Champions Quarry Expansion

TRANSPORT MANAGEMENT PLAN

Final Report

Version 2.2 (October 2017)

Champions Quarry *"Working with the Environment"*

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

REVISION HISTORY AND APPROVAL OF THE TRANSPORT MANAGEMENT PLAN

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 Roads and Maritime Services and Lismore City Council and then submitted to the Secretary (or a nominee) of 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	Ву	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	Champions	Jeff Champion
	(09_0080 MOD 3)	Quarry	
		DP & E	

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ANNEXURES

Annexure A – Drivers Code of Conduct

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)) as amended from time to time
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
Drivers Code of Conduct	The drivers code of conduct substantially in accordance with Annexure A as reviewed and updated from time to time
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 Transport Management Plan	
Minister	Minister for Planning, or delegate	
NOW	NSW Office of Water, within the Department of Primary Industries	
OEH	Office of Environment and Heritage	
Primary Haulage Route	The primary haulage route identified in paragraph 1.2 of this Management Plan	
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	

RMS	Roads and Maritime Services	
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.	
Traffic Impact Study	Champions Quarry Traffic Impact Study performed by RoadNet (2009) forming part of the Environmental Assessment Report dated 25 February 2010	

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 29,000m³ (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 including transport.

1.2 SUMMARY OF TRANSPORT ASSESSMENTS AND INVESTIGATIONS UNDERTAKEN

Several detailed Transport Assessments have been undertaken including the Traffic Impact Study which was undertaken by RoadNet (2009). The Traffic Impact Study identified 3 Primary Haulage Routes as set out in Figure 1.2:

- North to Lismore via Wyrallah Road, Wyrallah Ferry Road and Coraki Road to the Bruxner Highway;
- South to the Pacific Highway at Woodburn via Wyrallah Road; and
- South to Broadwater via Wyrallah Road and Broadwater Road.

The Transport Assessments also identified 2 school bus services utilising some or all of the Primary Haulage Routes at peak morning and afternoon school times. These are:

- 1. Quinn's Bus Service Wyrallah Local Area; and
- 2. Amos Bus Service Broadwater to Lismore via Wyrallah.

The Proponents investigations in relation to bus routes revealed that bus drivers did not generally have a problem with local trucks, but sometimes with out of the area large freight semi-trailers, who were not necessarily familiar with the local road network.

A School Bus Stop Audit has been carried out by the Proponents. This Audit revealed that there are no LCC approved bus stops along the Primary Haulage Route. Accordingly, no bus stop road safety audit is required to be undertaken.

The studies concluded that the Project is unlikely to result in significant traffic impacts following the implementation of the mitigation measures contained in the Project Approval and adoption of the strategies contained within this Management Plan.

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



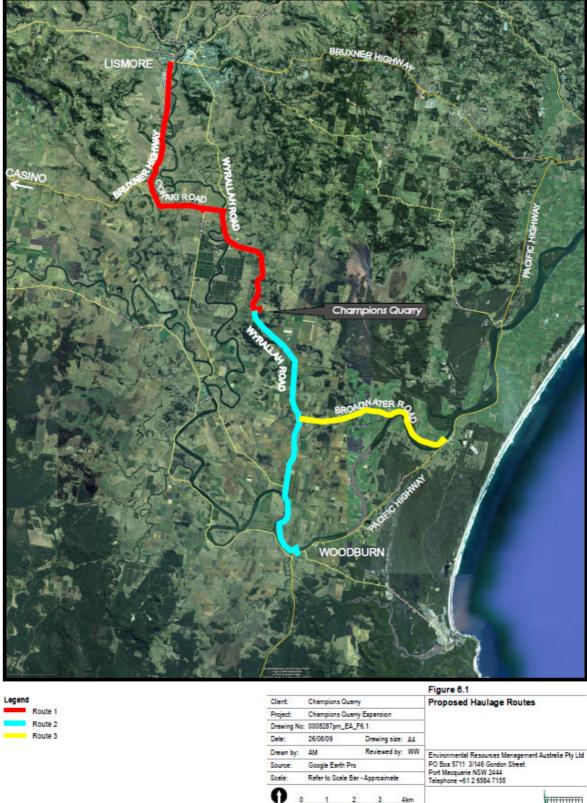
APPENDIX 2 PROJECT LAYOUT PLANS

Figure 2: Project Site and Nearest Residential Receivers

NSW Government Department of Planning and Infrastructure

Figure 1.2 – Proposed Haulage Routes

Known as Figure 6.1 – Proposed Haulage Routes extracted from the Champions Quarry Expansion Environmental Assessment Report dated February 2010.





2 PURPOSE AND OBJECTIVES

2.1 PURPOSE

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

- ensure that the RMS, LCC 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 describe:

- a drivers code of conduct for the Project;
- describe the measures to be implemented to ensure:
 - o haulage is minimised or routes altered to avoid school buses;
 - a CB radio communication protocol is established with local bus companies to improve driver awareness of quarry truck and school bus locations along haulage routes;
 - o drivers of project related vehicles comply with the drivers code of conduct; and
 - o compliance with the relevant conditions of approval; and
- include a program to monitor the effectiveness of the implementation 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 transport):

- baseline data;
- a description of:
 - o relevant statutory requirements;
 - o relevant limits or performance measures/criteria;
 - o 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;
 - \circ 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;
- $\circ~$ a protocol for managing and reporting any incidents, complaints, non-compliance with statutory requirements and exceedances; and
- \circ ~ 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 transport 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
Roads Act 1993
Roads Transport (Safety and Traffic Management) Act 1999
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 transport in relation to the Project are contained within Conditions 28, 29, 30 and 31 of Schedule 3 of the Project Approval. These Conditions and other additional clauses that are relevant to transport 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 28 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 28 of Schedule 3 of the Project Approval states:

"The Proponent must ensure that:

- (a) vehicles on site do not exceed a speed limit of 30 kilometres per hour;
- (b) all loaded vehicles entering or leaving the site have their loads covered; and
- (c) all loaded vehicles leaving the site are cleaned of sand and other materials before they leave the site, so as to avoid tracking dirt onto public roads."

3.2.3 CONDITION 29 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 29 of Schedule 3 of the Project Approval states:

"During cane harvesting season (July to December), the Proponent must implement all reasonable and feasible measures to minimise project-related traffic delays and congestion at the Broadwater Road/Pacific Highway intersection."

3.2.4 CONDITION 30 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 30 of Schedule 3 of the Project Approval states:

"The Proponent must implement all reasonable and feasible measures to minimise project-related heavy vehicle traffic on the haulage routes during hours which school buses are operating on these routes, to the satisfaction of the Secretary."

3.2.5 CONDITION 30A OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 30A of Schedule 3 of the Project Approval states:

"The Proponent must make, and retain for at least 3 years, records of time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project. These records must be made available to the Department on request and a summary included in the Annual Review."

3.2.6 CONDITION 31 OF SCHEDULE 3 OF THE PROJECT APPROVAL

Condition 31 of Schedule 3 of the Project Approval states:

"The Proponent must prepare and implement a Transport Management Plan for the project to the Secretary. This plan must:

- (a) be prepared in consultation with the RMS and Council, and submitted to the Secretary for approval prior to carrying out any quarrying operations;
- (b) include a drivers code of conduct for the project;
- (c) describe the measures that would be implemented to ensure:
 - haulage is minimised or routes altered to avoid school buses;
 - a CB radio communication protocol is established with local bus companies, to improve driver awareness of quarry truck and school bus locations along haulage routes;
 - drivers of project-related vehicles comply with the drivers code of conduct; and
 - compliance with the relevant conditions of this approval; and
- (d) include a program to monitor the effectiveness of the implementation of these measures.

The Proponent must implement the approved management plan as approved from time to time by the Secretary."

3.2.7 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
EMP 1	Noise Management Plan	9
EMP 2	Air Quality Management Plan	12
EMP 3	Water Management Plan	17

¹ Environmental Performance Conditions, Schedule 3 of the Project Approval

EMP 5	Waste Management Plan	33
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

Environmental Risk Issue	Standards, Policies, Guidelines and Modelling
	AS1743 (Road Signs Specifications)
Traffic	Austroads Guide to Traffic Management 2007

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 28 –	The Proponent must ensure that:vehicles on site do not exceed a speed limit of	Paragraph 5.1 and implement a drivers code of conduct in accordance with
Schedule 3	30 kilometres per hour;all loaded vehicles entering or leaving the site	Annexure A
	have their loads covered; and	
	 all loaded vehicles leaving the site are cleaned of sand and other materials before they leave the site, so as to avoid tracking dirt onto public roads. 	
Condition 29 –	During cane harvesting season (July to December), the Proponent must implement all reasonable and	Paragraph 6 and implement a drivers code of conduct in
Schedule 3	feasible measures to minimise project-related traffic delays and congestion at the Broadwater Road/Pacific Highway intersection.	accordance with Annexure A
Condition 30 –	The Proponent must implement all reasonable and feasible measures to minimise project-related heavy	Paragraph 7 and implement a drivers code of conduct in
Schedule 3	vehicle traffic on the haulage routes during hours	accordance with Annexure
	which school buses are operating on these routes, to the satisfaction of the Secretary.	A
Condition 30A –	The Proponent must make, and retain for at least 3 years, records of time of dispatch, weight of load and	Paragraph 8.2
Schedule 3	vehicle identification for each laden truck dispatched	
	from the project. These records must be made	
	available to the Department on request and a summary included in the Annual Review	
Condition	The Transport Management Plan must be prepared in	Introductory pages in this
31(a) – Schedule 3	consultation with the RMS and Council, and submitted to the Secretary for approval prior to carrying out any	Management Plan
	te me coordary for approval provide darying out any	l

	quarrying operations.	
Condition 31(b) –	The Transport Management Plan must include a drivers code of conduct for the project.	Annexure A
Schedule 3	The Treasure Management Discourse of days (here the	Developments 7 and 2 and 2 and 4
Condition 31(c) – Schedule 3	The Transport Management Plan must describe the measures that would be implemented to ensure:	Paragraph 7 and implement a drivers code of conduct in accordance with Annexure
	 haulage is minimised or routes altered to avoid school buses; 	A
		Paragraphs 4 to 8 inclusive
	 a CB radio communication protocol is established with local bus companies, to improve driver awareness of quarry truck and school bus locations along haulage routes; 	
	 drivers of project-related vehicles comply with the drivers code of conduct; and 	
	 compliance with the relevant conditions of this approval. 	
Condition 31(d) – Schedule 3	The Transport Management Plan must include a program to monitor the effectiveness of the implementation of these measures.	Paragraph 8 and implement a drivers code of conduct in accordance with Annexure A

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.

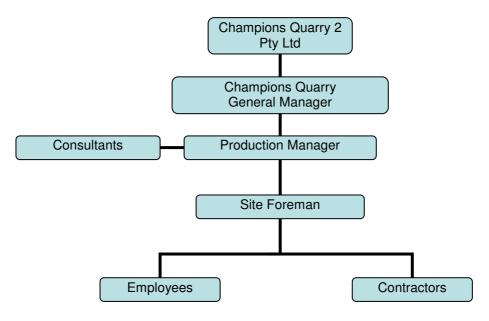
This section of the Strategy designates the responsibilities of the Proponent's personnel and Contractors in implementing this Strategy as it is relevant.

Table 4.1 – Champions Quarry Roles and Responsibilities

PRODUCTION MANAGER			
Action Number	Responsibility and Authority	Timing	
TMP.PM.01	Ensuring the Project Approval, Project Commitments and any other relevant licences and approvals are adhered to.	At all times	
TMP.PM.02	Prepare the Management Plan in consultation with the RMS and LCC and submit the Management Plan to the Secretary for approval.	Prior to carrying out any quarrying operations	
TMP.PM.03	Ensure 2 intersection upgrades are carried out in accordance with Schedule 3 Condition 23 of the Project Approval.	Prior to carrying out any quarrying operations	
TMP.PM.04	Ensure a Road Safety Audit is carried out of existing LCC approved bus stops along the haulage routes in accordance with Schedule 3 Condition 24 of the Project Approval.	Prior to carrying out quarrying operations in the Southern Extraction Area	
TMP.PM.05	Ensure appropriate signage is erected and vegetation removed in accordance with Schedule 3 Condition 25 of the Project Approval.	Prior to carrying out any quarrying operations	
TMP.PM.06	Ensure appropriate road maintenance contributions are made to LCC in accordance with Schedule 3 Condition 26 of the Project Approval.	At all times	
TMP.PM.07	Ensure appropriate records are retained recording the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.	At all operating times	
	SITE FOREMAN		
Action Number	Responsibility and Authority	Timing	
TMP.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	
TMP.SF.02	Ensure appropriate records are retained recording the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.	At all operating times	
QUARRY EMPLOYEES AND CONTRACTORS			
Action Number	Responsibility and Authority	Timing	
TMP.EC.01	Employees and Contractors must take reasonable steps to make themselves aware of road safety requirements and traffic hazards generally and specifically in relation to the Project.	At all times	
TMP.EC.02	Employees and Contractors must comply with the induction requirements and the Drivers Code of	At all times	

	Conduct.	
TMP.EC.03	All heavy/large vehicle operators must ensure communication with local bus companies using CB radios.	At all times
TMP.EC.04	Record the time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.	At all operating times

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



5 MANAGEMENT AND MITIGATION STRATEGIES

5.1 MANAGEMENT STRATEGIES

The principal measures used to control and minimise traffic related issues include the following:

- The Proponent has constructed a new and substantial intersection at the quarry site onto Wyrallah Road which meets and/or exceeds Austroads standards;
- Prior to carrying out quarry operations under this approval, the Proponent will upgrade the following intersections to the satisfaction of LCC:
 - Coraki Road/Wyrallah Ferry Road intersection to provide a sealed turning path for southbound quarry trucks with trailers from Coraki Road into Wyrallah Ferry Road; and
 - Wyrallah Road/Wyrallah Ferry Road intersection to provide a sealed left-turn lane for northbound quarry trucks and quarry trucks with trailers from Wyrallah Road into Wyrallah Ferry Road

These intersection upgrades must be completed to the relevant Austroads standard and generally in accordance with the conceptual layout plans shown in Figure 5.1 and 5.2 (in accordance with Condition 23 of Schedule 3 of the Project Approval).

These intersection works were completed in July 2014.

- Prior to carrying out quarrying operations under this approval, the Proponent will attend to the following in relation to road signage to the satisfaction of LCC (in accordance with Condition 25 of Schedule 3 of the Project Approval):
 - clear roadside vegetation and install an intersection distance advisory sign in Wyrallah Ferry Road on the approach to the bridge to improve driver awareness of the intersection;
 - install hinged "trucks entering" warning signs 200 metres either side of the quarry entrance, and ensure that these signs are open during the hours in which the quarry is operating; and
 - install Koala crossing signs along Wyrallah Road on either side of the quarry entrance.

These minor works were completed in May 2014.

- During the Project, the Proponent must pay LCC \$0.06442 per tonne per kilometre for every tonne of extractive materials in excess of 8,500 tonnes per annum transported from the site on roads for which LCC is liable for road maintenance funding, in accordance with LCC's section 94 Contributions Plan 2004 and relevant Development Control Plan (in accordance with Condition 26 of Schedule 3 of the Project Approval). Each payment must be:
 - a) based on the quantity of extractive materials transported from the site recorded by either accredited scales fitted to front-end-loaders or weighbridge records until the end of December 2015, and thereafter based on weighbridge records only;
 - b) paid by the date required by the invoice issued by LCC; and
 - c) increased over the life of the Project in accordance with the annual CPI.

- The Proponent must provide sufficient parking on site for all Project related traffic in accordance with LCC's parking codes (in accordance with Condition 27 of Schedule 3 of the Project Approval).
- Wyrallah Road between Wyrallah and Tuckurimba (including past the quarry intersection) was recently reduced to 80km/hour.
- The Proponent will create a Drivers Code of Conduct (substantially in accordance with Annexure A) which will detail the following:
 - 30km/hour on-site speed limit (in accordance with Condition 28(a) of Schedule 3 of the Project Approval);
 - loaded vehicles entering or leaving the site have their loads covered (in accordance with Condition 28(b) of Schedule 3 of the Project Approval);
 - loaded vehicles leaving the site are cleaned of sand and other materials before they leave the site, to avoid tracking dirt onto public roads (in accordance with Condition 28(c) of Schedule 3 of the Project Approval);
 - the primary route to and from Lismore will be via the Bruxner Highway, Coraki Road, Wyrallah Ferry Road and Wyrallah Road; and
 - the preferred route to and from the Pacific Highway to be via Wyrallah Road or via Broadwater Road.
- The Proponent will install 30km/hour road signs along the access road.
- All heavy vehicles entering or leaving the site must have CB radios installed and operational.
- All heavy vehicle operators entering or leaving the site must maintain effective communication with local bus companies via CB radio whilst on their haulage route.
- The Proponent will retain for at least 3 years, records of time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.

5.2 STAKEHOLDER CONSULTATION

This Management Plan was submitted to RMS and LCC in draft format for consultation purposes. The final Management Plan following consultation with RMS and LCC 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.

5.3 APPROVAL REQUIREMENTS

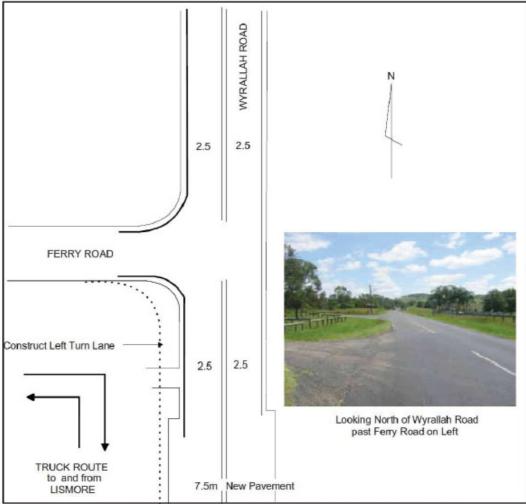
This Management Plan has been provided to the RMS and LCC for consultation purposes as required by the Project Approval.

5.4 TRAINING AND AWARENESS

As part of the general site induction process, all Project employees and Contractors involved in operating heavy/large vehicles on public roads will be made aware of any condition of the Project Approval that applies to traffic specific work elements as well as the requirement to comply with the Drivers Code of Conduct for the Project.

Figure 5.1 – Conceptual Layout of Wyrallah Road/Wyrallah Ferry Road Intersection Upgrade

Known as Appendix 5 Conceptual Layout of Intersection Upgrades – Figure 7: Wyrallah Road/Wyrallah Ferry Road Intersection Upgrade extracted from the Planning and Assessment Commission of NSW Conditions of Approval dated 30 August 2012 Appendix 5.



APPENDIX 5 CONCEPTUAL LAYOUT OF INTERSECTION UPGRADES

Figure 7: Wyrallah Road / Wyrallah Ferry Road Intersection Upgrade

Figure 5.2 – Conceptual Layout of Coraki Road/Wyrallah Ferry Road Intersection Upgrade

Known as Appendix 5 Conceptual Layout of Intersection Upgrades – Figure 8: Coraki Road/Wyrallah Ferry Road Intersection Upgrade extracted from the Planning and Assessment Commission of NSW Conditions of Approval dated 30 August 2012 Appendix 5.

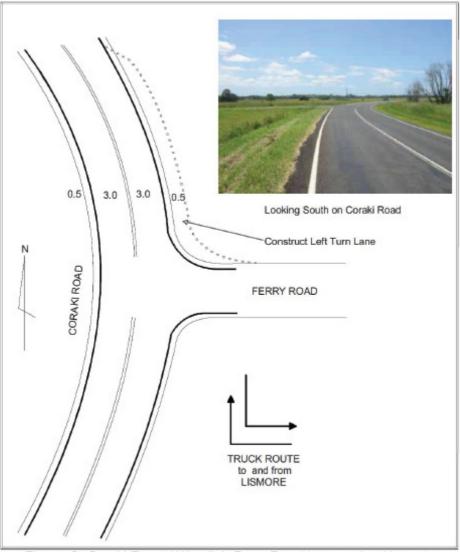


Figure 8: Coraki Road / Wyrallah Ferry Road Intersection Upgrade

6 MINIMISING DELAYS AND CONGESTION DURING THE CANE HARVESTING SEASON (JULY TO DECEMBER)

Heavy vehicle operators entering or leaving the site will be advised (via the Drivers Code of Conduct) of the following:

- the prevalence of potential traffic delays and congestion at the Broadwater Road/Pacific Highway intersection during cane harvesting season (July to December);
- the need to communicate effectively with other heavy vehicles via CB radio to minimise congestion;
- to utilise CB radios to determine how many vehicles are on/about to enter the transport route and if necessary stall vehicle movements to minimise bunching;
- heavy vehicles should be staggered when leaving the quarry to assist in reducing bunching and operators need to be aware of this practice; and
- truck numbers leaving the quarry are limited to 5 per hour and 50 per day.

The CB radio systems are to be utilised by both quarry truck drivers and other heavy vehicle drivers as a tool for notification of potential road hazards and vehicle movements. All quarry related heavy vehicles entering and leaving the site be fitted with CB radios.

To further minimise the impact of the quarry activities on road users, the Project Approval, Condition 9, Schedule 3 also imposes the following traffic restriction:

"The Proponent must not:"...

- (c) dispatch more than 50 laden trucks from the site on any day; or
- (d) dispatch more than 5 laden trucks from the site in any hour."

7 SCHOOL BUSES SERVICES SERVICING THE PRIMARY HAULAGE ROUTES

7.1 SCHOOL BUS ROUTES

Studies have revealed 2 school bus services utilising some of the Primary Haulage Routes at peak morning and afternoon school times. These are:

- 1. Quinn's Bus Service Lismore to Wyrallah Local Area between the hours of 8:00am-8:30am and 3:15pm-3:45pm Monday to Friday. Utilising UHF 26.
- 2. Amos Bus Service Broadwater to Lismore via Wyrallah Road between the hours of 7:15am-8:20am and 4:00pm-4:50pm Monday to Friday. Utilising UHF 25.

7.2 MINIMISING HAULAGE/ROUTES ALTERED TO AVOID SCHOOL BUSES

Heavy vehicle operators entering or leaving the site will be advised (via the Drivers Code of Conduct) of the following:

- the timing of school bus routes along the Primary Haulage Routes and be asked where practicable to avoid or minimise the truck movements along Primary Haulage Route during the hours that the school bus services utilise the Primary Haulage Route;
- to utilise CB radios to determine how many vehicles are on/about to enter the transport route and if necessary stall vehicle movements to minimise bunching;
- heavy vehicles should be staggered when leaving the quarry to assist in reducing bunching and operators need to be aware of this practice; and
- truck numbers leaving the quarry are limited to 5 per hour and 50 per day.

Where it is not practicable for the heavy vehicle operator to avoid the truck movement along the Primary Haulage Route the driver will be informed (via the Drivers Code of Conduct) of the UHF channel utilised by the school bus service on the Primary Haulage Route.

The CB radio systems are to be utilised by both quarry truck drivers and the bus drivers as a tool for notification of potential road hazards and vehicle movements. All quarry related heavy vehicles entering and leaving the site be fitted with CB radios. Further, all heavy vehicle operators entering or leaving the site must maintain effective communication with local bus companies via CB radio whilst on the Primary Haulage Routes.

7.3 TRAFFIC RESTRICTIONS

To further minimise the impact of the quarry activities on road users, the Project Approval, Condition 9, Schedule 3 also imposes the following traffic restriction:

"The Proponent must not:"...

- (c) dispatch more than 50 laden trucks from the site on any day; or
- (d) dispatch more than 5 laden trucks from the site in any hour."

8 SITE INSPECTIONS, RECORDING AND ANNUAL REPORTING

8.1 SITE INSPECTIONS, REPORTING AND REVISION

Routine quarry inspections of work areas, stockpiles, and onsite haulage routes will be conducted by the Production Manger and/or Site Foreman 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 in accordance with the EMS.

8.2 **RECORDING/REPORTING**

Records are to be maintained for all traffic management measures and 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);
- Traffic management measures (implementation or amendment of the Drivers Code of Conduct, notification to School Bus Drivers (if required/any));
- Incidents including a breach of the Drivers Code of Conduct (when, who was involved, outcome (if any), implementation of any resulting procedures); and
- The Proponent will obtain and retain for at least 3 years, records of time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the project.

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 to the Secretary and any other relevant agencies of the Incident; and
- within 7 days of the date of the Incident, provide the Secretary and any relevant agencies with a detailed report on the Incident, and such further reports as may be requested.

The Proponent will progressively review throughout the year any complaints and incidents as they relate to traffic management of quarry related heavy vehicles in order to monitor and improve the effectiveness of measures to reduce the impact of quarry related heavy vehicles.

These complaints and incidents will then be compared to the previous years reported complaints and incidents on an annual basis as part of the annual review are outlined in paragraph 8.3 below.

8.3 ANNUAL REPORTING

The Proponent will by the end of March each year (commencing in March 2014) review 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 monitoring results of the previous year; and
- (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 – DRIVERS CODE OF CONDUCT

CHAMPIONS QUARRY - SITE SAFETY RULES

DRIVERS CODE OF CONDUCT

This Drivers Code of Conduct must be complied with by all employees and contractors who are driving any heavy/large project related vehicles on public roads.

- OBEY ALL LAWS AND REGULATIONS
- ENSURE YOUR VEHICLE COMPLIES WITH RELEVANT STATE LEGISLATION IN RELATION TO ROADWORTHINESS AND MODIFICATIONS
- UNDERGO REGULAR VEHICLE CHECKS AND MAINTENANCE
- ABIDE BY THE SITE SPEED LIMIT, WHICH IS 30KM/HR
- ENSURE YOUR VEHICLES HAVE CORRECTLY FITTED MUFFLERS, LIMIT NOISE GENERATED FROM VEHICLES AND DO NOT USE EXHAUST BRAKES ON SITE
- ALL LOADED VEHICLES ENTERING OR LEAVING THE SITE MUST HAVE THEIR LOADS COVERED AND HAVE CB RADIOS INSTALLED AND OPERATIONAL
- ALL LOADED VEHICLES LEAVING THE SITE MUST BE CLEANED OF SAND AND OTHER MATERIALS BEFORE THEY LEAVE THE SITE
- ROUTES:
 - THE PRIMARY ROUTE TO AND FROM LISMORE WILL BE VIA THE BRUXNER HIGHWAY, CORAKI ROAD, WYRALLAH FERRY ROAD AND WYRALLAH ROAD
 - THE PREFERRED ROUTE TO AND FROM THE PACIFIC HIGHWAY TO BE VIA WYRALLAH ROAD OR VIA BROADWATER ROAD
- LOCAL BUSES OPERATE ON THE PRIMARY AND/OR PREFERRED ROUTES AT PEAK MORNING AND AFTERNOON SCHOOL TIMES – YOU MUST ENSURE EFFECTIVE COMMUNICATION WITH LOCAL BUS COMPANIES USING CB RADIOS INCLUDING:
 - QUINN'S BUS SERVICE WYRALLAH LOCAL AREA BUS ROUTE TIMES 8:00AM-8:30AM AND 3:15PM-3:45PM SCHOOL DAYS – UHF 26
 - AMOS BUS SERVICE BROADWATER TO LISMORE VIA WYRALLAH ROAD – BUS ROUTE TIMES 7:15AM-8:20AM AND 4:00PM-4:50PM SCHOOL DAYS – UHF 25
- AVOID BUNCHING OF QUARRY VEHICLES ALONG THE TRANSPORT ROUTE STAGGERING OF VEHICLES LEAVING THE QUARRY MAY ASSIST IN REDUCING BUNCHING
- USE CB RADIOS TO DETERMINE HOW MANY VEHICLES ARE ON/ABOUT TO ENTER THE TRANSPORT ROUTE AND IF NECESSARY STALL VEHICLE

MOVEMENTS TO MINIMISE BUNCHING SPECIFICALLY IN RELATION TO SCHOOL BUSES AND CANE TRUCKS

- TRUCK NUMBERS LEAVING THE QUARRY ARE LIMITED TO 5 PER HOUR AND 50 PER DAY
- IF CONGESTION OCCURS AT THE BROADWATER ROAD/PACIFIC HIGHWAY INTERSECTION DURING CANE HARVESTING SEASON (JULY TO DECEMBER), YOU MUST ENSURE EFFECTIVE COMMUNICATION WITH OTHER HEAVY VEHICLES VIA CB RADIOS TO MINIMISE CONGESTION
- REPORT ANY HAZARDS OR INCIDENTS ON SITE TO JEFF CHAMPION (PH: 0414 290 000)
- REPORT ANY PUBLIC ROAD INCIDENT/NEAR MISS RESULTING IN INJURY AND/OR DAMAGE TO PROPERTY TO THE POLICE
- DO NOT DRIVE WHILST UNDER THE INFLUENCE OF ALCOHOL, DRUGS, NOR ANY MEDICATION WHICH MAY AFFECT YOUR ABILITY TO DRIVE
- DRIVE IN A CONSIDERATE MANNER AT ALL TIMES AND RESPECT THE RIGHTS OF OTHERS TO USE AND SHARE THE ROAD SPACE
- KEEP YOUR VEHICLE CLEAN AND IN GOOD MECHANICAL CONDITION TO REDUCE THE ENVIRONMENTAL IMPACT

This document will be brought to the attention of all employees and contractors entering the site who operate heavy vehicles.

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;
- Champions Quarry Traffic Impact Study performed by RoadNet (2009) forming part of the Environmental Assessment Report dated 25 February 2010 (Appendix F);
- Preferred Project Report Champions Quarry Expansion, Preferred Project Report prepared by ERM Pty Limited and dated December 2011;
- Champions Quarry Traffic Assessment performed by RoadNet (2011) forming part of the Preferred Project Report dated December 2011 (Annexure C);
- 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.