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Peppertree Quarry
WASTE MANAGEMENT PLAN

June 2020

Document Control

Document Name	Peppertree Quarry Waste Management Plan
Document Filename	PTreeWASTE Mgt PlanMay2020
Document Location	G:\090 Metro Quarries Marulan\Marulan\OPERATIONAL\03. OHSE\1.04 compliance with legislation\approval PA 06_0074\SCH 3 – ENV PERF CONDS 41.42 Waste management\waste management plan

Change History

Rev No.	Date	Prepared By	Approved By	Comments
0	1st July 2019	Sharon Makin (Boral)	Angus Shedden (Boral)	Final WASTE MP submitted for DP&E review
1	1st August 2019	Sharon Makin (Boral)	Angus Shedden (Boral)	Final WASTE MP submitted (including DP&E comments)
2	31st August 2019	Sharon Makin (Boral)	Angus Shedden (Boral)	Final WASTE MP submitted (including DP&E comments re 4.0)
3	19th November 2019	Sharon Makin (Boral)	Angus Shedden (Boral)	Final WASTE MP submitted (including DP&E comments re 4.0)
4	June 2020	Sharon Makin (Boral)	Michael Higgins (Boral)	Revision based upon Modification 6 requirements.

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1 INTRODUCTION

1.1 BACKGROUND

Boral Resources (NSW) Pty Ltd (Boral) own and operates Peppertree Quarry (the Quarry), a hard rock quarry located in Marulan South, New South Wales. In February 2007, Boral was granted Project Approval (06_0074) to establish and operate the Peppertree Quarry under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Construction of the Quarry was completed in 2013 with commercial extraction operations having commenced in 2014.

The existing Quarry operations have been constructed and operated in accordance with the Project Approval (with modifications in 2009, 2011, 2012, 2016 and 2019) and an Environment Protection Licence (EPL No. 13088).

The 2007 Project Approval and subsequent modifications required the management and minimisation of waste.

In October 2019, the Project Approval was modified for the fifth time (hereafter referred to as Modification 5) under Section 75W of the EP&A Act, to allow the development of a new overburden area (South-West Overburden Emplacement – SWOE) south of the existing Western Overburden Emplacement (WOE) in the north-western corner of the Limestone Mine and extension of the consent boundary to the south to encompass the SWOE along with construction of new infrastructure to link with the SWOE. There were no additional waste streams identified in this Modification in relation to the proposed works.

This was followed in April 2020, with the Project Approval modified for the sixth time (hereafter referred to as Modification 6) under Section 4.55 (1A) of the EP&A Act, to allow the replacement of the existing air filtration network with two baghouse air filtration units and associated ducting attached to the existing and approved secondary and tertiary processing facilities (i.e. crushing and screening plant). The baghouses are located within the current operating plant footprint. There were no addition waste streams identified in this Modification in relation to the proposed works.

This document is a revised version of the initial 2019 Waste Management Plan (WMP) and incorporates changes associated with Modification 5 and Modification 6.

This Waste Management Plan (WASTE MP) has been prepared to document the processes in place for the management waste. The WASTE MP will remain a dynamic document which will be updated as required over the life of quarry operations until the Project Approval end date of December 2038.

1.2 OVERVIEW OF OPERATIONS

The Quarry has an identified resource area of approximately 250 million tonnes, which dependent upon extraction rates, would allow quarrying for 70 years or more over an area of approximately 104 hectares (ha), within a 650 ha parcel of land owned by Boral.

The Quarry produces granodiorite aggregate products and manufactured sand. All quarry products and materials are transported by rail to a number of Boral rail terminals for distribution by trucks into the Sydney metropolitan area.

Typical quarrying operations involve the stripping of overburden and the extraction of hard rock using open-cut drill and blast techniques.

Overburden is stripped by dozer, loaded onto trucks using excavators and/or front end loaders and transported to the overburden emplacement areas, where it is spread and shaped by dozer.

Traditional drill and blast methods are then used to break up the hard rock. A drill rig stationed on top of each production bench drills a series of holes that are later charged with explosives, detonators and delays. Boral apply standard practice of limiting the maximum instantaneous charge to stay within the relevant noise and vibration criteria.

Blasted rock is then processed on-site using various crushers and screens to obtain the desired product. Material is initially crushed in a primary mobile crusher located within the pit, which is currently fed by an excavator, front end loaders and trucks.. After passing through the primary crusher, the crushed material is taken from the pit along a series of conveyors to the first set of screens located to the northwest of the pit and material is stockpiled in a surge pile. Material in the surge pile is reclaimed and conveyed to the main processing area where it undergoes further crushing, screening and shaping. Product material is stored in the various covered storage bins prior to being dispatched off-site by train.

1.3 Scope and Objectives

This WASTE MP applies to all activities undertaken by the Quarry including quarrying, crushing, screening, stockpiling and transportation of quarry products, maintenance activities; and associated service and support functions.

The WASTE MP provides the framework and guidance for the Quarry activities to be conducted in a manner whereby appropriate measures are implemented to manage waste and meet compliance requirements of the CoA of the Project Approval.

Specific objectives of the WASTE MP are to:

- detail the type and amount of waste generated by the operations
- Provide classification and management of all wastes generated or stored on site to be in accordance with the EPA's *Environmental Guidelines: Assessment Classification and Management of Liquid and Non-Liquid Wastes*.
- Identify the Management methods of waste streams;
- Outline Reporting and tracking methods for waste management in relation to quarry operations

1.4 Responsibility for Implementation

The Quarry Manager carries ultimate responsibility for the implementation of this WASTE MP and providing the necessary resources as required. The site Environmental Officer is responsible for carrying out and/or coordinating the monitoring and reporting requirements of this plan.

Operations personnel (Quarry Supervisors) are responsible for the management of waste systems as per this Management Plan. Other site personnel are responsible for ensuring they follow the management methods in regards to waste.

1.5 Document Structure

The structure of the Management plan is outlined in Table 1.

Table 1: Structure of the Management plan

section	Content
1	Provides an overview of the project, and objectives of the plan
2	Details the statutory requirements as outlined in the conditions of consent dated august 2016
3	Describes the waste management objectives, performance criteria, generated wastes and operational management processes
4	Waste management monitoring
5	Outlines incident planning and responses
6	Financial provisions for the work required
7	Specifies training requirements
8	Outlines the reporting and review requirements

2 STATUTORY REQUIREMENTS

2.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The project was declared a 'major development' under the provisions of Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (SEPP Major Development) 2005. Since Project Approval was granted in 2007, there have been six approved modifications (with conditions), as detailed below:

- Modification 1 (2009): approved for exploratory blasting and test pitting in order to verify the design of the processing plant;
- Modification 2 (2011): approved for the construction of a new rail line rather than use the existing rail facilities to the Limestone Mine; and
- Modification 3 (2012): approved the construction of a high voltage power line from an existing substation to the processing plant and to provide a rail siding near the junction with the Main Southern Railway Line.
- Modification 4 (2016): approved for the extension of daily in-pit operating hours and Establishment of a new overburden emplacement area.
- Modification 5 (2019): approved for the development of a new overburden area (SWOE) south of the existing WOE in the north-western corner of the Limestone Mine.
- Modification 6: (2020) Approved for the replacement of existing dust extraction units with two baghouses and associated duct works.

The quarrying operations will continue to be subject to the provisions of the EP&A Act for any subsequent changes or modifications to the operations. Additionally, the operations will need to be able to demonstrate compliance against the current CoA of the Project Approval relevant to waste issued under the provisions of the EP&A Act (refer to Table 2).

Table 2: Conditions of Approval (Project Approval – Modification 5 and Modification 6

CoA	Condition of Project Approval	Addressed in Section
B71	**Operating Conditions** The Proponent must: (a) monitor the amount of waste generated by the project; (b) minimise the waste generated by the project; and (c) Report on waste minimisation in the Annual Review referred to in Condition D11	Section 3.0, 4.0, 8.0
B72	The Proponent must ensure that all waste generated or stored on site is assessed, classified and managed in accordance with the EPA's *Waste Classification Guidelines (EPA 2014)*	Section 3.0, 4.0
D9	**Reporting and Auditing** **Incident Notification** The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the project (including the project application number and name) and set out the location and nature of the incident.	Section 5.0

D11	**Annual Review** By the end of March in each year after the commencement of project, or other timeframe agreed by the Secretary, a report must be submitted to the Department reviewing the environmental performance of the project, to the satisfaction of the Secretary. This review must: (a) describe the project (including any rehabilitation) that was carried out in the previous calendar year, and the project that is proposed to be carried out over the current calendar year; (b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, including a comparison of these results against the: (i) relevant statutory requirements, limits or performance measures/criteria; (ii) requirements of any plan or program required under this approval; (iii) monitoring results of previous years; and (iv) relevant predictions in the documents listed condition A2(c). (c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence; (d) evaluate and report on: (i) the effectiveness of the noise and air quality management systems; and (ii) compliance with the performance measures, criteria and operating conditions in this approval; (e) identify any trends in the monitoring data over the life of the project; (f) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and (g) describe what measures will be implemented over the next calendar year to improve the environmental performance of the project.	Section 8

2.1.1 Statement of Commitments

The EA for Peppertree Quarry recommends a range of measures to avoid, manage, mitigate, offset and/or monitor the environmental impacts of the project, as set out in the Statement of Commitments. Commitments that relate to waste management are set out in Table 3 below.

Table 3: Statement of Commitments (EA, 2006)

Statement of Commitment	Referenced in WASTE MP
Wastes generated during both construction and operation of the proposed Marulan South Quarry will be recycled wherever possible or disposed of in an environmentally acceptable manner in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act) and the guidelines recommended in the EPA (1999) Environmental Guidelines:	Section 2.0- 8.0

Assessment, Classification and Management of Liquid and Non-Liquid Wastes. Waste management measures to avoid waste generation and promote reuse, recycling and reprocessing of waste will be incorporated into the Environmental Management Plan for the project. This plan will detail waste management practices including storage, recycling, reuse and waste reduction measures.	

2.2 PROTECTION OF ENVIRONMENT OPERATIONS ACT 1997

The objectives of the *Protection of Environment Operations Act 1997* (POEO Act) are to protect, restore and enhance the quality of the environment. Some of the mechanisms that can be applied, under the POEO Act, to achieve these objectives include reduction of pollution at source, monitoring and reporting of environmental quality.

Based on annual production volumes, Peppertree Quarry has been determined to be a 'Scheduled Activity' under Schedule 1 of the POEO Act which requires site operations to be the subject of an Environmental Protection Licence (EPL No. 13088).

The EPL has the following no specific compliance conditions relevant to waste management.

2.3 WASTE AVOIDANCE AND RESOURCE RECOVERY ACT 2001

This Act promotes waste avoidance and resource recovery by developing strategies and programs to avoid the generation of waste and reuse and recycle where possible.

2.4 PROTECTION OF ENVIRONMENT OPERATIONS (WASTE) REGULATION 2014

This Regulation sets out provisions for the management of waste in relation to storage, transportation, reporting and record keeping requirements for waste facilities. The Quarry does not operate as a waste facility and does not accept waste materials.

2.5 BORAL COMMITMENTS TO WASTE MANAGEMENT

The Quarry operates under a Boral integrated Health, Safety, Environment and Quality Management System (HSEQMS). The HSEQMS has commitments to the Boral Environmental Policy through established standards and procedures which require internal conformance to high levels of environmental performance with continual improvement objectives.

Boral have an established corporate and divisional risk-based audit program that periodically assess operational sites for conformance with HSEQMS requirements. In addition, the Quarry must be the subject of an Independent Audit every three years. An Independent Audit of the Quarry was most recently conducted in 2015 and 2018 with the next Audit due in 2021.

The HSEQMS Waste Management Standard (GRP-HSEQ-8-04) requires each Boral operation quarry to

"To monitor and measure waste materials Company sites produce, reuse, recycle, reduce, and dispose of, and that those actions comply with both licensing and regulatory requirements, "with Company operations to manage waste according to the principles of the waste hierarchy of:

- avoidance
- resource recovery (includes reuse, recycling, reduction, reprocessing and energy recovery)
- disposal"

Boral sites are required to undertake activities in accordance with the following commitments in relation to waste:

- A Waste Register shall be maintained at all sites.
- Sites shall actively facilitate resource efficiency through reuse or recycling of waste materials.
- Materials not suitable for reuse or recycling shall be directed to a waste or resource recovery facility, which is lawfully permitted to accept such material.
- A Subject Matter Expert (SME) shall be consulted before any material that is not already defined in procedures is moved or disposed of.

3 WASTE MANAGEMENT

3.1 WASTE MANAGEMENT OBJECTIVES AND PERFORMANCE CRITERIA

The primary objectives of this Waste Management Plan are to provide guidance and direction for Quarry activities to be conducted in a manner whereby appropriate measures are implemented to minimise and manage waste and to meet compliance requirements of the CoA of the Project Approval.

The performance criteria will be used to assess the success of the management actions and are outlined in Table 4.

Table 4: waste management objectives and performance criteria

Objective	Performance criteria
Compliance with regulatory requirements including Project Approval	No non compliances
Assess waste reduction opportunities	Minimum of 2 opportunities to be assessed
The site actively facilitate resource efficiency through reuse or recycling of waste materials.	Wastes identified with recycling / reuse systems place
Materials not suitable for reuse or recycling shall be directed to a waste or resource recovery facility, which is lawfully permitted to accept such material. All wastes classified accordingly.	Waste identified and being disposed of accordingly. Waste register in place
assess the effectiveness of waste management measures	Waste Register in place. Reporting in the Annual Review 98% materials disposed as per the waste management plan. This will be determined via a 6 monthly audit of waste monitoring data and the bins and management system Tracking system in place and utilised

3.2 ASPECTS AND IMPACTS

In accordance with HSEQMS requirements, the Quarry has developed an aspects and impacts register which aligns with Australian & New Zealand Standard AS/NZS 31000:2009 Risk Management - Principles and Guidelines. The register has identified, risk assessed and applied appropriate controls to activities with potential to generate wastes, some of which include.

- Management of oils;
- Disposal of conveyor belt;
- Establishment of overburdens.

The Aspects and Impacts registered is reviewed on an annual basis, when changes are made to the operations or when a noncompliance arises.

3.3 WASTE GENERATION

Waste generated by the quarry operations is collected and segregated to allow the proper storage and end use of the material to be managed.

Waste is classified in accordance with the NSW EPA Waste Classification Guidelines thereby advising on the appropriate management and / or disposal.

Waste generated onsite has been identified with Table 5 detailing the waste material, its source and the waste classification.

Table 5. Waste Generation and Classification

Waste	Source	Waste Classification
Oil absorbent pads	Oil spills	Solid general waste
Food scraps	Lunch room	Solid general waste
Disposable Coffee cups	Lunch room	Solid general waste
Screen mats	Replacement at screens at crusher	Solid general waste
Oil filters	Maintenance on vehicles	Solid general waste once oil has been drained
Oily rags / waste	workshop	Solid general waste
Plastic / Glass bottles / Aluminium cans	Office	Solid general waste
Paper and Cardboard	Office	Solid General waste
Cardboard	packaging / workshop	Solid general waste
Conveyor belt	Split conveyor belts from operations	Solid general waste
Oil drums	Spent oil - operations	Solid general waste
Empty IBC Containers	Plant operations	Solid general waste
Steel	General maintenance and capital works	Solid general waste
Waste oil	wash bay	liquid waste
tyres	vehicle maintenance	solid general waste
timber pallets	workshop	Solid general waste
Photocopy toners	office	Solid general waste
Sewage Effluent	amenities	liquid waste
Batteries	workshop	Solid general waste
Manganese Crusher liners	Operations	Solid General waste
Tungsten tips	Operations	Solid General waste
E Waste	Office	General solid waste
General rubbish	General	General solid waste
Overburden	Pit operations	Virgin excavated natural material (VENM)
Granodiorite Fines	Screening and crushing operations	Virgin excavated natural material (VENM)
Scalps	Screening and crushing operations	Virgin excavated natural material (VENM)

3.4 Operational Protocols

Management Methods have been developed for each waste with contracts in place with licensed contractors where appropriate.

Details of the management method of each waste and the responsible contractor are contained in Table 6.

Table 6. Waste Management Methods for Peppertree Quarry

Waste	Waste Classification	Management Method	Contractor
Oil absorbent pads	Solid general waste	Once used, bagged and placed in bin for landfill providing no liquid oil present.	Veolia – local Council landfill
Food scraps	Solid general waste	Bagged and placed in bin for landfill	Veolia – local Council landfill
Disposable Coffee Cups	Solid general waste	Coffee cups are made of compostable materials rather than polystyrene. Currently cups are bagged and placed in the bin for landfill.	Veolia – local Council landfill
Screen mats	Solid general waste	Placed in bin for landfill	Veolia – local Council landfill
Oil filters	Solid general waste once oil has been drained	Drained of oil, bagged and placed in bin for landfill	Veolia – local Council landfill
Oily rags / waste	Solid general waste	Oily rags are collected in the workshop for recycling however currently bagged and placed in bin for landfill	Veolia – local Council landfill
Plastic / Glass bottles / Aluminium cans	Solid general waste	Separated in the crib room and offices for recycling.	Endeavour Industries
Paper and Cardboard	Solid General waste	Separated in the crib room and offices for recycling	Endeavour Industries
Cardboard	Solid general waste	Separated at the workshop and warehouse and placed in specific cardboard bins	Veolia – recycling
Conveyor belt	Solid general waste	Collected and stockpiled for reuse. Contract is in place with companies who repair the belts to remove the damaged belts.	Fenner Dunlop or Spice Tech with belt on sold for mainly agricultural uses
Oil drums	Solid general waste	Drained on site, stockpiled in designated area, and crushed for recycling	Fast Skips
Empty IBC Containers	Solid general waste	Stockpiled in designated area and returned to supplier	Polo Citrus
Steel	Solid general waste	Offcuts and parts are placed in designated steel skip bins for recycling	Fast Skips
Waste oil	liquid waste	Collected and stored onsite in purpose designed oil tank adjacent to the workshop. This tank is emptied on a regular basis with the oil taken for recycling by a licensed regulated waste transporter	Clean away
tyres	solid general waste	There is very little storage of tyres on site. Tyres are replaced by designated contractors who take the damaged tyre for recycling or disposal.	Bridgestone, Premier Tyres
timber pallets	Solid general waste	Pallets and timber waste are placed in designated timber skip bins for recycling. Pallets in good condition will be returned to the supplier where possible	Veolia
Photocopy toners	Solid general waste	bagged and posted for recycling	Veolia – local Council landfill
Sewage Effluent	liquid waste	Above ground absorption trench on site.	Onsite management
batteries	Solid general waste	Collected and recycled through regional facilities	Onsite management

Manganese Crusher liners	Solid General waste	Placed in designated skip bin and recycled	Fast Skips
Tungsten tips	Solid General waste	Placed in designated skip bin and recycled	Fast Skips
E Waste	General solid waste	Collected and recycled through regional facilities	Onsite management
General rubbish	General	General solid waste	General rubbish
Overburden	Virgin excavated natural material (VENM)	Emplaced within approved designated emplacements on site	Onsite management
Granodiorite Fines	Virgin excavated natural material (VENM)	Emplaced within approved designated emplacements on site	Onsite management
Scalps	Virgin excavated natural material (VENM)	Stockpiled on site prior to sale	Onsite management

3.5 RESOURCE RECOVERY EXEMPTION

Peppertree Quarry have utilised truck tyres from the adjoining mine to establish heavy vehicles parking bays and as bunds along designated roadways. These tyres have been individually placed upright, to approximately half their height into the ground to form the barriers.

These Tyres have been brought onto site under “The Recovered Tyres Exemption 2014, Resource Recovery Exemption Under part 9, Clause 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014.”

This exemption applies to “recovered tyres that are, or are intended to be, applied to land for use in civil engineering structures and road making activities (using industry recognised standards such as the Building Code of Australia). Recovered tyres are a material comprising used, rejected or unwanted tyres, including casings, seconds, shredded tyres or tyre pieces that contain at least 98% tyre material. “

As per the requirements of the Exemption, 152 tyres have been sourced from the Marulan South Limestone Mine and utilised for this purpose (refer Figure 1).

Figure 1 use of truck tyres

3.6 WASTE MANAGEMENT OPPORTUNITIES

A number of potential opportunities to better manage our waste have been identified and will be investigated.

Details of the opportunities are contained in Table 7.

Table 7. Waste Management Opportunities for investigation

Waste	Investigation Opportunity
Oil absorbent pads	Investigate whether natural materials are available and used pads can be composted
Food scraps	Establish collection and compost system
Disposable Coffee Cups	Establish collection and compost system
Screen mats	Screen mats are composed of steel and rubber. Investigate recycling as steel or as chipped material similar to tyres
Oil filters	Investigate possibility of recycling
Oily rags / waste	Establish collection and recycling system
Plastic / Glass bottles / Aluminium cans	Separated in the crib room and offices for recycling. – continue with current practice
Paper and Cardboard	Separated in the crib room and offices for recycling – continue with current practice
Cardboard	Separated at the workshop and warehouse and placed in specific cardboard bins - continue with current practice
Conveyor belt	Collected and stockpiled for reuse. Contract is in place with companies who repair the belts to remove the damaged belts. – continue with current practice
Oil drums	Drained on site, stockpiled in designated area, and crushed for recycling – continue with current practice but review oil usage and possible bulk purchases to limit use of drums
Empty IBC Containers	Stockpiled in designated area and returned to supplier - continue with current practice but review product usage and possible bulk purchases to limit use of IBC containers
Steel	Offcuts and parts are placed in designated steel skip bins for recycling – continue with current practice
Waste oil	Collected and stored onsite in purpose designed oil tank adjacent to the workshop. This tank is emptied on a regular basis with the oil taken for recycling by a licensed regulated waste transporter – continue with current practice but review usage of oils and generation of waste to see if quantities can be reduced
tyres	There is very little storage of tyres on site. Tyres are replaced by designated contractors who take the damaged tyre for recycling or disposal – audit contractors and encourage recycling of tyres.
timber pallets	Pallets and timber waste are placed in designated timber skip bins for recycling. Instigate separation of Pallets in good condition and arrange system to return to the supplier where possible
Photocopy toners	bagged and posted for recycling via Close the Loop - continue with current practice
Sewage Effluent	Above ground absorption trench on site. Review replacement of current system with Biocycle type system with use of treated effluent for irrigation
batteries	Collected and recycled through regional facilities - continue with current practice
Manganese Crusher liners	Placed in designated skip bin and recycled- continue with current practice
Tungsten tips	Placed in designated skip bin and recycled- continue with current practice
E Waste	Collected and recycled through regional facilities- continue with current practice
General rubbish	Conduct bin audit and assess other items for management eg plastic buckets

Overburden	Emplaced within approved designated emplacements on site- continue with current practice
Granodiorite Fines	Emplaced within approved designated emplacements on site – investigate use of fines in other products and mixes
Scalps	Stockpiled on site prior to sale - continue with current practice

4 WASTE MONITORING

Waste monitoring allows for the better understanding of the generation of materials and the assessment of disposal and reuse / recycle options.

Data is provided by contractors on a regular basis as part of their invoicing and contractual arrangements.

A more formal system is being established whereby each waste contractor is to provide a docket for each pick up of waste or recycled materials.

On a monthly basis, this will be collated into a waste register maintained on site.

On a 6 monthly basis, this data, and the waste management collection system, will be reviewed with contractors and Boral staff. This review will document any issues and identify any possible waste management opportunities.

Waste Contractors will also be requested to provide dockets as proof of delivery of materials to the agreed designated facilities, when requested to do so.

Waste oils, which are required to be tracked, are managed through an authorised agent.

Boral have in place a national waste contract with Veolia and are expanding this to include a panel of waste service providers, such as Clean Away, who can offer more recycling opportunities. Peppertree Quarry will be utilising this panel to manage all waste materials and seek, where possible, improved ways for reuse or recycling.

5 WASTE RESPONSE PLAN

The objective of this section is to provide the procedure for responding to impacts identified through the routine monitoring and management of the waste.

It is also designed to act as a response plan for taking action in the unlikely event that an unforeseen incident occurs at the site; e.g. Spill of waste materials

Responding to identified impacts will be the responsibility of the Quarry Supervisor.

Schedule 2, Condition D9 and D10 of the Project Approval details the reporting requirements for identified impacts/incidents and states that:

"D9. The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the project (including the project application number and name) and set out the location and nature of the incident.

D10. Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the noncompliance. The notification must be in writing to

compliance@planning.nsw.gov.au and identify the project (including the project application number and name), set out the condition of this approval that the project is noncompliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.
***Note**: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance."*

An incident as defined in the Approval is deemed to be "*an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance*."

The response plan for incidents is detailed below.

WASTE IMPACT RESPONSE

Adverse environmental impacts are likely to be associated with the incorrect storage, handling or disposal of waste materials. This would potentially include:

- Liquid spills;
- Fire from stockpiled materials prior to disposal or reuse / recycling
- Spills during transportation and
- Illegal disposal.

If it is identified that a waste related activity may or has resulted in an offsite disturbance or caused an incident as defined above the following actions will be taken:

- Operation in relation to the waste (i.e. disposal, recycling etc.) to be stopped if necessary until appropriate control systems can be implemented or the impact managed;
- the Department of Planning, Industry and Environment (DPI&E) and NSW EPA will be notified of the incident/impact/potential impact within seven days of its identification;
- an investigation will be undertaken to establish the root cause
- Subject to the findings of the investigation actions will be taken to repair, replace or change the identified cause of the impact. These actions will be completed by appropriately qualified personnel or consultants; and
- The identified cause of the impact and the selected response will be formally documented in an incident response report.
- Training will be undertaken or contractual arrangements made, if changes are required to procedures or operations.

6 FINANCING AND PROVISION

Funding of works associated with the WASTE MP will be from operational and capital budgets associated with the quarry operations.

7 TRAINING

Every employee and contractors working onsite must be inducted. The Peppertree Quarry induction covers the controls associated with managing waste.

Where identified by management representatives, additional site specific training will be developed and implemented and delivered to relevant personnel and contractors.

All waste management contractors will have the necessary qualifications, where required to remove waste from site.

8 REPORTING AND REVIEW

8.1 REGULATORY COMPLIANCE

The Site will be aware of regulatory waste requirements to ensure the necessary controls and monitoring is carried out for the purpose of verifying compliance.

Regulatory documents such as the following will be periodically reviewed for site compliance with waste management obligations:

- environmental licences and
- planning consents
- waste specific legislation

Compliance with relevant waste conditions and regulations will be managed by appropriate operational management, which includes;

- maintenance and inspection of infrastructure associated with waste management
- Application and review of procedures and
- monitoring

8.2 REPORTING

8.2.1 Annual Review

The activities and performance outcomes of the WASTE MP will be presented in the Annual Review. This will include details of the management of waste over the reporting period including any alternatives or investigations undertaken to minimise waste generation.

8.2.2 Incident Reporting

Incidents as defined in Section 8.1 must be immediately notified to the Department and any other relevant agencies immediately after Boral becomes aware of an incident as per Condition D9 of the approval.

Non-compliances must be notified to the Department within seven days of Boral becoming aware of a non-compliance as per Condition D10 of the approval.

Incidents and non-compliances are to be identified in the Annual Review with a description of what actions were taken to rectify the non-compliance and avoid reoccurrence.

Incident reporting will also be undertaken in accordance with Condition R2 of the EPA Environment Protection Licence which states "*The licensee or its employees must notify all*

relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act."

In accordance with Appendix 8 of the Approval and Condition R3 of the EPA EPL, written incident notification and reporting must be undertaken once Boral becomes aware that an incident has taken place, within 7 days of becoming aware of the incident.

Under Part 5.7A of the *Pollution of the Environment Operations Act* 1997 (POEO Act), a Pollution Incident Response Management Plan (PIRMP), which also requires immediate reporting of incidents, has been implemented at the Quarry. This PIRMP outlines incidents that have the potential to cause material harm and therefore the actions to prevent and manage such incidents.

The POEO Act requires:

- Identifying and risk assessing the likelihood of hazards;
- Actions for preventing and responding to incidents;
- A site specific inventory of all potential pollutants;
- Equipment to be used in an incident response;
- Plan to minimise environmental and human harm by the implementation of actions to be taken during or immediately after a pollution incident;
- Consideration of how an incident may impact neighbours;
- Immediate reporting and ongoing communication an incident to ARAs and neighbours;
- Staff training on their roles and responsibilities under the PIRMP; and
- Annual testing and review of the PIRMP.

The Quarry Manager (or nominated Boral Authority) has the responsibility of ensuring all PIRMP reviews, revisions, training, testing and internal and external notifications are undertaken in compliance with POEO Act requirements.

The Department of Planning, Industry and Environment and EPA representatives will be advised of incidents as per the detail in the PIRMP.

Boral also maintains a safety and environmental incident reporting system. Any incidents relating to waste will be entered into this system. All logged incidents are dealt with internally and, if necessary, through a NSW regulatory authority. Following reporting, all incidents are investigated and appropriate management recommendations are implemented.

8.3 AUDITING

Boral has an established corporate and divisional risk-based audit program that periodically assess operational sites for conformance with HSEQMS requirements.

In accordance with the requirements of CoA D13 (Schedule 2), within 3 years of the date of the commencement of construction and every 3 years thereafter, unless the Secretary directs otherwise, Boral will commission and pay the full cost of an Independent Environmental Audit of the project. The adequacy of this WASTE MP will be included in the Environmental Audit. An Independent Audit of the Quarry was conducted in 2015 and 2018 with the next Audit due in 2021.

8.4 REVIEW OF MANAGEMENT PLAN

This WASTE MP will be reviewed periodically by suitably qualified persons to determine the efficacy of the Plan and ensure it continues to fulfil its intended purpose. This will allow for and promote adaptive management through progressive stages of future quarry operations.

Even though The WASTE MP is not a formal requirement of the Conditions of Consent, it is likely to be reviewed in line with the other formally required Management plans and therefore be reviewed in response to Condition D6 and D7 of the Project Approval which requires a review within 3 months of:

- the submission of an incident report;
- the submission of an Annual Review;
- the submission of an Independent Environmental Audit;
- the approval of any modification of the conditions of this approval (unless the conditions require otherwise);
- notification of a change in project stage; or
- the issue of a direction of the Secretary which requires a review

If necessary, to either improve the environmental performance of the project, cater for a modification or comply with a direction, this plan must be revised, to the satisfaction of the Secretary and submitted to the Secretary for approval within six weeks of the review. The proponent will continue to apply existing management plans, strategies or monitoring programs prior to the determination of a modification until the approval of a similar plan, strategy or program.