALLINA ROAD
DILLONS LANE
ELLIS ROAD
CHILCOTTS CREEK
BRUXNER HIGHWAY
DUCK CREEK MOUNTAIN ROAD
GRAYS LANE
ROUS
URALBA ROAD
ROUS ROAD
DEES LANE
LYNWOOD
PLATYPUS DRIVE
FOREST ROAD
URALBA
DUCK CREEK
NORTH SOUTH TRAIL
URALBA NATURE RESERVE
BARTLETTS LANE
YELLOW CREEK
LOCKE CANAL
DUCK CREEK EAST CANAL
EMIGRANT CREEK CANAL
WHYTES LANE
PIMLICO
PIMLICO CANAL
EMIGRANT POINT ROAD
HERMANS CANAL
BARLOWS CANAL
EGRET LANE
ROGERS CANAL
BARNES LANE
PERRYS LANE
RIVERBANK ROAD
COOLGARDIE ROAD
PIMLICO ROAD
RANDLES CREEK
SIGNATA ROAD
SALTWATER CREEK
RIVER DRIVE
EMPIRE VALE ROAD
CHURCHS LANE
EMPIRE VALE CREEK
RICHMOND RIVER
PURDIES LANE
MOYLANS DRAIN
MOYLANS LANE
REEDY CREEK ROAD
PACIFIC HIGHWAY
KAYS ROAD
MOSQUITO CREEK
CARRS LANE
DANNS LANE
RICHMOND RIVER NATURE RESERVE
RIVERSIDE DRIVE
RIVER STREET
SMITH DRIVE
WEST BALLINA
BARLOWS ROAD
FISHERY CREEK
FLATHEAD LANE
EMIGRANT CREEK
CUMBALUM ROAD
CUMBALUM
TEVEN
BEACON ROAD
NORTH TEVEN ROAD
MAGUIRES CREEK
WELLERS ROAD
TEVEN ROAD
JACKSONS CANAL
WESTBRIDGE LANE
STOKERS LANE
TINTENBAR
TINTENBAR ROAD
OLD BANGALOW ROAD
FORESTERS WAY
PHOENIX DRIVE
TAMARIND DRIVE
SANDY FLAT ROAD
SANDY FLAT CREEK
ELTHAM ROAD
HOUGHLAHANS CREEK
HOUGHLAHANS CREEK ROAD
LEGEND
Teven Quarry extent
Main road
Local road
Track
Suburb
Watercourse
NPWS Reserve
0
1
2
km
Scale: 1:60,000 at A4
Coordinate System: GDA 1994 MGA Zone 56
Date Drawn: 21-Oct-2020
Project Number: 630.12846
Site Locality
Figure 1
\\au.slr.local\Corporate\Projects-SLR\630-Srv\NTL\630.12846 Holcim Management Plan Review 2019\06 SLR Data\01 CAD\GIS\ArcGIS\SLR630128846_F01 Site Locality.mxd



Proposed operations

Teven Quarry Environmental Management System

Figure 2

2. Stakeholder Consultation

2.1 Pre 2020 Consultation

During the EIS (umwelt, 2014) process considerable consultation occurred with a range of government agencies, Ballina Shire Council and the community. Holcim addressed all stakeholder issues in the EIS. Additionally, Holcim developed a project-specific community engagement program during the planning and assessment phase of the Project which included the distribution of community information sheets to residences in the vicinity of Teven Quarry.

In accordance with Schedule 3 Condition 15 of the Development Consent (SSD 6422), this EMS was sent to DPIE for approval. The current management plan is dated May 2016.

2.2 2020 Consultation

A copy of the 2020 updated management plan was provided to DPIE in August 2020. Holcim received comments from DPIE on 12 October 2020 and updated this document and will resubmit to DPIE on as required by the Development Consent (SSD 6422). See **Appendix A** for consultation. For the Consultation Management Plan refer to **Section 6.3.2**.

3. Statutory Requirements

A list of the Development Consents permits and licences currently held by Teven Quarry is included on the Teven Quarry website.

The statutory approvals held by Teven Quarry include:

- Development Consent (SSD 6422) incorporating the four approved modifications;
- Environment Protection License (EPL 3293);
- Controlled Activity Approvals (*Water Management Act 2000*);
- Section 138 consents (*Roads Act 1993*);
- Section 90 permit (*Heritage Act 1977*);
- Crown road closure permits (*Roads Act 1993*);
- Construction certificates; and
- Other relevant approvals.

3.1 Development Consent Conditions

The requirements stipulated in Schedule 5 Condition 1 of the Development Consent (SSD 6422) are provided in **Table 2.**

Table 2 Development Consent Conditions Relating to the Strategy

Development Consent Condition	Relevant Section
Schedule 5	
Condition 1 Environmental Management Strategy The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:	Entire EMS
a) be submitted to the Secretary for approval within 6 months of the date of this consent;	Noted. Consent was dated 15 July 2015
b) provide the strategic framework for the environmental management of the development;	Section 4
c) identify the statutory approvals that apply to the development;	Section 3.1
d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 6.1
e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Section 6.3.2
• respond to any non-compliance;	Section 7.3
• receive, record, handle and respond to complaints;	Section 6.4
• resolve any disputes that may arise during the course of the development;	Section 6.4

Development Consent Condition	Relevant Section
• respond to emergencies; and	Section 6.7
f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and	Section 5.2
• a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.	See Section 7.1 Each management plan summarises the environmental monitoring at site.

4. Environmental Management Framework

4.1 Structure of this Strategy

This EMS provides the strategic context for environmental management at Teven Quarry. The EMS outlines Holcim's commitment to proactive community and environmental management and demonstrates Holcim's commitment to reducing environmental and community impacts.

The structure of the EMS follows the 'Plan-Do-Check-Act' process as per the recommended industry standard approach (AS/NZS ISO 14001:2004). A description of this process and how it relates to the Teven Quarry EMS is provided in **Table 3**).

Table 3 Structure of the Teven Quarry Environmental Management Strategy

Feature	Requirements	Strategy Section Reference
Plan	• Maintain register of legal and other requirements. • Maintain register of environmental aspects and impacts. • Set environmental objectives and targets. • Develop environmental programs and management plans.	Section 3 Section 5.2
Do	• Responsibilities for environmental management. • Provision of environmental awareness training and assessment of competence. Internal communications and document control. • External communications with regulators, members of the public and other stakeholders. • Management of complaints. Operating procedures. • Incident management. • Emergency preparedness and response.	Section 4
Check	• Annual review of compliance with environmental statutory requirements during preparation of the annual environmental management report. • Independent Environmental Audit • Environmental monitoring. • Non-compliance and corrective/preventive action audits.	Section 5
Act	• Periodic review and revision of the EMS by senior management. • Non-compliance and corrective/preventive action.	Section 5-8

4.2 Holcim Australia Environmental Policy

4.2.1 Environmental Policy and Commitment

Teven Quarry will operate in accordance with the Holcim Environmental Policy.

Holcim's Environmental Policy applies to all Holcim operations and defines the environmental management at the Teven Quarry. The Environmental Policy commits to:

- Continuous improvement of environmental performance and provide positive contribution to Holcim business and to society; and
- Sustainable development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The Holcim Environmental Policy is based on four key fundamentals (**Table 4**).

Table 4 Holcim Environmental Policy – Key Fundamentals

Holcim Fundamental	Requirement
Environmental Management systems	Holcim applies internationally recognised standards, and seeks to comply with domestic environmental laws, regulations and standards applicable to their products and operations. Holcim assesses the environmental policies and practices of suppliers and sub-contractors as part of their selection process. Holcim also translate environmental commitments into actions by setting objectives and targets and monitoring progress against these targets.
Resource utilisation	Holcim promotes reuse, recycling and conservation over their entire value chain, and invests in research for innovative and sustainable products and processes.
Environmental impacts	Holcim assesses and measures environmental impacts to continuously improve processes and promote best practice. Holcim Australia seek to develop management controls on their site to monitor, prevent and minimise the release of pollutants to the environment.
Stakeholder relations	Holcim engage stakeholders and report publicly on compliance, performance and progress where appropriate.

4.3 Holcim Environmental Management System

4.3.1 Holcim Safety Health and Environmental Standards

The Holcim Environmental Management System currently sets the minimum environmental management requirements for all Holcim operations. The management system consists of:

- The Holcim Environmental Policy; and
- The Holcim Environmental Standards.

SHE Standard 4 (Henkel, 2011) describes environmental management requirements as they relate to the operational control of significant environmental aspects (hazards or risks). For each environmental hazard, a set of minimum environmental standards have been developed. These standards, coupled with sustainability indicators, are used to measure environmental performance over time.

4.3.2 Teven Quarry Environmental Management Strategy

This Teven Quarry EMS has been developed in accordance with the Holcim Environmental Management System, which describes environmental management requirements as they relate to the operational control of significant environmental aspects (hazards or risks). For each environmental hazard, a set of minimum environmental standards have been developed. These standards, coupled with sustainable indicators, are used to measure the environmental performance of the Quarry EMS over time.

Compliance with the Teven Quarry EMS will be ensured by training, inspections, audits and regular review.

5. Planning

5.1 Identification of environmental risks

Teven Quarry personnel will continuously seek to identify and assess environmental risks so they are appropriately managed. A risk assessment procedure has been developed as part of the Teven Quarry EMS, which will detail how the register of aspects and impacts is to be developed, maintained and updated.

The Teven Quarry Manager and Holcim environmental personnel will be responsible for ensuring that environmental risks are considered during the development of objectives and targets; environmental programs and management plans; operational procedures; and during training. In addition, environmental risks are considered part of the 'change management process' which is implemented by Holcim. The change management process is utilised to manage any potential environmental and community impacts which may result from changes to operations at Teven Quarry.

5.2 Environmental Management Plans

Environmental Management Plans (EMPs) provide an overview of a specific environmental aspect or activity and the controls, which are to be implemented to effectively manage the aspect or activity. The Development Consent (SSD 6422) requires the following management plans to be prepared to the satisfaction of the Secretary of DPIE:

- Noise Management Plan (Schedule 3 Condition 6);
- Blast Management Plan (Schedule 3 Condition 10);
- Air Quality Management Plan (Schedule 3 Condition 14);
- Water Management Plan (Schedule 3 Condition 20);
- Transport Management Plan (Schedule 3 Condition 25); and
- Biodiversity and Rehabilitation Management Plan (Schedule 3 Condition 29).

The implementation of these EMPs will assist Holcim in ensuring effective environmental performance of Teven Quarry.

5.3 Environmental objectives and targets

Environmental objectives and targets will be reviewed regularly to meet the commitments contained within the Holcim Environmental Policy and to measure the performance of the Teven Quarry EMS. These targets will be developed in consideration of the requirements of the Environmental Policy, Holcim EMS and legislative requirements.

6. Implementation and Operation

6.1 Roles and Responsibilities

Environmental management at Teven Quarry will be the responsibility of all employees and contractors, with the Teven Quarry Manager having overall responsibility for environmental management. Environmental roles and responsibilities for project personnel are summarised below. Specific responsibilities are described in the Teven Quarry EMPs.

Table 5 General Environmental Responsibilities at Teven Quarry

Personnel	Responsibilities
Quarry Manager	• Have a working knowledge of this Strategy, the Teven Quarry Environmental Policy and the Holcim EMS. • Ensure all statutory reporting is undertaken. • Be aware of the environmental legislative requirements associated with the Teven Quarry and take measures to ensure compliance. • Ensure appropriate training is provided to all employees and contractors regarding their environmental responsibilities. • Provide adequate resources to allow the development, implementation and operation of the Teven Quarry EMS. • Authorise the Teven Quarry EMS. • Ensure all operations are undertaken in accordance with Holcim's Environmental Policy and Holcim Environmental Management System. • Liaise with regulatory authorities and the community in relation to environmental matters.
Operations Manager and General Manager	• Have a working knowledge of this Strategy, the Teven Quarry Environmental Policy and the EMS. • Ensure all statutory reporting is undertaken. • Provide adequate resources to allow the development, implementation and operation of the Teven Quarry EMS. • Be aware of the environmental legislative requirements associated with the Teven Quarry and take measures to ensure compliance. • Ensure all operations are undertaken in accordance with the Teven Quarry Environmental Policy, procedures, and EMS.
Environmental Manger / Co-ordination	• Provide assistance to the Quarry Manager, Operations Manager and General Manger to implement and maintain the Teven Quarry Environmental Management System and Plans. • Assist the Operations Manager and General Manager to ensure statutory reporting is undertaken. • In consultation with the Quarry Manager, undertake liaison with regulatory authorities and the community in relation to environmental matters.
All employees and contractors	• Be aware of this Strategy and the Teven Quarry Environmental Management System and undertake all works in accordance with these documents. • Be responsible and accountable for the environmental impact of the work they perform. • Immediately report any environmental incidents to their

Personnel	Responsibilities
	supervisor. • Not carry out any activity that causes, or is likely to cause, environmental harm unless all reasonable and practicable measures to prevent or minimise the harm

6.2 Training, awareness and competence

Holcim has developed a comprehensive environmental training and induction program for all employees, contractors and visitors at Teven Quarry. The training and induction program consists of:

- Induction training;
- Environmental awareness training; and
- Toolbox talks.

The training packages are designed to ensure that personnel gain a sound understanding of relevant environmental issues and management strategies; environmental incident and emergency response procedures; and their role and responsibilities in developing, implementing and operating the Teven Quarry EMS.

Training, toolboxes and induction program cover the following components:

- The environmental and community context of the operation;
- Roles and responsibilities in achieving conformance with the Holcim environmental policy and the requirements of the EMS;
- The potential environmental impacts and associated controls for their work activities;
- Incident and emergency response and reporting; and
- The consequences of non-compliance with the Holcim Environmental Policy and the Teven Quarry EMS.

Training consists of inductions for all new staff and contractors. Permanent staff will be retrained in general environmental awareness as required. Key issues include dust and noise minimisation, vegetation clearing procedures, archaeological awareness and water and energy management.

A specific induction training is delivered to Holcim road haulage personnel and contract haulage operators, this includes good driving practice and minimisation of environmental impacts, including dust and noise. These requirements are detailed in the Teven Quarry Transport Management Plan. Induction and environmental awareness training is competency based to ensure that all personnel have knowledge of the relevant roles and responsibilities, which relate to their activities.

Tool-box talks will be held on an as–needs basis to address specific environmental issues, such as findings from incident or complaint investigations, or improvement initiatives.

6.3 Communication

Effective communication between Teven Quarry management, employees and contractors and communication between Teven Quarry and external stakeholders is important for the successful implementation and operation of the Teven Quarry EMS. Communication mechanisms are outlined below.

6.3.1 Internal Communication

Internal communication amongst Teven Quarry personnel (including contractors) is undertaken through phone, email or fax. Key internal communication mechanisms will include email, internal newsletters, meetings and internal reporting. It will be the responsibility of the Teven Quarry Manager to manage the communication of environmental issues and to advise all personnel on communications internal to Holcim. Information regarding significant environmental aspects of the operation will be communicated internally through training and other mechanisms.

6.3.2 External Communication

External communication includes communication between Teven Quarry and a range of external stakeholders including the community, government agencies and businesses. All external communications relating to environmental and community aspects of the Teven Quarry operations will be undertaken in accordance with the Teven Quarry EMS. The Teven Quarry Manager, in consultation with the Holcim environmental personnel will be responsible for the management of external communication of environmental issues.

Holcim will maintain open external communication throughout the life of the Project. Communication will include information available on the Holcim website, as per Schedule 5 Condition 11 of the Development Consent (SSD 6422). This will provide information about the quarry operations, community involvement programs and environmental performance. A feedback mechanism will be provided on the website. The Holcim website is also a key mechanism for external dissemination of information, with copies of approved EMPs and this EMS, and other relevant information including environmental monitoring results to be made available on the website. Other key communication mechanisms will include annual statutory reporting.

6.3.2.1 Community Consultative Committee

Development Consent (SSD 6422) required the following in relation to Community Consultative Committee's (CCC).

> *If directed by the Secretary, the Applicant shall establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary.*
>
> *Any such CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments (Department of Planning, 2007, or its latest version).*
>
> *Notes:*
> - *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*
> - *In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.*

The Independent Environmental Audit (IEA) (GHD, 2020) noted Holcim had not been directed by the Secretary to establish a CCC. The IEA did not provide any recommendations regarding the establishment of a CCC. If directed by the Secretary, Holcim will establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary.

6.4 Complaints Management and Dispute Resolution

6.4.1 Complaints Management

Holcim prides itself on fostering positive relationships with the community and considers that it is critical component of Holcim's business that complaints or enquiries are responded to in a professional manner. Wherever possible, a proactive approach will be taken to engage the community regarding proposed activities that may affect them. Any complaints that are received relating to Teven Quarry's operations will be recorded in a standard format in the Holcim Safety, Health & Environment (SHE) reporting database (INX) and responded to in a timely manner by the Quarry Manager or their delegate.

Community complaints can be provided in person at Teven Quarry or can be submitted via the Teven Quarry telephone line (02) 6687 8566). The Teven Quarry Manager will be responsible for the implementation of the complaints management process and will ensure a timely initial response to any complaints received. The Teven Quarry management will provide a more detailed response outlining any complaint investigation findings and corrective actions implemented as appropriate.

If Teven Quarry receives an air quality complaint the site will investigate the source of the complaint and if Teven Quarry was a contributing factor, activities will be altered to reduce dust emissions. If Teven Quarry was a contributing factor to the dust complaint, the site will discuss with the residence whether they would like a depositional dust gauge installed for a period of two months.

Records of complaints will be kept for a minimum of four years in a register to be maintained by the Teven Quarry Manager. The complaints register will be available on the Holcim website. The community complaints will also be reported on an annual basis in the Annual Review.

6.4.2 Dispute Resolution

Holcim strives to maintain good relations with all external stakeholder groups through effective communication. Holcim strives to avoid disputes arising through consultation with relevant external stakeholders and through addressing any concerns in a timely manner. Should any disputes arise that cannot be resolved through direct consultation, the dispute resolution processes will be implemented.

Schedule 4 Condition 2 of the Development Consent (SSD 6422) outlines an independent review process that can be initiated if a landowner considers that the operations of the quarry are exceeding the impact assessment criteria outlined in Schedule 3 of the Development Consent (SSD 6422). In accordance with these requirements, the landowner may request (in writing) an independent review of the impacts of the Project on their land. If the independent review determines that the quarrying operations are not complying with the relevant criteria, then the measures that could be implemented to ensure compliance with the relevant criteria will be identified and reported to DPIE.

All complaints regardless of whether Teven was the source will be logged and investigated by Holcim.

6.5 Quarry Website

Holcim maintains webpages that meet Schedule 5 Condition 11 of the Development Consent (SSD 6422) which states:

Within six months of the date of this consent, the Applicant must:

a) make the following information publicly available on its website:
- *the documents listed in condition 2 of Schedule 2;*
- *current statutory approvals for the development;*

- *all approved strategies, plans or programs required under the conditions of this consent;*
- *a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;*
- *a complaints register, updated monthly;*
- *the Annual Reviews of the development;*
- *any independent environmental audit, and the Applicant's response to the recommendations in any audit;*
- *minutes of CCC meetings;*
- *any other matter required by the Secretary; and*

b) keep this information up-to-date, to the satisfaction of the Secretary.

The information available on these web pages will be updated every 6 months.

6.6 Incident management

All employees and contractors undertaking work at Teven Quarry will be required to report any non-conformances with the EMS or environmental incidents to their supervisor. The supervisor is responsible for triggering the Holcim incident management system. This system provides alerts to relevant personnel based on the incidents outcome and potential consequence. The Teven Quarry Manager (or delegate), in consultation with the Holcim environmental personnel, is responsible for responding to complaints and incidents, and determining the appropriate corrective action.

The site's Development Consent (SSD 6422) defines an incident as the following:

> *A set of circumstances that:*
> *• causes or threatens to cause material harm to the environment; and/or*
> *• breaches or exceeds the limits or performance measures/criteria in this consent.*

If an 'incident' occurs that causes material harm, Holcim will immediately notify the DPIE. Within 7 days of the date of the incident, Holcim will provide DPIE with a detailed report on the incident. For any other incidents associated with the site, Holcim will notify DPIE within 7 days of the date of the incident or when Holcim becomes aware of the incident. Holcim will provide a detailed report on the incident.

In addition to reporting to DPIE, incidents that cause or threaten 'material harm to the environment' (as set out in Part 5. 7 of the *Protection of the Environment Operations Act*) will also to be reported to the NSW EPA in accordance with the requirements of the Protection of the *Environment Operations Act 1997*, EPL 3293 and the Teven Quarry Pollution Incident Response Management Plan (PIRMP).

Part 5.7 of the NSW *Protection of the Environment Operations Act* defines the meaning of 'material harm to the environment' as follows:

> *(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.*

All environmental incidents with a medium or high actual or potential risk rating will be investigated using a root cause methodology. All environmental incidents will be reported annually in the Annual Review.

6.7 Emergency Preparedness and Response

The Teven Quarry PIRMP outlines the processes to be followed in the event of an emergency, as well as internal and external communication procedures to be followed.

The identification of potential emergency situations will be facilitated through risk reviews. If a potential emergency situation is identified, an appropriate emergency response will be determined and incorporated into the risk review. Following the risk review, all relevant emergency procedures will be updated with changes to the emergency procedure communicated to all relevant staff. All employees will be trained in emergency preparedness and response as part of the site induction and ongoing training.

7. Environmental Monitoring, Corrective Actions and Audits

7.1 Environmental Monitoring

Environmental monitoring will measure Teven Quarry's performance against criteria in the Development Consent (SSD 6422) and EPL 3293. Environmental monitoring will be coordinated by the Teven Quarry Manager or their delegate, in accordance with relevant licence and Development Consent (SSD 6422) conditions.

Monitoring requirements are described in the specific EMPs and summarised in **Table 6.** For the location of all monitoring points refer to **Figure 3.**

Table 6 Environmental Monitoring Program Requirements

Plan	Monitoring Locations	Monitoring Frequency	Additional Requirements
Noise management plan	NN1, NN2, NN3 and AWS	Quarterly	
	NN3	Yearly	Requirement of EPL 3293
Blast management plan	BM1, BM2 and AWS	Quarterly	
Air Quality management plan	PM1	24 hour average[1] Yearly annual average	Upon receipt of complaint regarding dust health concerns
	DG1	Monthly samples for determination of annual average	Upon receipt of complaint regarding dust nuisance
Water management plan	Licensed discharge point	Any discharge[2]	Requirement of EPL 3293
Biodiversity and rehabilitation management plan	Rehabilitated areas	Annual	

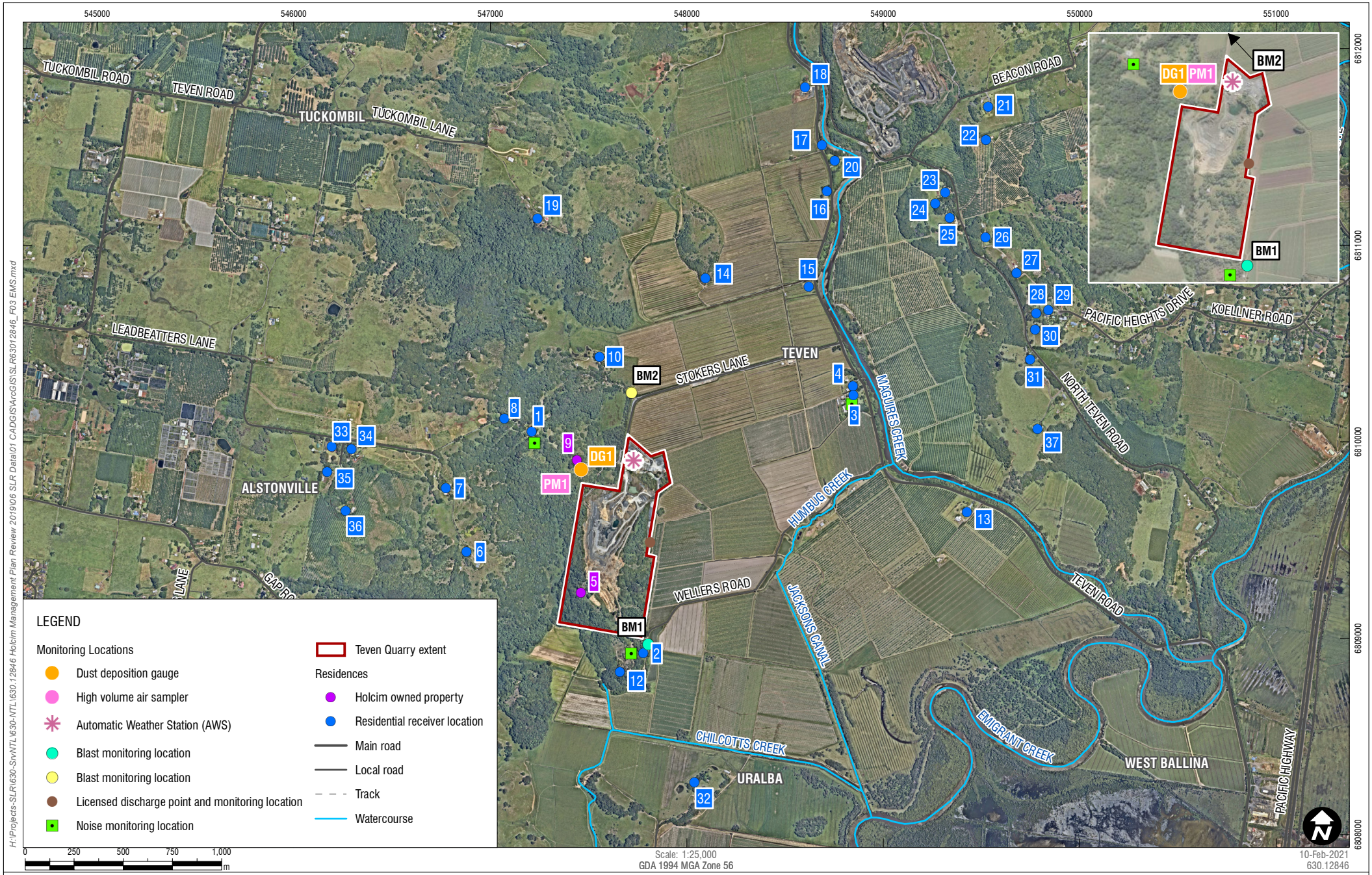
All environmental monitoring will be undertaken by trained personnel using appropriately calibrated equipment, in accordance with relevant Australian Standards and industry best practice methods.

Monitoring results will be reviewed against relevant statutory limits to ensure compliance with statutory requirements. All monitoring results and calibration records will be kept for at least four years, in accordance with statutory requirements

Monitoring results will be reported externally as part of the Annual Review and Environment Protection License Annual Return.

[1] 24 hr sample collected every 6 days in accordance with applicable Australian Standards

[2] Any discharge, whether controlled or otherwise, which has not occurred from rainfall exceeding 82.5mm over any consecutive 5 day period.



Environmental Management Strategy

Figure 3

7.2 Environmental Reporting

Teven Quarry provides relevant information internally to its employees via crew talks, inductions and formal training.

7.2.1 Annual Review

An Annual Review will be prepared for Teven Quarry and submitted to the Secretary, DPIE and relevant agencies, in accordance with Schedule 5 Condition 4 of the Development Consent (SSD 6422). The Annual Review will:

- Describe the development (including rehabilitation) that was carried out in the previous year, and the development over the current year;
- Include a comprehensive review of the monitoring results and complaint records of the development over the previous year, which includes a comparison of these results against:
- The relevant statutory requirements, limits or performance measures/criteria;
- The monitoring results of the previous years; and
- The relevant predictions in the EIS.

It will also:

- Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- Include a summary of complaints and complaint related investigations and outcomes;
- Identify any trends in monitoring data over the life of the development;
- Identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- Describe what measures will be implemented over the current year to improve environmental performance of the development.

The Annual Review will be made available to the public through the site's website. Other statutory reporting (e.g EPL 3293 Annual Return) will be completed in accordance with relevant statutory requirements.

7.3 Non-Compliance and Corrective Actions

Non-compliances at Teven Quarry may be identified by a range of mechanisms including:

- Review of monitoring results;
- Complaints;
- Site inspections including those by government agencies;
- Audits; and/or
- Incident reports.

If a non-compliance is identified, the Teven Quarry Manager will be responsible for implementing an appropriate investigation and determining appropriate corrective and preventative actions, as well as recording the non-compliance and corrective actions within the Holcim Incident Management System.

Any actions required as an outcome of the non-compliance will be tracked in Holcim Incident Management System INX. The corrective and/or preventative actions implemented following non-compliance will be reviewed monthly.

In accordance with Schedule 5 Condition 2 of the Development Consent (SSD 6422), following exceedance of the relevant environmental criteria outlined in Schedule 3 of the Development Consent (SSD 6422), Holcim shall:

- Take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- Consider all reasonable and feasible options for remediation (where relevant) and submit a report to DPIE describing those options and any preferred remediation measures or other course of action; and
- If required, implement remediation measures as directed by the Secretary.

7.4 Audits

The Teven Quarry Manager (or delegate) will undertake monthly formal inspections of environmental management controls. Checklists will be developed to guide these inspections. Any issues arising from these inspections will be reported in the Holcim Incident Management System and will be managed in accordance with site incident procedures and actioned as necessary to resolve.

An external Independent Environmental Audit is required within three years of the date of consent, and every five years thereafter, in accordance with Schedule 5 Condition 9 of the Development Consent (SSD 6422). This audit will be undertaken by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Secretary of DPIE.

In accordance with Schedule 5 Condition 11 any Independent Environmental Audit, and Holcim response to the audit recommendations will be made available on the Holcim website.

8. Review and Improvement

This EMS will be reviewed, and revised as necessary, in accordance with the requirements of Schedule 5 Condition 5 of the Development Consent (SSD 6422) which states:

> *Within 3 months of the submission of an:*
> *(a) annual review under condition 4 above;*
> *(b) incident report under condition 7 below;*
> *(c) audit report under condition 9 below; and*
> *(d) any modifications to this consent,*
> *the Applicant shall review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.*
>
> *Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.*

In terms of sub clause b), the requirement to review and update management plans will be assessed during the preparation of each Annual Review. The Annual Review will state which management plans require updating and which management plans do not require updating.

Update versions of management plans will be put on the website.

9. Document Control

9.1 Environmental Records

The Quarry Manager is responsible for maintaining all environmental management documents as current at the point of use. Types of records include:

- Monitoring, inspection and compliance reports/records;
- Correspondence with public authorities;
- Induction and training records;
- Reports on environmental incidents, complaints and follow-up action;
- Community engagement information; and

All environmental management documents are subject to ongoing review and continual improvement. This includes times of change to scheduled activities or to legislative or licensing requirements.

10. References

Department of Environment and Climate Change 2008. *Managing Urban Stormwater: Soils and Construction Volume 2E: Mines and Quarries.*

GHD 2020. *Teven Quarry Project Independent Environmental Compliance Audit.*

Readymix 2007. *Plan of Management for Teven (Fox's) Quarry.*

Henkel, 2011. *SHE Standards Safety, Health and Environmental Protection Standards.*

Umwelt (Australia) Pty Limited 2014. *Teven Quarry Project Environmental Impact Statement*, Report prepared for Holcim (Australia) Pty Limited.

11. Change Information

Version	Date	Change Summary
1	September 2016	Document prepared to meet Development Consent (SSD 6422) requirements.
2	August 2020	Review of the template for all Teven management plans; • General structure updates; • Section 2 – addition of consultation section; • Section 7.1 - minor change to monitoring; • Section 9 – document control; • Section 8 – review and improvement; • Section 11 – change information
3	April 2021	See Appendix A for changes in response to DPIE's review.

Appendix A

Consultation

From: **no-reply@majorprojects.planning.nsw.gov.au** <no-reply@majorprojects.planning.nsw.gov.au>
Date: Wed, 7 Oct 2020 at 13:38
Subject: Teven Quarry - Teven Quarry Environmental Management System SSD-6422-PA-10 - Request for Additional Information
To: <evan.smith@lafargeholcim.com>
Cc: <Mark.Davis@planning.nsw.gov.au>

Dear Evan Smith,

The Department is requesting that you provide additional information in relation to the Teven Quarry - Teven Quarry Environmental Management System.

Please access your profile for details of this request and to upload your response. You are requested to provide this response by 6/11/2020 .

If you have any enquiries, please contact Mark Davis at Mark.Davis@planning.nsw.gov.au .

To sign in to your account click here or visit the Major Projects Website.

Please do not reply to this email.

Kind regards

Department of Planning, Industry and Environment

Subscribe to our newsletter

Planning, Industry & Environment

Mr Evan Smith
Environmental Manager

Teven Quarry

By email: evan.smith@lafargeholcim.com

07/10/2020

Dear Mr. Smith

Teven Quarry (SSD-6422)
Request for Additional Information

I refer to your submission of the revised Environmental Management Strategy (EMS), dated August 2020, in accordance with condition 1 of Schedule 5 of the Teven Quarry development consent (SSD-6422).

The Department has carefully considered the revised EMS and requests that you provide additional information as detailed in Attachment A.

You are requested to provide the revised EMS to the Department by Friday 6 November 2020. If you are unable to meet this deadline, you are required to provide an updated timeframe for the provision of this information.

If you have any questions, please contact Mark Davis, who can be contacted at 8275 1518.

Yours sincerely

Colin Phillips

Colin Phillips
Team Leader
Resource Assessments (Coal & Quarries)

Attachment A
Teven Quarry
Environment Management Strategy Review – Oct 2020

Environmental Management Strategy, Schedule 5, Condition 1	Satisfactory (Yes/No)	Comment	Action Required	Holcim Response
Environmental Management Strategy (EMS) The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: a) be submitted to the Secretary for approval within 6 months of the date of this consent;	**Partial**	• Section (S.) 2.2 The Consultation Management Plan should be referenced to S.6.3.2. • Please ensure the term EMS is not used for both the Environmental Management Strategy and the Environmental Management System as it is confusing.	Holcim must update this plan to address the DPIEs comments and provide a single Plan of the environmental monitoring locations.	• Addressed. • Addressed.
(b) provide the strategic framework for the environmental management of the development;	**Yes**	• S.4		
(c) identify the statutory approvals that apply to the development;	**Yes**	• S.3.1 & Table 2		
(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	**Yes**	• S.6.1		
(e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the development;	**Yes**	• S.6.3.2		
• respond to any non-compliance;	**Partial**	• S.7.3		
• receive, record, handle and respond to complaints;	**Yes**	• S.6.4		
• resolve any disputes that may arise during the course of the development;	**Yes**	• S.6.4		
• respond to emergencies; and	**Partial**	• S.6.7 Please provide and attach a copy of the PIRMP as an Appendix to the EM Strategy.		• The PIRMP has been attached in Appendix B.
f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and	**Yes**	• S.5.2: NMP, BMP, AQMP, TMP and B&RMP have been sighted by DPIE.		
• a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.	**No**	• S.7.1 • There should be one plan that shows all environmental monitoring locations. • T.6 Monitoring frequency for PM1 in the AQMP is more		• A figure has been drafted (Figure 3) showing all monitoring locations. • Frequency

Environmental Management Strategy, Schedule 5, Condition 1	Satisfactory (Yes/No)	Comment	Action Required	Holcim Response

Other Comments on Environmental Management Strategy	*Holcim Response*
Please update Figure 1 to include the new Pacific Highway route. S.1.2 & S.3 T.6 These have different EPL numbers (1307 & 3293)? This must be corrected. S.6.6 Is the Incident Management System INX?	• Figure updated. • Checked and addressed. • INX expanded.

		accurately every 6-days for a High-Volume Air Sampler.		has been amended to every six days.

Appendix B

Pollution Incident Response Management Plan

Pollution Incident Response Management Plan - Teven Quarry

Holcim Tuncurry Pollution Incident Response Management Plan

Revision/Checking History

Revision Number	Date	Checked by	Issued by
1 - 3	2014-16	Daniel Lidbetter – NSW/ACT Planning & Environment Coordinator	Daniel Lidbetter
4	October 2017	Amy Nelson - NSW/ACT Planning & Environment Coordinator Garth Stacey – Quarry Manager	Amy Nelson
5	August 2018	Alana White – Senior Environment and Community Liaison Garth Stacey – Quarry Manager	Alana White
6	Sept 2019	Hema Vignaraja – SHE Reporting Analyst Shilpa Shashi - NSW/ACT Planning & Environment Coordinator	Hema Vignaraja
7	Sep 2020	Shilpa Shashi - NSW/ACT Planning & Environment Coordinator	Shilpa Shashi

Table of Contents

Appendices

A: Emergency Contact Details

B: Pollution Incident Response Test Checklist

C: Community Notification Strategy

D: Maps

Glossary of Acronyms

PIDS- Pollution Information Data Sheet

PPE- Personnel 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 **Teven 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

(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

(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—$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.

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 **Teven 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: Garth Stacey - Quarry Manager
2) Notifying and coordinating relevant authorities: Garth Stacey - Quarry Manager
3) Implementation and management of this document: Shilpa Shashi- NSW/ACT Planning & Environment Coordinator

4) Annual review and testing of PIRMP - Shilpa Shashi- 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 2019 Final' folder that will be shared with the site.

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).

Table 1: Holcim SHE Risk Score Matrix – Attachment 6.2F

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 breech 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 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

Table 2: Holcim Quarry Environmental Impact and Hazard Register

Key Environmental Hazards		Risk			Mitigation Measures	Revised Risk		
		L	C	R		L	C	R
Air Quality								
1	Excessive dust emissions	Possible	Serious	Medium	▪ Complete monitoring & assess results quarterly ▪ Review results & monitoring program quarterly ▪ Water carts/spraying ▪ Minimise disturbed areas ▪ Operate within a controlled wet production process (dredging operation) ▪ Progressively rehabilitate disturbed areas ▪ Restrict works during periods of high wind ▪ Dust minimisation training ▪ Maintenance of dust control equipment	Unlikely	Significant	Low
2	Health issues off site	Rare	Severe	Low	▪ As per (1) ▪ Complaints hot line ▪ Issue monitoring results ▪ Communicate construction activities to neighbours plus potential for dust	Rare	Serious	Low
8	Equipment exhaust emissions exceed limits	Unlikely	Significant	Low	▪ Inspect equipment engine emissions regularly ▪ All equipment is serviced and maintained to OEM requirements ▪ Excessive equipment emissions to trigger out of service procedures	Rare	Significant	Low
Groundwater								

Key Environmental Hazards		Risk			Mitigation Measures	Revised Risk		
		L	C	R		L	C	R
1	Groundwater contamination	Unlikely	Serious	Low	▪ 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	Rare	Serious	Low
2	Lowering of groundwater table	Rare	Serious	Low	▪ Monitor & report on ground water levels ▪ Comply with Water Management Plan water balance	Rare	Significant	Low
3	Acid-sulphate soils	Likely	Serious	Medium	▪ Potential Acid sulphate soil (PASS) status is known ▪ Implement acid-sulphate soils management plan ▪ Regular review of acid-sulphate management plan outcomes	Unlikely	Serious	Low
Surface Water								
1	Discharge of sediment	Possible	Serious	Medium	▪ 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 as per AIR	Unlikely	Serious	Low

Key Environmental Hazards		Risk			Mitigation Measures	Revised Risk		
		L	C	R		L	C	R
2	Discharge of hazardous materials	Rare	Severe	Low	▪ As per Surface Water (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	Rare	Serious	Low
Ecology								
1	Damage to local flora	Possible	Serious	Medium	▪ Develop & implement Biodiversity Action Plan ▪ Put in adequate physical protection measures including signage ▪ Monitor & report on site flora health regularly ▪ Suitable training re 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	Unlikely	Significant	Low
2	Damage to site fauna	Unlikely	Serious	Rare	▪ As per Air Quality (1) ▪ Information re local WIRES for distressed or injured fauna	Rare	Serious	Low
3	Dust pollution onto site sensitive ecological areas	Unlikely	Severe	Medium	▪ As per (1) ▪ Comply with site Management Plans ▪ Regular review of riparian areas (as per Management Plans)	Unlikely	Significant	Low
Blasting								

Key Environmental Hazards		Risk			Mitigation Measures	Revised Risk		
		L	C	R		L	C	R
1	Blasting impacts	Unlikely	Serious	Low	▪ 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 ▪ Clear off-site areas prior to blasts	Unlikely	Serious	Low
2	Vibration / airblast damage to off-site structures	Rare	Severe	Low	▪ As per 1 ▪ Monitor sensitive areas & review blast design as necessary ▪ inspect sensitive areas pre & post all blasts	Rare	Serious	Low
Land								
1	Spill of liquid fuel whilst in storage	Possible	Severe	Medium	▪ 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 ▪	Significant	Unlikely	Low
2	Spill during delivery of fuel to mobile equipment	Possible	Severe	Medium	▪ 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.	Unlikely	Significant t	Low
3	Spill during delivery of fuel to storage tank	Possible	Severe	Medium	▪ Supplier's fuel transfer procedure is known ▪ Fuel transfer is supervised against suppliers procedure	Unlikely	Significant	Low

Key Environmental Hazards		Risk			Mitigation Measures	Revised Risk		
		L	C	R		L	C	R
4	Improper storage and use of PASS remediation materials	Likely	Significant	Medium	▪ Ensure water leachate is contained on site ▪ Quantities held on site are minimised or capped ▪ Location of stockpiles close to processing point ▪ PASS mitigation materials are managed in accordance with approval conditions ▪ Excess materials are disposed of in accordance with legislative requirements	Unlikely	Significant	Low
5	Land contamination	Likely	Significant	Medium	▪ Holcim land contamination strategy is known and applied	Unlikely	Significant	Low

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. Refer to table 3 below

- 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.

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.

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

Pollutant	Storage Location	Current SDS Held Yes/No	Emission control equipment (1)	PPE (1)	Spill Clean Up Method (1)	Quantity stored on site
Fuel Hydrocarbons, oil, petrol, diesel, solvents & Cleaning chemicals)	Designated Workshop Area	Yes- held in office	Sand, earth, vermiculite	PVC 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 Post a guard immediately Enter barricades to prevent unintended access **Contain** Contain the spill quickly by surrounding with the booms which should be firmly secured in place.	7400lts Total 4400lts main fuel tank 2200lts mobile fuel tank 800lts small mobile fuel trailer

Pollutant	Storage Location	Current SDS Held Yes/No	Emission control equipment (1)	PPE (1)	Spill Clean Up Method (1)	Quantity stored on site
					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 similar of suitable barrier equipment. **Prevent** 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 **Disposal** Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place into a	

Pollutant	Storage Location	Current SDS Held Yes/No	Emission control equipment (1)	PPE (1)	Spill Clean Up Method (1)	Quantity stored on site
					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 INX. Small Spill 1) Stop leak without risk. 2) Move containers from spill area 3) Absorb with an inert material and place in appropriate waste disposal container. 4) Use spark-proof tools and explosion-proof equipment. 5) Dispose of via a licensed waste disposal contractor.	

Vehicle fluids & Lubricants	Designated workshop area	Yes – held in office	Sand, earth, vermiculite	PVC Gloves, safety glasses	**<u>Large Spill</u>** **<u>Assess</u>** 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? **<u>Ensure Personal Safety</u>** 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.	1600 Lit Oil Total 8 – 200 Lit oil drums

					Prevent 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 **Disposal** 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 in INX. Small Spill 1) Stop leak without risk. 2) Move containers from spill area 3) Dilute with water and mop up, or absorb with an inert dry material and place in appropriate waste disposal container 4) Dispose of via a licensed waste disposal contractor.	
Truck wash	Level 4 adjacent silt pond	Yes – held in office	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	Truck wash temporarily moved to silt pond area lower stockyard while level 4 under new construction. Storage 10,000 litres.

					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 in INX. Small Spill 1) Stop leak without risk. 2) Move containers from spill area 3) Dilute with water and mop up, or absorb with an inert dry material and place in appropriate waste disposal container 4) Dispose of via a licensed waste disposal contractor.	
Liquid Nitrogen	Workshop designated cage area	Yes-held in office	Nil	Goggles, Safety boots and insulated or leather gloves, air-line respirator (if inhalation risk exists)	Spillage 1) Release of liquid to atmosphere will generate vapour fog clouds which can travel considerable distances and affect visibility. 2) These clouds should be treated as asphyxiating atmospheres as the evaporated liquid will have displaced air 3) Refer to vessel operating instructions 4) In an emergency allow liquid and gas to escape to atmosphere	1 Liquid Nitrogen cylinder E size

					5) Monitor oxygen concentration in confined spaces 6) Contact relevant authorities for guidance 7) Leak checking may be done by pressure drop test or soapy water at joints and outlets 8) Shut liquid and gas valves to stop leak if possible and safe to do so.	
Surfactant	Workshop designated area	Yes – held in office	Soil, sand, vermiculite	Safety glasses, PVC gloves	<u>Small spills</u> 1) Contain using sand or diatomaceous earth 2) Collect and seal in properly labelled drums 3) Wash residue with water <u>Large Spills</u> 1) Restrict access to area 2) Provide PPE 3) Remove chemicals which react with spill of material 4) Spills are slippery 5) Contain spill or leak 6) Do not allow entry to drains or water ways 7) Spilled material should be contained by dyking with inert material, sand, soil etc. 8) Solutions can be recovered or carefully diluted with water.	100 litres total 4 – 20 litre containers 4 – 5 litre containers
Dry Powders	Designated workshop area	Yes – held in office	Access to council sweeper, soil, sand, vermiculite	Safety glasses, PVC Gloves,	<u>Accidental Release Measures</u> Emergency procedures: Prevent entry to area by unprotected personnel. Methods and material for containments and clean up 1) Vacuum or wet sweep material	200kgs cement total 10 – 20kg cement bags

					2) avoiding generation of dusts. 3) A fine water spray should be used to suppress dust when sweeping. 4) Product dampened with water may be collected with a clean shovel. 5) Seal all spilled product and wastes in vapour tight labelled plastic containers for reuse/recycle where possible or eventual disposal.	
Welding gas	Designated workshop area	Yes – held in office	Ventilation	Respirator	<u>Occupational Release:</u> 1) Avoid heat, flames, sparks and other sources of ignition. 2) Stop leak if possible without personal risk. 3) Reduce vapours with water spray 4) Keep unnecessary people away, isolate hazard area and deny entry. 5) Remove sources of ignition. 6) Ventilate closed spaces before entering. 7) Report on INX.	6 cylinders G size Oxygen 6 cylinders G size Acetylene
Effluent	Tanks by office	Yes – held in office	Access to council commercial vacuum/ pump truck,, soil, sand, bleach, hydrated lime	PVC Gloves, goggles, overalls	<u>Accidental Release Measures</u> 1) Contaminated area must be clearly marked or cordoned off to restrict access. 2) Protective clothing should be worn when cleaning up a sewage spill. 3) 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. 4) When the area is visibly clean, either a chlorine / water solution or hydrated lime should be applied to the spill	3000 litre septic tank

					area to disinfect. 5) If a major spill has occurred hydrated lime should be applied to the area in place of chlorine bleach 6) .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. 7) Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period. 8) Report on INX.	
Untreated water from sediment ponds*	Site dams	Not applicable	Freeboard	Not applicable	<u>Discharge Measures</u> 1) Assess the water for TSS, pH and oil and grease 2) If within the consent and licence parameters, no further action 3) If outside of the consent and licence parameters, enact the PIRMP and assess for likelihood or actual material harm. 4) If any are available, implement measures available for reducing flow and enacting clean up. Ie lowering water levels in dam, putting in place coir logs, use of flocculant or coagulant, etc.	Pit dam maximum capacity 23.5 mega litres Main dam maximum capacity 11.5 mega litres

(1) **This information should be drawn from a review of the SDS or manufacturer/supplier technical information**

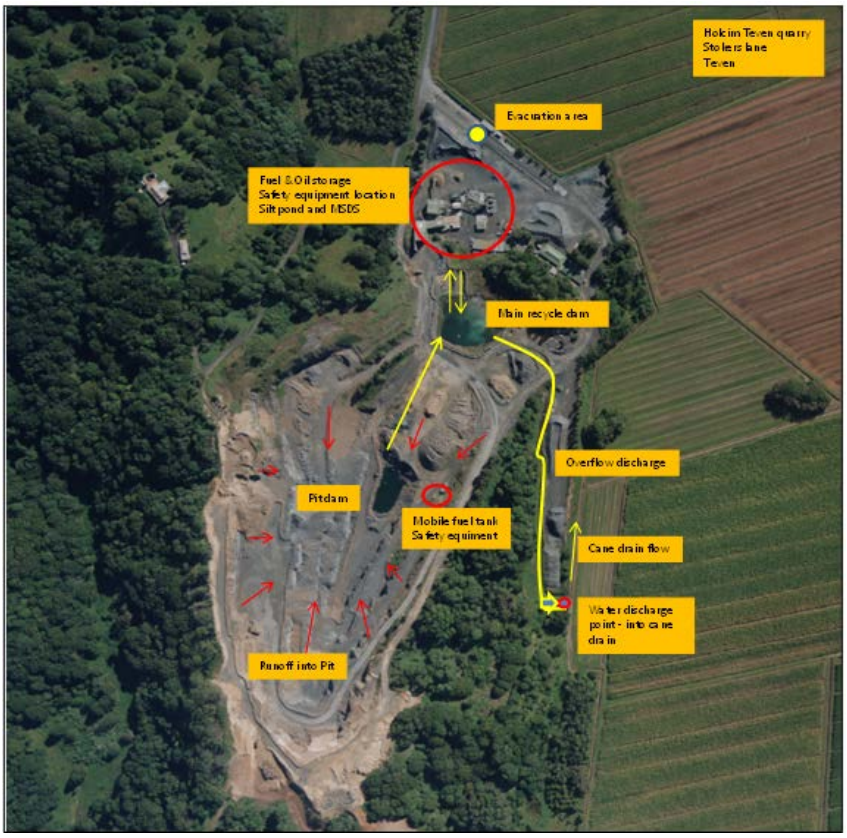
7.3 Emergency Response Map

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.



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:

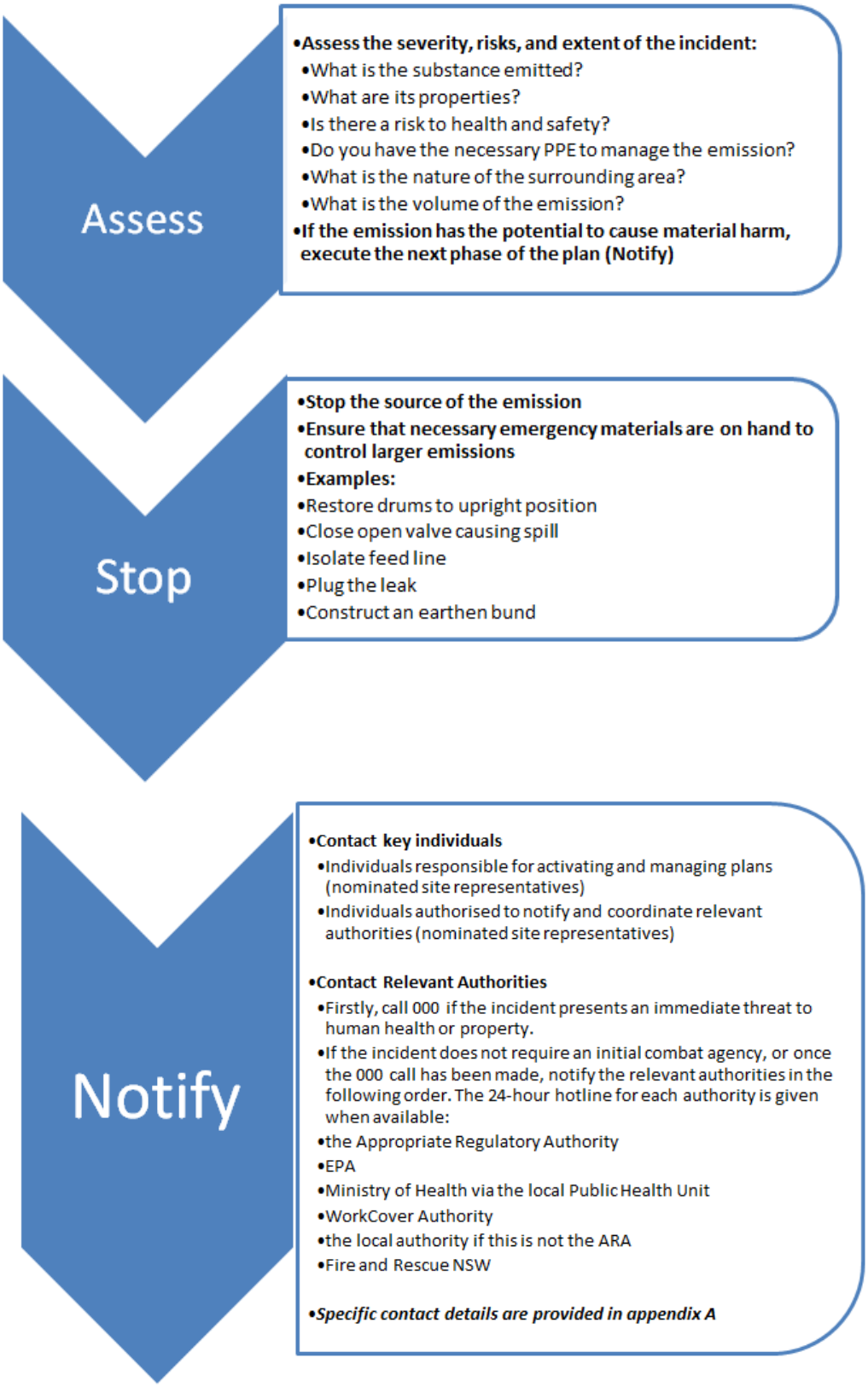
- The PIRMP will be tested annually and any identified updates or changes will be made
- The PIRMP will be tested and reviewed within one month from the date of any pollution event that triggers this PIRMP
- The review will also consist of assessment of any additional hazards and control measures
- In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

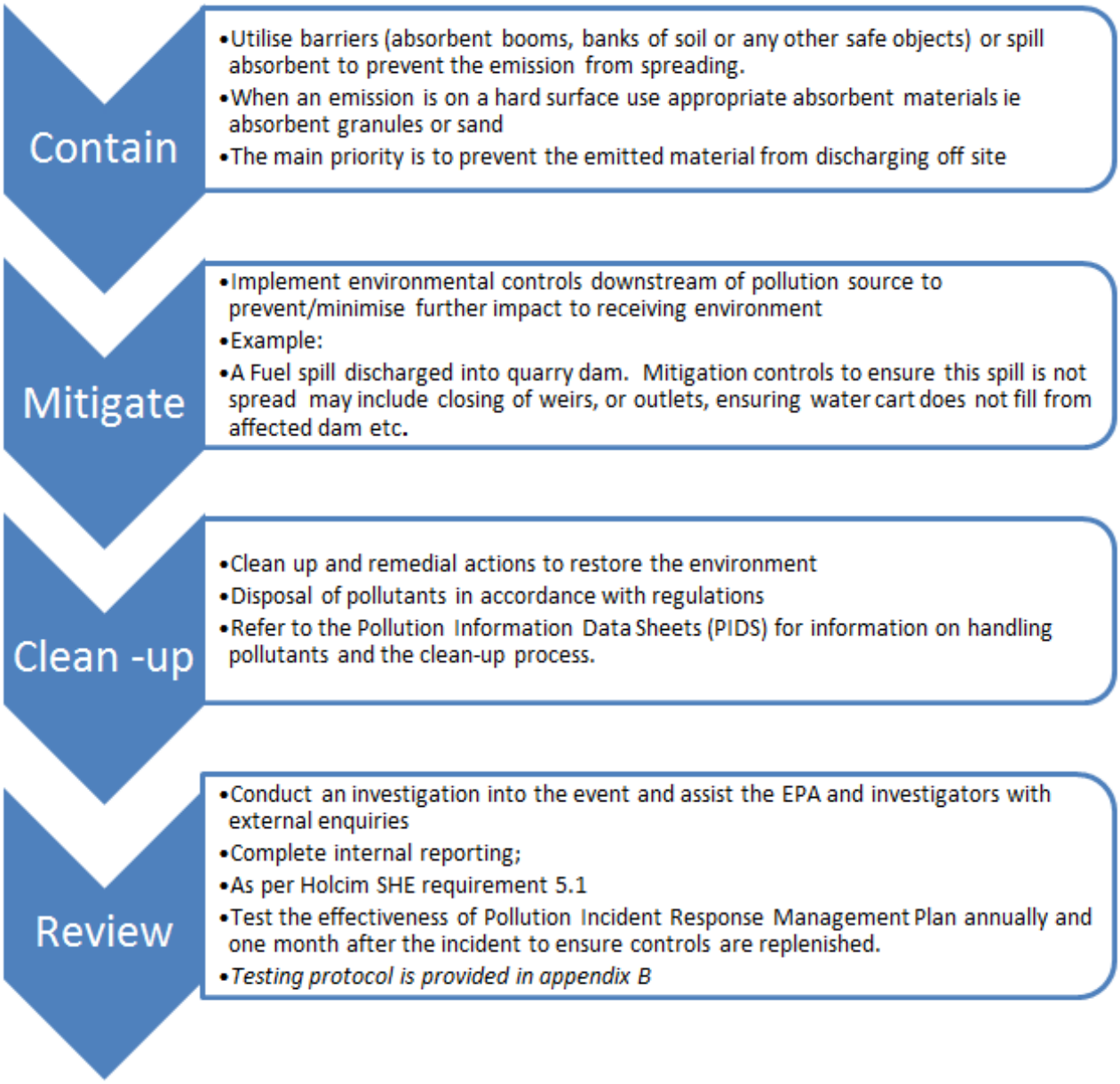
7.5 Typical Holcim Response process

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 below.


Assess
•Assess the severity, risks, and extent of the incident:
•What is the substance emitted?
•What are its properties?
•Is there a risk to health and safety?
•Do you have the necessary PPE to manage the emission?
•What is the nature of the surrounding area?
•What is the volume of the emission?
•If the emission has the potential to cause material harm, execute the next phase of the plan (Notify)
Stop
•Stop the source of the emission
•Ensure that necessary emergency materials are on hand to control larger emissions
•Examples:
•Restore drums to upright position
•Close open valve causing spill
•Isolate feed line
•Plug the leak
•Construct an earthen bund
Notify
•Contact key individuals
•Individuals responsible for activating and managing plans (nominated site representatives)
•Individuals authorised to notify and coordinate relevant authorities (nominated site representatives)
•Contact Relevant Authorities
•Firstly, call 000 if the incident presents an immediate threat to human health or property.
•If the incident does not require an initial combat agency, or once the 000 call has been made, notify the relevant authorities in the following order. The 24-hour hotline for each authority is given when available:
•the Appropriate Regulatory Authority
•EPA
•Ministry of Health via the local Public Health Unit
•WorkCover Authority
•the local authority if this is not the ARA
•Fire and Rescue NSW
•Specific contact details are provided in appendix A


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.
•*Testing protocol is provided in appendix B*

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 an environmental incident 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 include neighbouring residential and/or commercial properties, sensitive receivers ie farms, hospitals schools within the area of impact. 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

8.Staff Training

Sites need to develop a toolbox talk based on the PIRMP. This training should be delivered to all appropriate personnel on site and be conducted to include potential scenarios that may require implementation of the plan.

Frequency of training

Training for site staff should be repeated annually, and after each update to the plan. In the event of an incident requiring the PIRMP to be activated a training drill should be carried within one month of the incident occurring.

How Records of training are kept

Training records should be stored on site and in the Chris 21 data base. This data base is the primary online tool for tracking individual staff training records and frequency for training and refresh courses. These records are to be made available to relevant authorities on request.

9.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
- Staff training and awareness
- 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

Contacts	Phone Number
Individuals responsible for activating the plans and managing the response	**Quarry Manager** **Phillip Messenger- 0429 790 207**
Emergency Services	**000**
EPA	**131 555**
The Ministry of Health via the local Public Health Unit	**1300 555 555**
WorkCover Authority	**13 10 50**
Local Council (If this is not DECCW) (List of NSW Local Council Phone Numbers www.dlg.nsw.gov.au/dlg/dlghome/dlg_localgovdirectory.asp)	**Ballina Shire Council** **(02) 6686 4444**
Fire and Rescue NSW	**000**
Other Organisations or agencies that need to be advised of the incident	**1300 729 579**

Appendix B - Pollution Incident Response Test Checklist

Date:25/11/2020.....

Site:Teven Quarry.....

Address:Stokers Lane Teven.....

Pollution Incident Scenario:Loader – Blown Hydraulic Hose .....

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		
Individuals Authorised to Notify and Coordinate Relevant Authorities		
Emergency Services		
EPA		
The Ministry of Health via the local Public Health Unit		
WorkCover Authority		
Local Council		
Fire and Rescue NSW		
Additional Contacts relevant to the licensee's premises		
Other Organisations or agencies that need to be advised of the incident		

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		
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	

Has there been an evacuation drill in the last 12 months? Yes .....

Date:March 2020 .....

Notes:Will have another drill early 2021 .....

Improvements to the Pollution Incident Response Management Plan:

No improvements noticed while carrying out training

1) .....

2) .....

3) .....

4) .....

Comments / Recommendations / Review

Spill kits need to have all contents checked and re-stocked where needed

1) .....

2) .....

3) .....

4) .....

5) .....

6) .....

7) .....

8) .....

9) .....

Pollution Incident Response Test Checklist Assessor:Phillip Messenger .....

Signed:  **.....**

Appendix C – Community Notification Strategy

- 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
Neighbour	Mick Murphy	0414 778 165
Neighbour	Paul Rizzo	0428 660 069
Ballina Council	Ballina Council	(02) 6686 4944
Neighbour	Brandon Sole	0416 668 428
Neighbour	Craig Woolley	0414 662 833