Champions Quarry Expansion

WASTE MANAGEMENT PLAN

Final Report

Version 2.2 (October 2017)

Champions Quarry

"Working with the Environment"

REVISION HISTORY AND APPROVAL OF THE WASTE MANAGEMENT PLAN

Version	Date	Description	By	Review
1.0 (March 2014)	March 2014	Final Report Waste Management Plan	Champions Quarry	Jeff Champion Completed
1.0 (March 2014)		Final Report Waste Management Plan	EPA	Completed
1.0 (March 2014)		Final Report Waste Management Plan	DP & I	Requested Amendments
1.1 (May 2014)	May 2014	Final Report Waste Management Plan	DP & I	Approved
2.0 (January 2017)	January 2017	Final Report Waste Management Plan	Champions Quarry	Jeff Champion
			DP & E	Comments
2.1 (March 2017)	March 2017	Final Report Waste Management Plan	Champions Quarry	Jeff Champion
			DP & E	Approved
2.2 (October 2017	October 2017	Final Report Waste Management Plan	Champions Quarry	Jeff Champion
			DP & E	Approved

This Management Plan has been prepared after due consideration of the Guidelines from DP & E which seek to ensure that this is an effective and user friendly plan. It is not a prescriptive or detailed document but provides a broad framework and direction.

This Management Plan is considered a dynamic document and will be reviewed where necessary as part of the annual review process (see Section 8 of the EMS). This Management Plan and any subsequent revisions must be approved by Champions Quarry Management and DP & E. The Management Plan must be prepared in consultation with the NSW Environmental Protection Authority and then submitted to the Secretary (or a nominee) of the DP & E for approval in accordance with the Project Approval.

A copy of the revised Management plan will be available on the Proponent's website.

REVISION HISTORY AND APPROVAL OF PROJECT APPROVAL (CONDITIONS OF APPROVAL)

Date	Description	By	Review
30 August 2012	Project Approval	Champions Quarry	Jeff Champion
		DP & I	
29 October 2013	Notice of Modification (09_0080 MOD 1)	Champions Quarry	Jeff Champion
		DP & I	
16 September 2016	Notice of Modification (09_0080 MOD 2)	Champions Quarry	Jeff Champion
		DP & E	
9 August 2017	Notice of Modification (09_0080 MOD 3)	Champions Quarry	Jeff Champion
		DP & E	

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REFERENCES

GLOSSARY

Biodiversity Offset Strategy	The conservation and enhancement strategy described in the documents listed in condition 2(a) of Schedule 2, and shown in the figure in appendix 6 of the Project Approval
CoA	Planning and Assessment Commission of NSW Conditions of Approval dated 30 August 2012 (incorporating the Statement of Commitments (SoC))
Contractor	Contractor engaged by the Proponent to undertake activities associated with the Project (and includes Subcontractors)
DECCW	Department of Environment, Climate Change and Water
Department	Department of Planning and Environment
DoP	Department of Planning
DP & I	Department of Planning and Infrastructure (previously known as DoP)
DP & E	Department of Planning and Environment (previously known as DP & I)
DPI (Agriculture)	Department of Primary Industries - Agriculture
DPI (Water)	Department of Primary Industries - Water
DRG	Division of Resources and Geoscience within the NSW Department of Planning and Environment
Environment	Surroundings in which the Project operates within including: air, water, land, natural resources, flora, fauna, humans, heritage and their interrelation
Environmental Aspect	Element of organisational activities or products that can interact with the environment
Environmental Impact	Any changes to the environment, whether adverse or beneficial, wholly or partially resulting from an organisational aspect
Extraction Areas	The Central and Southern Extraction Areas, shown on Figure 9 in Appendix 6 of the Project Approval
EA	Champions Quarry Expansion, Environmental Assessment Report prepared by ERM Pty Limited and dated February 2010
EA (MOD 1)	Modification Application MP 09_0080 MOD 1 dated April 2013
EA (MOD 2)	Modification Application MP 09_0080 MOD 2 dated February 2016, the accompanying annexures A and B and the response to submissions dated April 2016
EA (MOD 3)	Modification Application MP 09_0080 MOD 3 dated February 2017, titled Annexure A – Application pursuant to Section 75W of the Environmental Planning and

	Assessment Act 1979, and the response to submissions dated July 2017
EMP	Environmental management practices
EMS	Environmental Management Strategy prepared in accordance with Schedule 5 Condition 1 of the Project Approval
EPA	NSW Environmental Protection Authority
ERM	Environmental Resources Management Australia
EP & A Act	*Environmental Planning and Assessment Act 1979 (NSW)*
EPL	*Environmental Protection Licence under the POEO Act*
Guidelines	The Guidelines for Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004)
Incident	A set of circumstances that: • cause or threaten to cause, material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in the Project Approval
LCC	Lismore City Council
Management Plan	Refers to this Waste Management Plan
Minister	Minister for Planning, or delegate
POEO Act	*Protection of the Environment Operations Act 1997*
Preferred Project Report (PPR)	Champions Quarry Expansion, Preferred Project Report prepared by ERM Pty Limited and dated December 2011
Project Approval	Project Approval issued by Planning and Assessment Commission of New South Wales containing the CoA dated 30 August 2012 as amended from time to time
Proponent	Reavill Farm Pty Ltd and Tucki Hills Pty Ltd and any other entity or person who seeks to carry out the development approved under the Project Approval
Response to Submissions	Champions Quarry Response to Submissions, prepared by ERM Pty Limited and dated September 2010 and containing the Proposed Quarry Management Plan
Secretary	Secretary of DP & E, or nominee
SoC	Statement of Commitment (Appendix 3 of the Project Approval)
Subcontractor	Any company, body or person who is contracted to the Contractor for the purpose of supplying services or goods.

1 BACKGROUND

1.1 OVERVIEW

The Proponent has been granted Project Approval by the NSW Minister for Planning and Infrastructure under Section 75J of the EP & A Act to expand quarrying operations of the quarry known as Champions Quarry located at Tuckurimba (near Lismore) on the Far North Coast of New South Wales (herein referred to as "the Project").

The approved expansion is to increase the extraction rate from a maximum of 29,000m^3 (approximately 64,000 tonnes) of sandstone material to 250,000 tonnes of extractive materials per calendar year until the year 2038. Activities included as part of the expansion include but are not limited to, those activities required for clearing, top soil and over burden removal, extraction of quarry product, processing, stockpiling, loading and transportation of material.

As outlined in the EMS, the Project has undergone a high level of scrutiny as part of a detailed EA and subsequent investigations to evaluate the extent of impact of the proposed quarry expansion on the environment.

Figure 1.1 – Project Layout Plans

Known as Appendix 2 Project Layout Plans – Figure 2.2 (amended 1 June 2012) extracted from the Planning and Assessment Commission of NSW Conditions of Approval dated 30 August 2012

APPENDIX 2
PROJECT LAYOUT PLANS

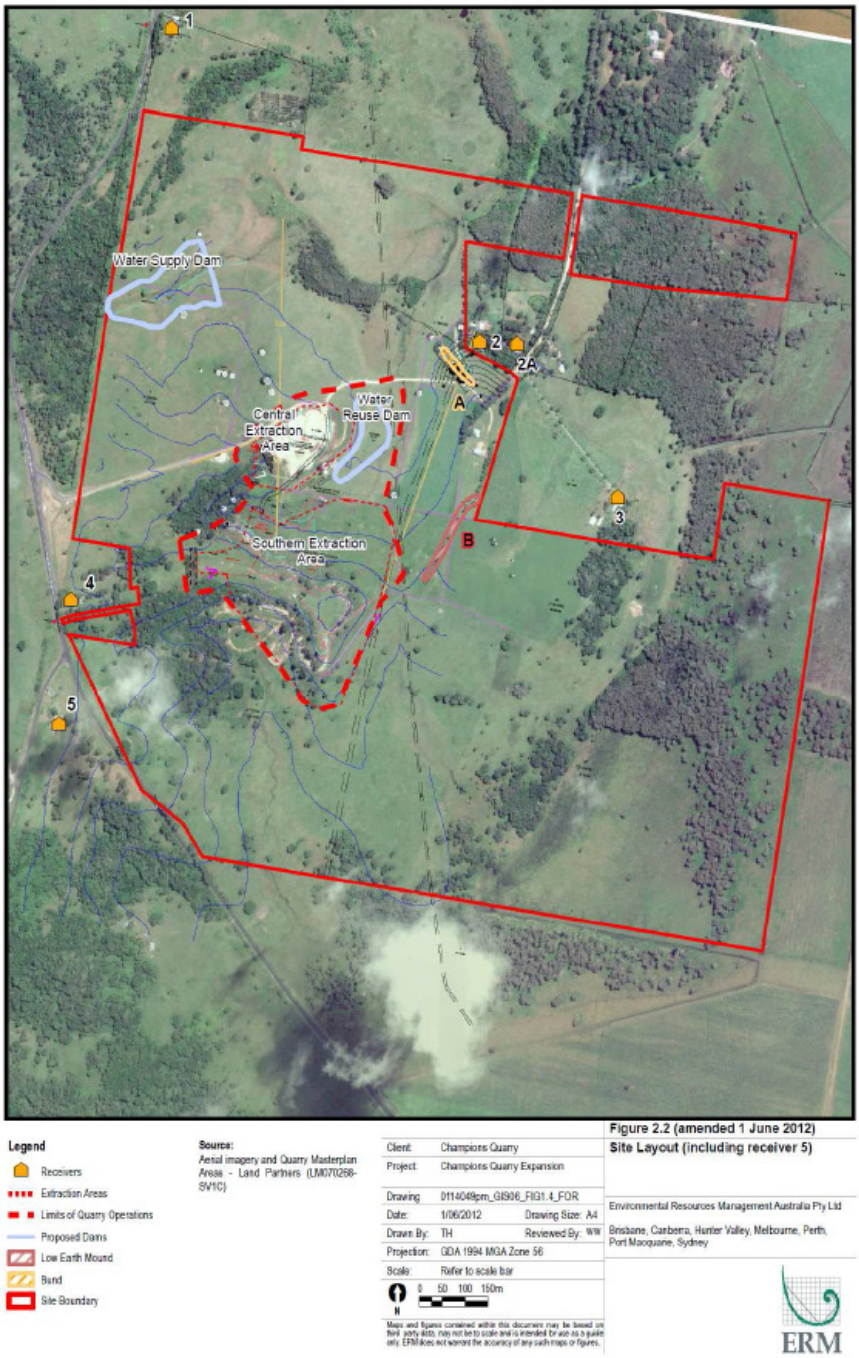

***Figure 2**: Project Site and Nearest Residential Receivers*

NSW Government
Department of Planning and Infrastructure

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2 PURPOSE AND OBJECTIVES

2.1 PURPOSE

The primary purpose of this Management Plan is to provide procedures to:

- ensure that the EPA and the Secretary are involved in the formulation of this Management Plan;
- address the requirements of applicable legislation and any ongoing approvals as they are applicable to the Project; and
- meet the Project Approval.

2.2 OBJECTIVES

This Management Plan's objectives specifically in relation to the Project are to:

- identify the various waste streams of the project;
- estimate the volumes of waste material that would be generated by the project;
- describe and justify the proposed strategy for disposing of this waste material; and
- include a program to monitor the effectiveness of these measures.

Further in accordance with Schedule 5 Condition 3 of the Project Approval, this Management Plan includes the following information (as relates to waste):

- baseline data;
- a description of:
    - relevant statutory requirements;
    - relevant limits or performance measures/criteria;
    - relevant performance indicators;
- a description of the measures that would be implemented to comply with relevant statutory requirements, limits, or performance measures /criteria;
- a program to monitor and report on:
    - the impacts and environmental performance of this Project:
    - the effectiveness and management measures;
    - a contingency plan to manage any unpredicted impacts and their consequences;
    - a program to investigate and implement ways to improve the environmental performance of the project over time;
    - a protocol for managing and reporting any incidents, complaints, non-compliance with statutory requirements and exceedances; and
    - a protocol for the periodic review of this Management Plan.

3 LEGISLATIVE OBLIGATIONS

3.1 LEGISLATION AND POLICIES

The applicable legal and other requirements related to waste and environmental management for the Project are outlined in Table 3.1 below

Table 3.1 – Legal and other requirements for Environmental Management

Legislation and Policies
Environmental Protection and Biodiversity Conservation Act 1999
Environmental Planning and Assessment Act 1979
Environmental Planning and Assessment Regulation 2000
Protection of the Environment and Operations Act 1997
Mine Health and Safety Act 2004
North Coast Regional Environmental Plan 1988 (NCREP)
Lismore Local Environmental Plan 2012 (Lismore LEP)

3.2 MINISTERS CONDITIONS OF APPROVAL

Pursuant to section 75B(1) of the EP & A Act, the Project was declared to be a project under Part 3A of the Act and project approval has been received from the Minister for Planning.

The primary conditions relevant to waste in relation to the Project are contained within Conditions 15, 16, 32 and 33 of Schedule 3 of the Project Approval. These Conditions and other additional clauses that are relevant to waste operations of the quarry are outlined below.

3.2.1 CONDITION 20 (COMPLIANCE) OF SCHEDULE 2 OF THE PROJECT APPROVAL

Condition 20 of Schedule 2 of the Project Approval states:

"The Proponent must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities".

3.2.2 CONDITION 15 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 15 of Schedule 3 of the Project Approval states:

> "The Proponent must manage on-site sewerage to the satisfaction of Council and the EPA. The facility must comply with the requirements of the Environment and Health Protection Guidelines – On-site Sewerage Management for Single Households (1998), or the latest version.

3.2.3 CONDITION 16 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 16 of Schedule 3 of the Project Approval states:

> "The Proponent must ensure that all chemicals and/or petroleum products held on site in appropriately bunded areas with impervious flooring and of sufficient capacity to contain 110% of the largest container stored within the bund, and in accordance with Australian Standard AS1940-2004, The Storage and Handling of Flammable and Combustible Liquids. The flooring and bund(s) must be designed in accordance with:
>
> - The requirements of the relevant Australian Standard; and
> - DECC's Storing and Handling Liquids: Environmental Protection – Participants Manual.

3.2.4 CONDITION 32 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 32 of Schedule 3 of the Project Approval states:

> "The Proponent must:
>
> (a) minimise the waste generated by the project; and
>
> (b) ensure that the waste generated by the project is appropriately stored, handles and disposed of,
>
> to the satisfaction of the Secretary."

3.2.5 CONDITION 33 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 33 of Schedule 3 of the Project Approval states:

> "The Proponent must prepare and implement a Waste Management Plan for the project to satisfaction of the Secretary. This plan must:
>
> (a) be prepared in consultation with EPA, and submitted to the Secretary for approval prior to the commencement of any processing of extracted materials;
>
> (b) identify the various waste streams of the project;
>
> (c) estimate the volumes of waste material that would be generated by the project;
>
> (d) describe and justify the proposed strategy for disposing of this waste material; and
>
> (e) include a program to monitor the effectiveness of these measures.
>
> The Proponent must implement the approved management plan as approved from time to time by the Secretary."

3.2.6 CONDITION 3 OF SCHEDULE 5 OF THE PROJECT APPROVAL

Condition 3 of Schedule 5 of the Project Approval more broadly states the following in relation to the preparation of management plans:

> "The Proponent must ensure that the Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:
>
> (a) detailed baseline data;
>
> (b) a description of:
>
> - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
> - any relevant limits or performance measures/criteria; and
> - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
>
> (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;

(d) a program to monitor and report on the:

- impacts and environmental performance of the project; and
- effectiveness of any management measures (see (c) above);

(e) a contingency plan to manage any unpredicted impacts and their consequences;

(f) a program to investigate and implement ways to improve the environmental performance of the project over time;

(g) a protocol for managing and reporting any:

- incidents;
- complaints;
- non-compliance with statutory requirement; and
- exceedances of the impact assessment criteria and/or performance criteria; and

(h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans."

3.3 ENVIRONMENTAL PROTECTION LICENCE (EPL) CONDITIONS

An Environmental Protection Licence has been obtained for the operations – EPL 20562.

3.4 RELATED MANAGEMENT PLANS

This Management Plan forms part of an overarching environmental management system for the Project. Where relevant reference should be made to the other plans for the Project listed in Table3.2.

Table 3.2 – Environmental Management Plan Requirements

Number	Environmental Plan	Condition[1]
EMP 1	Noise Management Plan	9
EMP 2	Air Quality Management Plan	12
EMP 3	Water Management Plan	17
EMP 4	Transport Management Plan	31
EMP 6	Heritage Management Plan	36
EMP 7	Landscape Management Plan	45

3.5 STANDARDS, POLICIES, GUIDELINES AND MODELLING

The standards, policies, guidelines and modelling that have been used in the preparation of this Management Plan and that relate to the Project are listed in Table 3.3.

Table 3.3 – Environmental Standards, Policies, Guidelines and Modelling

[1] Environmental Performance Conditions, Schedule 3 of the Project Approval

Environmental Risk Issue	Standards, Policies, Guidelines and Modelling
Waste	Environment and Health Protection Guidelines – On-site Sewerage Management for Single Households (1998) Australian Standard AS1940-2004, The Storage and Handling of Flammable and Combustible Liquids
	Australian Standard AS1547-2012, On-site Domestic Wastewater Management
	DECC's Storing and Handling Liquids: Environmental Protection – Participants Manual
	DECC's Waste Classification Guidelines, Part 1: Classifying Waste (2008)

3.6 CROSS REFERENCING REQUIREMENTS OF MANAGEMENT PLANS AND RELEVANT CHAPTERS/PARAGRAPH

Table 3.4 – Cross Referencing Requirements of Management Plans and Relevant Chapters/Paragraph

Relevant Condition	Statement of Project Approval	Paragraph/Chapter Dealing with Condition
Condition 33(b) – Schedule 3	This Management Plan must identify the various waste streams of the project.	Paragraph 5.2, 5.3 and Annexure A
Condition 33(c) – Schedule 3	This Management Plan must estimate the volumes of waste material that would be generated by the project.	Paragraph 5.3, 5.4 and Annexure B
Condition 33(d) – Schedule 3	This Management Plan must describe and justify the proposed strategy for disposing of this waste material.	Paragraph 5.3 and Annexure A
Condition 33(e) – Schedule 3	This Management Plan must include a program to monitor the effectiveness of these measures.	Paragraph 6

4 ROLES AND RESPONSIBILITIES

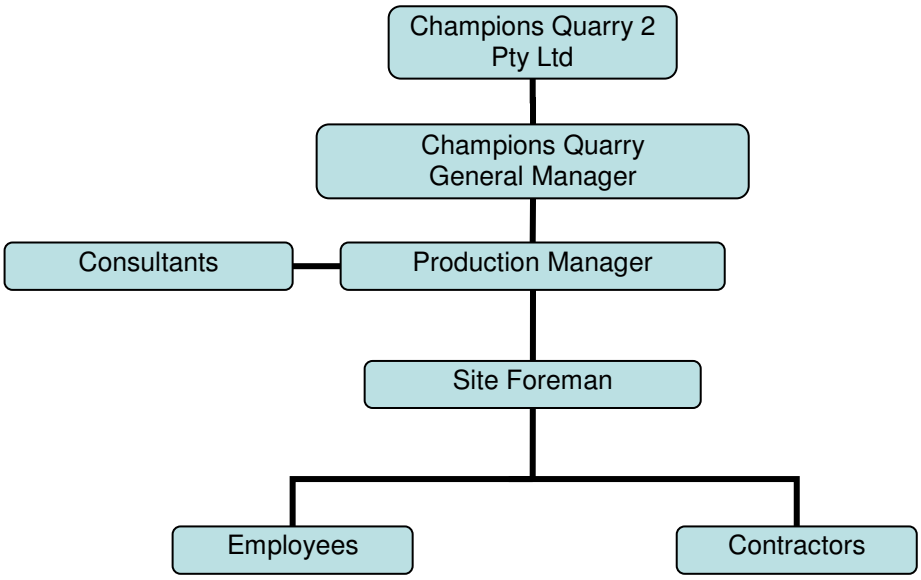
All quarry personnel and Contractors are accountable through conditions of employment or contracts with each individual responsible for ensuring that their work complies with the EMS procedures. An organisational structure for the Project is provided in Section 6 of the EMS.

This section of the Strategy designates the responsibilities of the Proponent's personnel and Contractors in implementing this Strategy as it is relevant.

Table 4.1 – Champions Quarry Roles and Responsibilities

PRODUCTION MANAGER		
Action Number	**Responsibility and Authority**	**Timing**
WMP.PM.01	Ensuring the Project Approval, Project Commitments and any other relevant licences and approvals are adhered to.	At all times
WMP.PM.02	Prepare the Management Plan in consultation with the EPA and submit the Management Plan to the Secretary for approval.	Prior to the commencement of any processing of extracted materials
WMP.PM.03	Ensure onsite sewerage is managed to the satisfaction of LCC and the EPA in accordance with Schedule 3 Condition 15 of the Project Approval.	At all times
WMP.PM.04	Ensure chemicals and petroleum products that are held onsite are in appropriately bunded areas in accordance with Schedule 3 Condition 16 of the Project Approval.	At all times
WMP.PM.05	Identify waste streams of the project, their estimated volumes and strategies for disposing of the waste.	Annually
SITE FOREMAN		
Action Number	**Responsibility and Authority**	**Timing**
WMP.SF.01	Ensuring the Project Approval, Project Commitments and any other relevant licences and approvals are adhered to in accordance with this Plan.	At all times
WMP.SF.02	Assist in identifying waste streams of the project, their estimated volumes and strategies for disposing of the waste.	At all times
QUARRY EMPLOYEES AND CONTRACTORS		
Action Number	**Responsibility and Authority**	**Timing**
WMP.EC.01	Employees and Contractors must take reasonable steps to make themselves aware of waste streams and strategies for disposing of the waste specifically in relation to the project.	At all times

Figure 4.1 – Environmental Management Strategy Organisational Chart as it applies to the Waste Management Plan (extracted from the EMS)



5 WASTE MANAGEMENT AND MITIGATION STRATEGIES

5.1 INTRODUCTION

This section investigates the expected waste generation and subsequent waste management of the Project. Opportunities for waste recycling and reuse are identified, as well as methods for disposal for waste streams that cannot be effectively reused.

The NSW Waste Management hierarchy will be incorporated into the waste reduction and resource recovery strategies for the operation of the quarry. The hierarchy is formed on the principles: avoid, reuse, recycle/reprocess and dispose.

5.2 IDENTIFIED WASTE STREAMS

The Project will involve the handling and production of waste from a number of sources, including:

- small amounts of vegetative matter during the development of the southern pit;
- topsoil and overburden;
- dust and fines from processing including washing and crushing;
- wastewater from runoff and plant processing;
- used oils, filters and machinery parts;
- domestic sewerage;
- general office and administrative waste.

5.3 MANAGEMENT PROCEDURES

5.3.1 SOLID WASTE

Excavated Materials

Excavated materials include soil and weathered rock waste from the removal of top soil and overburden during development of extraction cells.

Soil based materials are intended to be used in on-site activities such as construction of bunds, water management structures, rehabilitation or sold. Sediment control measures as detailed in the Soil and Water Management Plan will be employed to prevent the loss of sediment into drains and water storages during quarrying activities.

Overburden may be reused on-site if it is considered a 'virgin excavated natural material not mixed with any other waste that has been excavated from an uncontaminated area' as classified by Waste Classification Guidelines, Part 1: Classifying Waste (DECC, 2008).

As excavated material is intended to be either on sold or reused on site it is anticipated waste in the form of excavated material would be very minimal or non-existent.

Processing Waste

Given the intended scope of materials to be produced by the quarry, all solid products from quarry processing are intended for market. Therefore there is considered to be minimal scope for processing waste to be generated. Even sediment from the sedimentation ponds will be removed, dried and on sold.

Domestic Waste

Domestic waste is classified by Waste Classification Guidelines, Part 1: Classifying Waste (DECC, 2008) as solid waste (putrescibles) and is composed of everyday waste items such as food scraps, paper, aluminium cans, plastics, packaging and other materials generated by on-site staff. Collection bins will be provided for recyclable materials (including paper and cardboard, glass bottles and aluminium cans). General domestic and recyclable waste generated by on-site staff will be minimal and will be appropriately managed via a waste removal service.

Operational Waste

Workshop and maintenance activities associated with the operation of the quarry will generate wastes such as rags, gloves, general packaging material, empty drums, material off-cuts, machinery parts (and liquid waste referred to below such as oils, oily water and lubricants). These wastes will be segregated and recycled where possible or otherwise disposed to an appropriate off-site recycling facility/appropriately licensed facility or contractor.

Other general operational waste (including chemicals, timber, scrap steel, plastics, and cardboard) wastes will be segregated and recycled where possible or otherwise disposed to an appropriate off-site recycling facility/appropriately licensed facility or contractor.

General operational waste generated on-site will be low and will be appropriately managed via recycling or disposed of to an appropriate off-site recycling facility/appropriately licensed facility or contractor.

Green Waste

Both putrescibles waste such as food waste and green waste are classified by Waste Classification Guidelines, Part 1: Classifying Waste (DECC, 2008) as Solid Waste and are dealt with under the heading of Domestic Waste.

Vegetation stripped during any clearing will be reused to rehabilitate specific areas of the site (ie bunds) to allow for stabilisation of soils or chipped for mulch.

Green waste will be minimal and where possible used on site for composting.

5.3.2 LIQUID WASTE

Effluent

Effluent from on-site staff amenities (including from toilets, kitchen sinks and basins) will be managed:

- via an on-site waste water management system designed to the AS 1547; and/or
- via the installation of a waterless composting toilet.

Due to the small number of employees at the quarry it is anticipated that the effluent will be minimal.

Lubricants

Grease and lubricants are classified by Waste Classification Guidelines, Part 1: Classifying Waste (DECC, 2008) as Liquid Waste. Small quantities of these wastes may be generated by the Project. To prevent any environmental harm, wastes of this type (including waste oils and oily water) will be stored in designated drums in an appropriately bunded area. They will be reused where possible, or disposed of at an appropriate off-site recycling facility/appropriately licensed facility or contractor.

Lubricant waste generated on-site will be minimal and will be appropriately managed via recycling or disposed of to an appropriate off-site recycling facility/appropriately licensed facility or contractor.

Water

The water supply of the quarry has been designed to be self-sufficient and maximise water recycling opportunities within quarry operations. This will ensure no additional demands on local water supplies and minimise the potential for impacts on local receiving waters.

5.3.3 OVERVIEW OF WASTE MANAGEMENT

Annexure A details the specific management of waste streams.

5.4 WASTE VOLUMES

It is noted that quarry waste volume targets are difficult to predict from year to year and are largely dependent on operational factors including the scale of the quarry operations and type of material being sold. Notwithstanding this, the Proponent has estimated the volumes of waste set out in Annexure B based on existing quarry operations prior to commencement of extraction under the Part 3A Approval and potential volumes if the quarry is extracting less than 125,000 tonnes of material per annum. These estimates will be reviewed as and when required, as annual production fluctuates.

5.5 WASTE MITIGATION MEASURES

Waste management and mitigation at the quarry is based around the hierarchy of management.

1. REDUCE where you can. If you can't reduce then…
2. RE-USE what you can. If you can't re-use it then…
3. RECYCLE AND COMPOST what you can. What you can't recycle is burned to…
4. CREATE ENERGY for electricity. If it can't create energy then it is…
5. DISPOSED of in landfill. This is the last option.

Specific mitigation measures to be implemented to minimise wastes generated by the quarry include the following:

- separation of recyclable and non recyclable materials will take place where possible and be stored in appropriately designated receptacles;
- waste receptacles will be collected on a regular basis by licensed contractors, where appropriate, or quarry staff and transported for off-site disposal at an appropriately licensed landfill or recycling facility;
- all waste disposal will be in accordance with the POEO Act and DECC's Waste Classification Guidelines (2008); and
- educating employees of the Project of the importance of waste stream segregation and recycling.

5.6 STAKEHOLDER CONSULTATION

This Management Plan was submitted to EPA in draft format for consultation purposes. The final Management Plan following consultation with EPA will be submitted to the Secretary for comment and approval prior to carrying out any quarrying operations. A revision history is provided in the prelude to this Management Plan.

5.7 APPROVAL REQUIREMENTS

This Management Plan has been provided to the EPA for consultation purposes as required by the Project Approval.

5.8 TRAINING AND AWARENESS

As part of the general site induction process, all Project employees will be made aware of the importance of waste management including:

1. details of the waste management system on site;
2. details of the waste segregation procedures; and
3. details of the relevant locations for segregated waste (ie what bins are to be used for what).

This training will be undertaken as part of the induction process and will be followed up by toolbox meetings throughout the Project as required.

6 SITE INSPECTIONS, RECORDING AND ANNUAL REPORTING

6.1 SITE INSPECTIONS AND REVISION

Routine quarry inspections will be conducted by the Production Manger and/or Site Foreman and/or designated waste management personnel to monitor work practices and identify non-conforming areas and activities or work practices which could lead to potential environmental harm.

Where non-compliance with nominated performance goal/s is detected, an incident notice will be raised by the Site Foreman and/or Production Manager and/or designated waste management personnel in accordance with the EMS.

The aim of the inspections is to look for reuse, recycling and minimisation initiatives which will also include the following checks:

- Housekeeping;
- Cross contamination; and
- Waste volumes and storage.

6.2 RECORDING/REPORTING

An internal record of the type and amount of waste disposed of during the previous year the following will be maintained by the Proponent.

In addition, records are to be maintained for all waste management incidents relating to the Project including and will be kept at the Proponents office (being either the onsite or offsite office):

- Complaints including an analysis of why and when the complaint was made, actions (if any) and resolutions (if applicable); and
- Incidents including a breach of the Drivers Code of Conduct (when, who was involved, outcome (if any), implementation of any resulting procedures).

The Production Manager is responsible for ensuring all records are kept up to date. Records must be kept for a minimum of 4 years after the event and produced to any authorised personnel who requests to see them.

Further in accordance with Condition 7 of Schedule 5 of the Project Approval, the Proponent will immediately notify the Secretary and any other relevant agencies of any Incident. Within 7 days of the date of the Incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the Incident, and such further reports as may be requested.

These records will then be utilised in the annual review under paragraph 6.3 to compare the actual performance of the Project in the previous year in relation to waste disposal against the estimated amounts of waste. Estimates may then be updated to more actually reflect the proposed level of operations of the quarry.

6.3 ANNUAL REPORTING

The Proponent must submit a report to the Department by the end of March each year reviewing the environmental performance of the Project to the satisfaction of the Secretary in accordance with Schedule 5 Condition 4 of the Project Approval. The review will:

(a) Describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;

(b) Include a comprehensive review of the monitoring results, complaints records and Incidents related to the project over the previous calendar year, which includes a comparison of these results against:

- The relevant statutory requirements, limits or performance measures/criteria;
- The monitoring results of the previous year; and
- The relevant predictions of the EA, EA (Mod 1) and EA (Mod 2);

(c) Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;

(d) Identify any trends in the monitoring data over the life of the Project;

(e) Identify any discrepancies between the predicted and actual impacts of the Project and analyse the cause of any significant discrepancies; and

(f) Describe what measures will be implemented over the current calendar year to improve the environmental performance of the Project.

Further in accordance with Schedule 5 Condition 5 of the Project Approval within 3 months of the submission of one of the following the Proponent must review and if necessary revise the strategies, plans and programs required under the Project Approval to the satisfaction of the Secretary:

(a) Annual review under Schedule 5 Condition 4 of the Project Approval;

(b) Incident report under Schedule 5 Condition 7 of the Project Approval;

(c) Audit report Schedule 5 Condition 9 of the Project Approval; and

(d) Any modifications to the Project Approval.

The Proponent in consultation with the Production Manager will implement any changes arising from reviews of the quarry strategies, plans and programs. Records of such reviews will be maintained. Details of any significant changes made to this Strategy and associated monitoring programs and monitoring plans will be forwarded to all relevant project personnel.

ANNEXURE A – OVERVIEW OF MANAGEMENT OF WASTE SYSTEM

EPA Waste Classification	Waste Material	Usual Site Locations / Source	Storage	Waste Collection, Treatment and Destination
Special Waste	Waste tyres (and conveyor belts)	Workshop/ service bay/ mobile equipment	Stockpile in an appropriate location	Remove from site and transported to a licenced facility for recycling/disposal.
Liquid Waste	Septic	Adjacent buildings	Septic tank (if onsite)	Sludge collected from septic tank by licensed waste contractor and transported to sewerage treatment plant.
	Waste oil/oily water	Workshop/ service bays/ mobile equipment, fuel source,	Empty oil drum bins, oil trolleys, waste oil/oily water tanks in bunded area	Waste oil/oily water is collected and stored in bunded area and transported to a licenced facility.
	Parts washer liquid waste and degreaser	Workshop/ service bay	Sealed drums	Collected and transported to a licenced facility for recycling/disposal.
	Engine coolant	Workshop/ service bay/ mobile equipment	Mobile collection tanks for reuse or directly evacuated from the machinery	Coolant is not usually removed from engine unless contaminated, in which case the waste coolant is stored in waste tanks for collection.
General Solid Waste (putrescible)	Animal waste and food waste	Various	General waste bins	Collected in dedicated general waste bins and transported to an offsite facility and/or composted on-site. Alternatively, approval may be sought to dispose of waste onsite.
General Solid Waste (non-putrescible)	Municipal waste, concrete waste, building and demolition waste, air filters and plastic drums	Various	General waste bins	Collected in dedicated general waste bins and transported to an offsite facility. Alternatively, approval may be sought to dispose of waste onsite.
	Paper and cardboard	Various	Paper/cardboard bins	Collected in dedicated paper/cardboard bins and transported to an offsite facility. Alternatively, approval may be sought to dispose of waste onsite.
	Scrap metal	Various	Collected in dedicated area or in scrap metal bins	Collected from dedicated area/scrap metal bins and transported to an appropriate scrap metal recycler.
	Timber pallets	Various	Stockpiled in an appropriate location	Timber pallets are either re-used onsite, returned to suppliers for re-use or taken offsite for disposal as green waste.
	Timber	Various	Stockpiled in an appropriate location	Timber is either re-used or chipped and stockpiled.
	Garden waste and vegetation waste	Various	Stockpiled in an appropriate location	Collected and reused to rehabilitate specific areas of the site.
	Soil based material including rock, silt and	Various	Stockpiled in an appropriate location	Be used in on-site activities such as construction of bunds, water management structures, rehabilitation or sold.

EPA Waste Classification	Waste Material	Usual Site Locations / Source	Storage	Waste Collection, Treatment and Destination
	sediment			
Hazardous	Lead acid batteries	Workshop/ service bay/ mobile equipment	Stored in bunded area	Collected and transported to disposal and recycling centre.
	Oily rags/oil absorbent material, Oil filters, Empty oil drums	Workshop/ service bay/ mobile equipment	Oily materials bin	Collected in oliy rags bin, transported to a licenced facility for processing.
	Waste grease	Workshop/ service bay	Store in sealed 20L drum	Collected in 20L drum, transported to a licenced facility for processing.

ANNEXURE B – ESTIMATED VOLUMES OF WASTE MATERIAL

EPA Waste Classification	Waste Material	Waste Collection, Treatment and Destination	Estimated Waste Volumes / Annum
Special Waste	Waste tyres (and conveyor belts)	Remove from site and transported to a licenced facility for recycling/disposal.	5 tonnes/annum
Liquid Waste	Septic	Sludge collected from septic tank by licensed waste contractor and transported to sewerage treatment plant.	1000 litres/annum
	Waste oil/oily water	Waste oil/oily water is collected and stored in bunded area and transported to a licenced facility.	500 litres/annum
	Parts washer, liquid waste and degreaser	Collected and transported to a licenced facility for recycling/disposal.	100 litres/annum
	Engine coolant	Coolant is not usually removed from engine unless contaminated, in which case the waste coolant is stored in waste tanks for collection.	100 litres/annum
General Solid Waste (putrescible)	Animal waste and food waste	Collected in dedicated general waste bins and transported to an offsite facility and/or composted on-site. Alternatively, approval may be sought to dispose of waste onsite.	12 x 240 litre wheelie bins/annum Approximately 1.2 tonnes/annum
General Solid Waste (non-putrescible)	Municipal waste, concrete waste, building and demolition waste, air filters and plastic drums	Collected in dedicated general waste bins and transported to an offsite facility. Alternatively, approval may be sought to dispose of waste onsite.	24 x 240 litre wheelie bins/annum 2.4 tonnes/annum
	Paper and cardboard	Collected in dedicated paper/cardboard bins and transported to an offsite facility. Alternatively, approval may be sought to dispose of waste onsite.	24 x 240 litre wheelie bins/annum
	Scrap metal	Collected from dedicated area/scrap metal bins and transported to an appropriate scrap metal recycler.	1.5 tonnes/annum
	Timber pallets	Timber pallets are either re-used onsite, returned to suppliers for re-use or taken offsite for disposal as green waste.	10/annum
	Timber	Timber is either re-used or chipped and stockpiled.	100% recused/recycled
	Garden waste and vegetation waste	Collected and reused to rehabilitate specific areas of the site.	100% recycled
	Soil based material including rock, silt and sediment	Be used in on-site activities such as construction of bunds, water management structures, rehabilitation or sold.	100% recycled/sold
Hazardous	Lead acid batteries	Collected and transported to disposal and recycling centre.	5-10/annum
	Oily rags/oil absorbent	Collected in oliy rags bin, transported to a licenced facility	50-100 kg/annum

EPA Waste Classification	Waste Material	Waste Collection, Treatment and Destination	Estimated Waste Volumes / Annum
	material, Oil filters, Empty oil drums	for processing.	
	Waste grease	Collected in 20L drum, transported to a licenced facility for processing.	Recycled, less than 20L/annum

Note: The waste volumes are difficult to predict from year to year and are largely dependent on operational factors including the scale of the quarry operations and type of material being sold. Notwithstanding this, the Proponent has estimated the volumes of waste set out in Annexure B based on existing quarry operations prior to commencement of extraction under the Part 3A Approval and potential volumes if the Quarry is extracting less than 125,000 tonnes of material per annum. These estimates will be reviewed as and when required, as annual production fluctuates.

REFERENCES

- The Guideline for Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004);
- EA – Champions Quarry Expansion, Environmental Assessment Report prepared by ERM Pty Limited and dated February 2010;
- Preferred Project Report – Champions Quarry Expansion, Preferred Project Report prepared by ERM Pty Limited and dated December 2011;
- Response to Submissions – Champions Quarry Response to Submissions, prepared by ERM Pty Limited and dated September 2010 and containing the Proposed Quarry Management Plan;
- Planning and Assessment Commission of NSW Conditions of Approval dated August 30, 2012;
- Minister for Planning and Infrastructure - Notice of Modification dated October 29, 2013; and
- Minister for Planning - Notice of Modification dated September 16, 2016.