

# Ardglen Quarry

Environmental Audit

2013



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PhD (Chem), Bsc

Ardglen Quarry  
Environmental Audit

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## EXECUTIVE SUMMARY

Buttai Gravel Pty Limited (Daracon, the audit client) commissioned JM Environments by to conduct an independent environmental compliance audit (the audit) of the Ardglen Quarry Extension.

The audit was undertaken for Daracon to fulfil its statutory obligations under Schedule 5 Item 5 of the Project Approval issued by the Department of Planning for the Ardglen Quarry Extension.

The audit was undertaken in accordance with ISO 19011:2011 Guidelines for auditing management systems.

The audit objectives were to:

- assess the environmental performance of the project, and its effects on the surrounding environment;
- assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
- review the adequacy of any strategy/plan/program required under this approval; and, if necessary, and
- recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

Based on the evidence reviewed in this audit it is considered that the quarry is not currently impacting the surrounding environment due primarily to operations at the quarry being temporarily suspended. It is recommended that the surface water sampling and reporting of the SWMP are implemented in order to assess the quality of water in the main sump. It is also recommended that the stormwater from the Lube Shed area is directed to smaller sumps on site. .

It appears that the quarry was not complying with noise performance criteria when it was previously in operation and is likely not to comply into the future as the noise mitigation actions have not been undertaken. It is understood that different plant and equipment is planned to be used on site when the quarry recommences. It is also understood that rail movements are not controlled by the quarry but rather are timetabled by ARTC. The auditor recommends that Daracon is to query ARTC on any planned out hours loading and events and Daracon's duty to pre-warn local residents for out hours loading is emphasised rather restricting the number of out hours loading events.

The auditor recommends that the necessity for removal of the weir and causeway from Doughboy Hollow Creek be reassessed in conjunction with NOW. The causeway, in particular, is not on the quarry site, not used for quarry operations and is used as a right of way by local residents and therefore its care and maintenance (and existence) should be the responsibility of the local council.

Based on the site visit, the approved Doughboy Hollow Rehabilitation Strategy may need revision in view of the larger area of kikuyu grass located in private paddocks surrounding the rehabilitation area.

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## 1 Introduction

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The audit was undertaken in accordance with ISO 19011:2011 Guidelines for auditing management systems.

### 1.1 Ardglen Quarry

The Ardglen Quarry (the quarry) has been operated as a hard rock quarry by the NSW Railways since before 1900. The quarry was purchased by Daracon around 2006 at which time was being operated under Liverpool Plans consent DA 1/1994. The existing reserves of hard rock were considered to be diminishing and Daracon proposed to extend the quarry west to enable up to 500,000 tonnes of material to be extracted per year for up to thirty years. Environmental Resources Management Australia Pty Ltd (ERM) prepared *Ardglen Quarry Extension- Environmental Assessment June 2007* (ERM project number 00384149) (the EA) for application number 06\_0264. A five year deferred commencement consent was requested in the EA. Consent was granted by the Department of Planning for the quarry extension on 2 December 2008. Condition 9 of the consent required that within 3 years of the approval, “the Proponent shall surrender all development consents or continuing use rights for the Ardglen Quarry, to the satisfaction of the Director-General.”

A modification to the project approval sought to amend the timing of the development and implementation of an Environmental Management Strategy (EMS) and associated monitoring programs that applied to the existing quarry operations and to the future operations. A consolidated approval (CA) to the modification was granted in December 2010. The consolidated approval contained a copy of the statement of commitments. A copy of the CA can be found in Appendix A.

Operation at the quarry had ceased around December 2012.

## 2 Audit objectives and Scope

The audit objectives were to:

- assess the environmental performance of the project, and its effects on the surrounding environment;
- assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
- review the adequacy of any strategy/plan/program required under this approval; and, if necessary, and
- recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

The audit scope was to:

- review the EA;
- review the SoC;
- review the CA;
- prepare an audit document review checklist based on the conditions of the EA, SoC and CA;
- review supplied documents;
- conduct a site visit;
- interview available Daracon staff; and
- prepare this Audit Report.

The consent came into force from December 2011 which is the time that all existing development consents or continuing use rights for the Ardglen Quarry were to be surrendered. Hence the timeline of the audit is from December 2011.

### 3 Audit Activities

The audit was conducted via the following activities:

- Selection of an audit team;
- A review of the CA, EA and SoC to establish the audit criteria;
- Development and distribution of an audit checklist;
- An audit opening meeting;
- A request and review of documents;
- A site visit;
- An audit closing meeting; and
- Preparation and distribution of this audit report.

Some of these activities are discussed in more detail below.

#### 3.1 The Audit Team

The audit was selected to fulfil the requirements of schedule 5 clause 5 of the CA i.e. “this audit team must be led by a suitably qualified auditor and include experts in the field of noise and rehabilitation”. The audit team consisted of:-

**Lead Auditor:** James McMahon PhD, BSc and Certificate of Competency in Environmental Auditing (RABQSA-AU, TL and EM). Dr McMahon was the main point of contact for the audit client during all phases of the audit. He was responsible for:

- developing the auditing protocols and checklists,
- conducting audit interviews;
- reviewing of the existing consent and associated documents including the applicable air quality and water quality management plans that form part of the consent and/or operating requirements for the quarry;
- evaluating compliance of the current quarry and its operations with the conditions of consent and the management plans and prepare an audit report detailing the state of

## Ardglen Quarry Environmental Audit

compliance identifying any non-compliances or outstanding uncompleted works with respect to air and water quality impacts by the quarry's operation.; and

- writing this audit report;

**Auditor/Noise Technical Expert:** Mr Ray Tumney (B Mech Eng, M Env Studies). Mr Tumney has 10 years' industrial and construction experience and over 15 years' extensive experience in acoustic and vibration assessment and management for all types of operations. Mr Tumney was responsible for:

- reviewing of the existing consent and associated documents including the applicable noise and vibration management plans that form part of the consent and/or operating requirements for the quarry; and
- evaluating compliance of the current quarry and its operations with the conditions of consent and the management plans and prepare an audit report detailing the state of compliance identifying any non-compliances or outstanding uncompleted works with respect to noise and vibration generated by the quarry's operation.

**Rehabilitation Technical Expert:** Phil Conacher M. Nat. Res., BSc, Diploma of Urban and Regional Planning, Grad Dip App Sc (Ornithology).

Mr Conacher was responsible for:

- reviewing of the existing consent and associated documents including the applicable ecological management plans that form part of the consent and/or operating requirements for the quarry; and
- evaluating compliance of the current quarry and its operations with the conditions of consent and the management plans and prepare an audit report detailing the state of compliance identifying any non-compliances or outstanding uncompleted works with respect to ecological impacts of the quarry's operation.

The audit team's appointment was endorsed by the Department of Planning. A copy of the endorsement can be found in Appendix B.

### 3.2 Audit Checklist

An audit checklist was prepared as part of the audit activities. The completed audit checklist is presented in Appendix C. The completed audit checklist includes the audit criteria, audit findings, audit log reference, compliance/non-compliance, site observations (if noted) and corrective actions (if required).

### 3.3 Audit Opening Meeting

An opening meeting was held at Daracon's Head Office, 5 James St Wallsend, on 26 November 2013. The purpose of the meeting was to introduce the audit team to the auditee's representatives and observers, discuss the legal obligations of the audit process, gain acceptance the audit plan by the parties involved and discuss the date and how the site visit will be conducted.

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The audit team (Dr McMahon, Mr Tumney and Mr Conacher), the auditee representatives (Mr Daniel Smith and Greg Dressler), auditee management representative Mr Bob Murphy and auditee observer Mr Stuart Murray were present at the opening meeting.

A copy of the opening meeting agenda can be found in Appendix D.

### 3.4 Audit Documents

A log of the audit documents that were requested and reviewed throughout the audit process is presented in Appendix E.

### 3.5 Site Visit

A site visit was conducted by members of the audit team, the auditee's representatives and former quarry manager Mr Rick Winfield on 2 December 2013. The purpose of the site visit was to view the current site layout, make a visual assessment of audit criteria and review site documentation. A copy of selected site photographs is presented in Appendix F. Site observations are listed in the audit checklist in Appendix C.

## 4 Audit Summary

An Audit summary is presented in Table 4.1. One hundred and sixteen conditions (including sub clauses) were reviewed during the audit. It was assessed that sixteen conditions were either not triggered or not able to be assessed due to the quarry not being operational and hence compliance was not assessed at the time of the audit.

It was considered that Daracon has complied with seventy three conditions and not complied with twenty seven conditions resulting in twenty six corrective actions and two recommendations.

**Table 4.1 Audit Summary Table**

Type of Condition	Number of Conditions	Conditions complied with	Conditions not complied with	Conditions not triggered/ assessed	Corrective Actions
Administrative	53	30	15	8	11
Noise and Vibration	19	14	5	0	4
Air Quality	7	5	2	0	2
Flora and Fauna	24	18	2	4	4
Water Quality	5	3	1	1	1
Visual Impact	2	1	1		1
Heritage	2	2	0	0	0
Additional Procedures	4	0	1	3	1

The corrective actions and recommendations have been ranked in order of their current impact on the surrounding environment. A **red highlight** indicates that the corrective action should be undertaken as soon as possible to avoid immediate potential impact on the environment. There

were no red highlighted corrective actions. An **amber highlight** indicates that the corrective action is required to be undertaken when the quarry is recommissioned to ensure compliance to the conditions of consent (2008) and avoid potential environmental impacts from the quarry operations. A **green highlight** indicates the corrective action is required to be undertaken to ensure compliance to the conditions of consent (2010) and avoid potential environmental impacts from the extension of the quarry operations. Where a recommendation was made it was not necessarily required to be undertaken in order to compliance to the conditions of consent. Recommendations are the auditor's opinion offered to assist in either streamlining administration of the quarry or streamlining requirements in approved plans. It should be noted that a different ranking may have been assigned if the quarry was operational. A summary of the corrective actions are presented in Table 4.2

**Table 4.2 Corrective Action and Recommendation Summary**

Type of Condition	Condition	Corrective Action
Administrative	S3 cl33 (c), S3 cl 43 (e), S5 cl4,	Daracon are to produce an AEMR to the specification once production recommences.
	S2 cl9	Daracon are to surrender all development consents as soon as practicable.
	S2 cl9	Daracon should ensure that the CCC consultant is aware of all the conditions of the approval.
	S3 cl42 (b)	Daracon are to forward the Road Safety and Condition Audit to Council and RMS for comments
	S3 cl 43	Recommendation to remove driver's induction form from the Traffic and Transport Management Plan and include the plan signoff in the induction form.
	S3 cl47	Daracon's accounting system should be used to track the waste contractors on site.
	S3 cl48	A centralised waste storage area should be constructed so it can contain small spills etc. and stormwater runoff is not directed towards Doughboy Hollow Creek.
	SoC4	Daracon's environmental management system should be implemented on site.
	S5 cl1	Environmental Due Diligence Checklist, Environmental Inspection Report and EMS Monthly Report need to be completed.
	S5 cl3	Monitoring exceedances are to be reported as required. If complaints are received by the Department or relevant agencies then they will have the information to inform the complainants that the quarry is not at fault. EMS has a system in place to report exceedances. The system is required to be implemented.
	S5 cl5	The quarry is currently not operational. It is required that a follow up site visit by the auditor is conducted 6 months following the recommencement of production if this date occurs before 31 December 2017.
S5 cl9, S4cl1	All relevant documents need to be supplied to both the relevant agencies and CCC.	

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Type of Condition	Condition	Corrective Action
	S5 cl10	All monitoring results are required to be posted on the website.
Noise	S3 cl2, SoC10	Satisfactory Noise Control works are to be implemented before operations recommence.
	S3 cl5	The proposed noise control treatments should be reviewed and redesigned as necessary and the NMP and other applicable documents are to be updated to reflect proposed new operating methods.
Noise	S3 cl11, SoC9 and EA6.4	Blast SWMS should be updated to ensure that appropriate communications and fly rock protection are in place for blasting a within 500 m of adjacent land. It would be wise to make this a standard provision for all blasts since much of the quarry is with 500 m of adjacent land.
	SoC9 and EA6.4	The Quarry induction does not specifically address the speed limits and should be amended to include a specific mention of speed limits for noise control purposes.
Air Quality	SoC13	The auditor recommends the AQMP is updated to remove requirement of low volume air sampling.
	S3 cl18	Daracon to supply specifications or a statement from supplier that the meteorological station meets the requirements in Approved Methods for Sampling of Air Pollutants in New South Wales guideline.
	S3 cl26	A VCA, or similar mechanism, should be implemented as soon as practicable.
Flora and Fauna	S3 cl28 (b), (c)	A review and implementation of DHCRS is required to prior to undertaking any works in the extension area.
	SoC7	Daracon should consider additional measures to control wild goats as the fencing is not considered sufficient control.
Water Quality	S3 cl19	The Lube Shed area potentially contains chemicals that may significantly impact on the water quality of Doughboy Hollow Creek. It is recommended that the stormwater is directed form the Lube Area to one of the smaller sumps located on site. This action should be undertaken as soon as practicable.
	S3 cl20	It is recommended that surface water quality monitoring is implemented regardless of the operational status of the quarry.
Other	S3 cl44	An assessment of external lighting against AS4282 (INT) 1995 is required to be submitted to the DG.

## 5 Conclusion

Based on the evidence reviewed in this audit it is considered that the quarry is not currently impacting the surrounding environment due primarily to operations at the quarry being temporarily suspended. It is recommended that the surface water sampling and reporting of the SWMP are implemented in order to assess the quality of water in the main sump. It is also recommended that the stormwater form the Lube Shed area is directed to smaller sumps on site.

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It appears that the quarry was not complying with noise performance criteria when it was previously in operation and is likely not to comply into the future as the noise mitigation actions have not been undertaken. It is understood that different plant and equipment is planned to be used on site when the quarry recommences. It is also understood that rail movements are not controlled by the quarry but rather are timetabled by ARTC. The auditor recommends that Daracon is to query ARTC on any planned out hours loading and events and Daracon's duty to pre-warn local residents for out hours loading is emphasised rather restricting the number of out hours loading events.

The auditor recommends that the necessity for removal of the weir and causeway from Doughboy Hollow Creek be reassessed in conjunction with NOW. The causeway, in particular, is not on the quarry site, not used for quarry operations and is used as a right of way by local residents and therefore its care and maintenance (and existence) should be the responsibility of the local council.

Based on the site visit, the approved Doughboy Hollow Rehabilitation Strategy may need revision in view of the larger area of kikuyu grass located in private paddocks surrounding the rehabilitation area.

# APPENDIX A

## Consolidated Consent

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# Project Approval

## Section 75J of the *Environmental Planning and Assessment Act 1979*

I approve the application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The Hon Kristina Keneally MP  
**Minister for Planning**

**Sydney**

**2008**

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### SCHEDULE 1

**Application Number:**

06\_0264

**Proponent:**

Buttai Gravel Pty Limited (Daracon Quarries)

**Approval Authority:**

Minister for Planning

**Land:**

Lot 1 DP 1001734  
Lot 218 DP 751028  
[Various Crown public roads](#)

**Project:**

Ardglen Quarry Extension

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[Blue type represents December 2010 modification \(MOD 1\)](#)

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## DEFINITIONS

AEMR	Annual Environmental Management Report
BCA	Building Code of Australia
CCC	Community Consultative Committee
Council	Liverpool Plains Shire Council
Day	The period from 7.00am to 6.00pm on Monday to Saturday, and 8.00am to 6.00pm on Sundays and Public Holidays
DECCW	<a href="#">Department of Environment, Climate Change and Water</a>
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
DWE	Department of Water and Energy
EA	Environmental assessment titled <i>Ardglen Quarry Extension Environmental Assessment</i> , dated June 2007, including the response to submissions, dated November 2007
EEC	Endangered Ecological Community as defined under the NSW <i>Threatened Species Conservation Act 1995</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence
Evening	The period from 6.00pm to 10.00pm
Extension Area	<a href="#">The Extension Area as shown in Appendix 1</a>
I&I NSW	<a href="#">NSW Department of Industry and Investment</a>
Land	Land means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Minister	Minister for Planning, or delegate
Night	The period from 10.00pm to 7.00am on Monday to Saturday, and 10.00pm to 8.00am on Sundays and Public Holidays
NOW	<a href="#">NSW Office of Water within DECCW</a>
Privately-owned Land	Land that is not owned by a public agency, or a quarrying company (or its subsidiary)
Project	The development as described in the EA
Proponent	Buttai Gravel Pty Limited (Daracon Quarries), or its successors
Reasonable and Feasible	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations and what is practical to build
RTA	Roads and Traffic Authority
Site	The land referred to in Schedule 1 and shown in Appendix 1 as the project application area
Statement of Commitments	The Proponent's commitments in <a href="#">Appendix 4</a>

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## **SCHEDULE 2 ADMINISTRATIVE CONDITIONS**

### **Obligation to Minimise Harm to the Environment**

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.

### **Terms of Approval**

2. The Proponent shall carry out the project generally in accordance with the:
  - (a) EA;
  - (b) statement of commitments; and
  - (c) conditions of this approval.

*Note: The general layout of the project is shown in Appendix 1.*

3. If there is any inconsistency between the above documents, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable and feasible requirement/s of the Director-General arising from the Department's assessment of:
  - (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence.

### **Limits on Approval**

5. This approval expires on 31 August 2038.

*Note: Under this approval, the Proponent is required to rehabilitate the site and implement biodiversity offsets to the satisfaction of the Director-General. Consequently, this approval will continue to apply in all other respects other than the right to conduct extractive operations until the site has been rehabilitated and the biodiversity offset provided to a satisfactory standard.*

6. The Proponent shall not extract or process more than 500,000 tonnes of material on the site each year.
7. The Proponent shall not transport more than:
  - (a) 250,000 tonnes of product from the site by rail a year; or
  - (b) 250,000 tonnes of product from the site by road a year.
8. The Proponent shall not import more than 80,000 tonnes of materials for the purposes of blending and product quality improvement each year.

### **Surrender of Consents**

9. Within 3 years of this approval, the Proponent shall surrender all development consents or continuing use rights for the Ardglan Quarry, to the satisfaction of the Director-General.

### **Management Plans/Monitoring Programs**

10. With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

### **Structural Adequacy**

11. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

*Notes:*

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of development.*

### **Demolition**

12. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

### **Operation of Plant and Equipment**

13. The Proponent shall ensure that all plant and equipment used at the site is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

### **Protection of Public Infrastructure**

14. The Proponent shall:
  - (a) repair, or pay all reasonable costs associated with repairing any public infrastructure that is damaged by the project; and
  - (b) relocate, or pay all reasonable costs associated with relocating any public infrastructure that needs to be relocated as a result of the project.

### **Revision of Strategies, Plans or Programs**

15. Within 3 months of any modification to this approval, the Proponent shall review and if necessary revise all management and monitoring strategies, plans and programs required under this approval which are relevant to the modification to the satisfaction of the Director-General.
-

## SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

### HOURS OF OPERATION

- The Proponent shall comply with the hours of operation in Table 1.

Table 1: Hours of Operation

<b>Activity</b>	<b>Day</b>	<b>Time</b>
Topsoil/overburden removal/emplacement	Monday-Saturday	7.00am to 5.00pm
	Sunday	None
Blasting	Monday-Friday	10:00pm to 3.00pm
	Saturdays, Sundays and Public Holidays	None
In-pit activities (including drilling, extraction, and transfer of material out of the pit)	Monday-Saturday	7.00am to 5:30pm
	Sundays and Public Holidays	None
Out-of-pit activities (including processing, and stockpiling)	Monday-Saturday	7.00am to 5:30pm
	Sundays and Public Holidays	None
Maintenance (if inaudible at nearby residences)	Monday-Sunday	Any time
Truck loading and distribution	Monday-Saturday	6.30am to 5.30pm
	Sundays and Public Holidays	None
Rail loading	Monday-Sunday	7:00am to 10:00pm

Note:

- The Proponent may load no more than 2 trains each year outside the hours listed in Table 1 (see condition 41).
- The Proponent may carry out blasting operations outside the hours listed in Table 1 for safety reasons provided the Proponent has notified [DECCW](#) and the local community about the proposed blast.

### NOISE

#### Noise Impact Assessment Criteria

- The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 2: Noise impact assessment criteria dB(A)

<b>Land</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>	
	<b>L<sub>Aeq</sub>(15 min)</b>	<b>L<sub>Aeq</sub>(15 min)</b>	<b>L<sub>Aeq</sub>(15 min)</b>	<b>L<sub>A1</sub>(1 min)</b>
1 – Burraston	35	35	35	45
3 – Rose	35	35	35	45
4 – CM Thompson	44	35	35	45
5 – M Taylor	45	35	35	45
6 – S Thompson	45	35	35	45
9 – Bates	37	35	35	45
10 – Avery	38	35	35	45
11 – Shipman	37	35	35	45
12 – Hall	36	35	35	45
13 – McGhie	35	35	35	45
14 – Purtell	36	35	35	45
15 – J Taylor	43	35	35	45

<b>Land</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>	
	<b>L<sub>Aeq(15 min)</sub></b>	<b>L<sub>Aeq(15 min)</sub></b>	<b>L<sub>Aeq(15 min)</sub></b>	<b>L<sub>A1(1 min)</sub></b>
16 - Bojba	40	35	35	45
All other privately-owned land	35	35	35	45

However, if the Proponent has a written negotiated noise agreement with any landowner of the land listed in Table 2, and a copy of this agreement has been forwarded to the Department and DECCW, then the Proponent may exceed the noise limits in Table 2 in accordance with the negotiated noise agreement. The Proponent may also exceed the L<sub>A1(1 min)</sub> and L<sub>Aeq(15 min)</sub> noise impact assessment criteria during out of hours rail loading activities provided they are conducted in accordance with condition 41 below.

**Notes:**

- For information on the numbering and identification of properties used in this approval see Appendix 5.
- To determine compliance with the L<sub>Aeq(15 minute)</sub> noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the DECCW may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- To determine compliance with the L<sub>A1(1 minute)</sub> noise limits, noise from the project is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the DECCW may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).
- The noise emission limits identified in the above table apply under meteorological conditions of:
  - wind speeds of up to 3 m/s at 10 metres above ground level; or
  - temperature inversion conditions of up to 3°C/100m, and source to receiver gradient wind speeds of up to 2 m/s at 10 metres above ground level.

**Land Acquisition Criteria**

3. If the noise generated by the project exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 7-9 of Schedule 4.

Table 3: Land acquisition criteria dB(A)

<b>Land</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
	<b>L<sub>Aeq(15 min)</sub></b>	<b>L<sub>Aeq(15 min)</sub></b>	<b>L<sub>Aeq(15 min)</sub></b>
1 – Burraston	40	40	40
3 – Rose	46	40	40
4 – CM Thompson	46	40	40
5 – M Taylor	46	40	40
6 – S Thompson	46	40	40
9 – Bates	46	40	40
10 – Avery	46	40	40
11 – Shipman	46	40	40
12 – Hall	46	40	40
13 – McGhie	40	40	40
14 – Purtell	46	40	40
15 – J Taylor	46	40	40
16 - Bojba	46	40	40
All other privately-owned land	40	40	40

However, if the Proponent has a written negotiated noise agreement with any landowner of the land listed in Table 3, and a copy of this agreement has been forwarded to the Department and DECCW, then the Proponent may exceed the noise limits in Table 3 in accordance with the negotiated noise agreement. The Proponent may also exceed the land acquisition criteria during out of hours rail loading activities provided they are conducted in accordance with condition 41 below.

Note: Noise generated by the project is to be measured in accordance with the notes to Table 2.

## Additional Noise Mitigation

4. Upon receiving a written request from the owner of any privately-owned residence where subsequent noise monitoring shows the noise generated by the project is greater than the relevant criteria in Table 4, the Proponent shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

Table 4: Additional Noise Mitigation Criteria dB(A)

<b>Land</b>	<b>Day</b>	<b>Evening</b>	<b>Night</b>
	<b><i>L<sub>Aeq(15 min)</sub></i></b>	<b><i>L<sub>Aeq(15 min)</sub></i></b>	<b><i>L<sub>Aeq(15 min)</sub></i></b>
1 – Burraston	38	38	38
3 – Rose	44	38	38
4 – CM Thompson	44	38	38
5 – M Taylor	44	38	38
6 – S Thompson	44	38	38
9 – Bates	44	38	38
10 – Avery	44	38	38
11 – Shipman	44	38	38
12 – Hall	44	38	38
13 – McGhie	38	38	38
14 – Purtell	44	38	38
15 – J Taylor	44	38	38
16 - Bojba	44	38	38
All other privately-owned land	38	38	38

Note: Noise generated by the project is to be measured in accordance with the notes to Table 2.

These additional mitigation measures must be reasonable and feasible.

If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

Within 3 months of this approval, the Proponent shall notify all applicable landowners of their rights under this condition, to the satisfaction of the Director-General.

## Continuous Improvement

5. The Proponent shall:
- implement all reasonable and feasible noise mitigation measures;
  - investigate ways to reduce the noise generated by the project, including off-site road and rail noise and maximum noise levels which may result in sleep disturbance; and
  - report on these investigations and the implementation and effectiveness of these measures in the AEMR,
- to the satisfaction of the Director-General.

## Monitoring

6. Prior to [any works being undertaken in the Extension Area](#), the Proponent shall prepare and implement a Noise Monitoring Program for the project, in consultation with [DECCW](#), and to the satisfaction of the Director-General. The program must include:
- a combination of attended and unattended noise monitoring measures; and
  - a noise monitoring protocol for evaluating compliance with the noise impact assessment and land acquisition criteria in this approval.

## BLASTING AND VIBRATION

### Airblast Overpressure Criteria

7. The Proponent shall ensure that the airblast overpressure level from blasting at the project does not exceed the criteria in Table 5 at any privately-owned residence.

Table 5: Airblast overpressure impact assessment criteria

Airblast overpressure level (dB(Lin Peak))	Allowable exceedance
115	5% of the total number of blasts over a period of 12 months
120	0%

### Ground Vibration Impact Assessment Criteria

8. The Proponent shall ensure that the ground vibration level from blasting at the project does not exceed the criteria in Table 6 at any privately-owned residence.

Table 6: Ground vibration impact assessment criteria

Peak particle velocity (mm/s)	Allowable exceedance
5	5% of the total number of blasts over a period of 12 months
10	0%

### Blasting Frequency

9. The Proponent shall not carry out more than 30 blasts a year, or more than 1 blast per day, without the written approval of the Director-General.

### Operating Conditions

10. The Proponent shall implement best blasting practice to:
- (a) protect the safety of people, property, public infrastructure and livestock; and
  - (b) minimise the dust and fume emissions from blasting at the project, to the satisfaction of the Director-General.
11. The Proponent shall not undertake blasting within 500 metres of any privately-owned land or any land not owned by the Proponent, unless suitable arrangements have been made with the landowner and any tenants to minimise the risk of flyrock-related impact to the property to the satisfaction of the Director-General.

### Public Notice

12. The Proponent shall:
- (a) notify the landowner/occupier of any residence within 1 kilometre of the quarry pit who registers an interest in being notified about the blasting schedule at the quarry;
  - (b) operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on the blasting schedule at the quarry;
  - (c) keep local residents informed about this hotline (or any alternative notification protocols), to the satisfaction of the Director-General.

### Property Investigations

13. If any landowner of privately-owned land within 1 kilometre of the site claims that buildings and/or structures on his/her land have been damaged as a result of blasting at the site, following commencement of operations within the extension area, then he/she may ask the Director-General in writing to investigate the claim.

If the Director-General is satisfied that an independent property investigation is warranted, the Proponent shall within 3 months of the Director-General's determination:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to investigate the claim; and
- (b) give the landowner a copy of the property investigation report.

If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Director-General.

If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 6).

### Blast Monitoring Program

14. Prior to carrying out any [blasting in the Extension Area](#), the Proponent shall prepare and implement a Blast Monitoring Program for the project, in consultation with the [DECCW](#), and to the satisfaction of the Director-General. This program must include a protocol for demonstrating compliance with the blasting criteria in this approval.

### AIR QUALITY

#### Impact Assessment Criteria

15. The Proponent shall ensure that the dust emissions generated by the project do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 8, 9 and 10 at any residence, on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 8: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>

Table 9: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>

Table 10: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

#### Operating Conditions

16. The Proponent shall ensure any visible air pollution generated by the project is assessed regularly, and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately-owned land, to the satisfaction of the Director-General.

#### Monitoring

17. [The](#) Proponent shall prepare and implement an Air Quality Monitoring Program for the project, in consultation with [DECCW](#), and to the satisfaction of the Director-General. This program must:
- use a combination of high volume air samplers and dust deposition gauges to monitor the dust emissions from the project;
  - include a protocol for demonstrating compliance with the air quality impact assessment criteria in this approval; [and](#)
  - [be submitted to the Director-General for approval prior to any works being undertaken in the Extension Area.](#)

## **METEOROLOGICAL MONITORING**

18. The Proponent shall ensure the project has a suitable meteorological station in the vicinity of the site that complies with the requirements in *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline, to the satisfaction of the [DECCW](#) and the Director-General.

## **SURFACE AND GROUND WATER**

### **Surface Water Discharges**

19. The Proponent shall only discharge water from the site in accordance with the provisions of an EPL.

### **Site Water Management Plan**

20. Prior to [any works being undertaken in the Extension Area](#), the Proponent shall prepare and implement a Site Water Management Plan for the project, in consultation with [DECCW](#) and [NOW](#), and to the satisfaction of the Director-General. This plan must be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General, and must include:
- (a) a Site Water Balance;
  - (b) an Erosion and Sediment Control Plan; and
  - (c) a Water Monitoring Program.

*Note: The Site Water Management Plan must incorporate the existing quarry operations and operations within the extension area.*

### **Site Water Balance**

21. The Site Water Balance must include details of:
- (a) sources and reliability of water supply;
  - (b) water management;
  - (c) water use; and
  - (d) any off-site discharges.

### **Erosion and Sediment Control**

22. The Erosion and Sediment Control Plan must:
- (a) be consistent with the requirements of the *Managing Urban Stormwater: Soils and Construction Manual* (Landcom 2004, or its latest version);
  - (b) identify activities that could cause soil erosion and generate sediment;
  - (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
  - (d) describe the location, function, and capacity of erosion and sediment control structures; and
  - (e) describe what measures would be implemented to maintain the structures over time.

### **Water Monitoring**

23. The Water Monitoring Plan must include:
- (a) water quality assessment criteria;
  - (b) a program to monitor water flows and quality in creeks and other waterbodies that could potentially be affected by the project;
  - (c) a protocol for the investigation, notification, and mitigation of identified exceedances of the water quality assessment criteria; and
  - (d) the procedures that would be followed if any unforeseen impacts are detected during the project.

## **REHABILITATION AND LANDSCAPE MANAGEMENT**

### **Rehabilitation**

24. The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the conceptual rehabilitation principles and proposed rehabilitation strategy in the EA (shown conceptually in Appendix 2), to the satisfaction of the Director-General.

## Offset Strategy

25. Prior to [undertaking any works in the Extension Area](#), the Proponent shall revise the Biodiversity Offset Strategy described in the EA and Response to Submissions (shown conceptually in Appendix 3), to the satisfaction of the Director-General. The revised strategy must be prepared in consultation with the [DECCW](#), and include additional areas where Yellow Box White Box Blakely's Red Gum Woodland EEC would be actively re-established within the identified biodiversity offset areas shown in Appendix 3.
26. Within 3 years of this approval, the Proponent shall make suitable arrangements to provide appropriate long term security for the offset areas to the satisfaction of the Director-General.

## Landscape Management Plan

27. The Proponent shall prepare and implement a detailed Landscape Management Plan for the project to the satisfaction of the Director-General. This plan must:
  - (a) be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General;
  - (b) submitted to the Director-General for approval prior to [undertaking any works in the Extension Area](#); and
  - (c) include a:
    - Doughboy Hollow Creek Rehabilitation Strategy;
    - Rehabilitation and Biodiversity Offset Management Plan; and
    - Quarry Closure Plan.

*Note: The Department accepts that the initial Landscape Management Plan may not include the detailed Quarry Closure Plan. However, if this occurs, the Proponent will be required to seek approval from the Director-General for an alternative timetable for the completion and approval of the Quarry Closure Plan.*

## Doughboy Hollow Creek Rehabilitation Strategy

28. The Doughboy Hollow Creek Rehabilitation Strategy must:
  - (a) be prepared in consultation with the [I&I NSW](#) and [NOW](#);
  - (b) describe the measures that would be implemented to:
    - remove the weir from Doughboy Hollow Creek;
    - rehabilitate the creek; and
    - rehabilitate and/or re-establish riparian vegetation.

## Rehabilitation and Biodiversity Offset Management Plan

29. The Rehabilitation and Biodiversity Offset Management Plan must:
  - (a) be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General;
  - (b) describe in general the short, medium, and long term measures that would be implemented to:
    - rehabilitate the site;
    - implement the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy; and
    - manage the remnant vegetation and habitat on the site;
  - (c) include a detailed description of what measures would be implemented over the next 3 years to implement the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy;
  - (d) include a detailed description of what measures would be implemented over the next 5 years to rehabilitate the site, including the procedures to be implemented for:
    - progressively rehabilitating areas disturbed by quarrying;
    - implementing revegetation and regeneration within the disturbance areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
    - managing the remnant vegetation and habitat on site;
    - managing impacts on fauna;
    - reducing the visual impacts of the project;
    - landscaping the site to minimise visual impacts;
    - protecting areas outside the disturbance areas;
    - conserving and reusing topsoil;
    - collecting and propagating seeds for rehabilitation works;
    - salvaging and reusing material from the site for habitat enhancement;
    - controlling weeds and feral pests;
    - controlling access; and
    - bushfire management;

- (e) detailed performance and completion criteria for the rehabilitation of the site and implementation of the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy;
- (f) a detailed description of how the performance of the rehabilitation of the site and implementation of the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy would be monitored over time to achieve the relevant objectives and completion criteria;
- (g) a description of the potential risks to successful revegetation and/or rehabilitation in the offset areas and project area, and a description of the contingency measures that would be implemented to mitigate these risks; and
- (h) details of who is responsible for monitoring, reviewing and implementing the plan.

### Quarry Closure Plan

30. The Quarry Closure Plan must:
- (a) define the objectives and criteria for quarry closure;
  - (b) investigate options for the future use of the site, including any final void(s);
  - (c) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and
  - (d) describe how the performance of these measures would be monitored over time.

### Rehabilitation Bond

31. Within 3 months of the approval of the Landscape Management Plan, the Proponent shall lodge a rehabilitation bond with the Director-General to ensure that the rehabilitation and biodiversity offset obligations required in this approval are implemented in accordance with the performance and completion criteria in the Rehabilitation and Biodiversity Offset Management Plan. The rehabilitation bond may in the form of a bank guarantee or security bond. The sum of the bond shall be calculated by:
- (a) a suitably qualified quantity surveyor at \$2.50/m<sup>2</sup> for the area to be disturbed over the next 5 year period at the quarry; and
  - (b) a suitably qualified rehabilitation expert for land within the biodiversity offset areas where re-establishment of the EEC is proposed,
- to the satisfaction of the Director-General.

#### Notes:

- If the rehabilitation and biodiversity offset is completed to the satisfaction of the Director-General, the Department will release the rehabilitation bond.
  - If the rehabilitation and biodiversity offset is not completed to the satisfaction of the Director-General, all or part of the rehabilitation bond will be used to ensure the satisfactory completion of the relevant works.
32. Every 5 years, [following the provision of the rehabilitation bond \(see condition 31\)](#), the Proponent shall review, and if necessary revise, the sum of the bond to the satisfaction of the Director-General. This review must consider:
- (a) the effects of inflation;
  - (b) any changes to the total area of disturbance; and
  - (c) the performance of the rehabilitation against the completion criteria of the Rehabilitation, Biodiversity Offset Management Plan.

## TRANSPORT

### Product Transport

33. The Proponent shall:
- (a) keep records of the:
    - amount of quarry materials imported onto the site each year;
    - amount of product transported from the site each year;
    - number of truck movements generated by the project, on a weekly basis;
    - number of train movements generated by the project, on a weekly basis;
    - date and time of each train movement generated by the project;
  - (b) provide annual production data to the [I&I NSW](#) using the standard form for that purpose; and
  - (c) include these records in the AEMR.

### **Road Safety and Condition Audit**

34. Prior to [undertaking any works in the Extension Area](#), the Proponent shall undertake a Road Safety and Condition Audit for the project, to the satisfaction of the Director-General. This audit must:
  - (a) be prepared by a suitably independent and qualified expert/s whose appointment has been approved by the Director-General;
  - (b) be prepared in consultation with the RTA and Council;
  - (c) assess the safety, performance and condition of the Ardglan Street-New England Highway intersection and the quarry access route from the New England Highway to the quarry entrance (Ardglan Street, High Street (Swinging Bridges Road), St Stephen Street and Warra Street); and
  - (d) identify any road works that are required to comply with relevant AUSROAD standards or other relevant RTA requirements.
35. Within 12 months of completing the Road Safety and Condition Audit, the Proponent shall undertake (and complete) any road works recommended in the Audit, to the satisfaction of the relevant roads authority (i.e. RTA or Council). If there is a dispute about the implementation of these measures, then the Proponent may refer the matter to the Director-General for resolution.

### **Road Signage**

36. Within 3 months of this approval, the Proponent shall install warning signs ("Truck Turning") on the northern and southern approaches to the quarry access route on the New England Highway, to the satisfaction of the RTA.

### **Road Maintenance**

37. The Proponent shall maintain the quarry access route from the New England Highway to the quarry entrance (Ardglan Street, High Street (Swinging Bridges Road), St Stephen Street and Warra Street) until the cessation of quarrying on the site, to the satisfaction of Council.

If the Proponent and the Council fail to reach agreement on the road maintenance requirements, then either party may refer the matter to the Director-General for resolution. Any determination by the Director-General's on this matter will be binding on the Proponent and the Council.

### **Road Haulage**

38. The Proponent shall ensure that truck movements associated with the project do not exceed 50 movements on average per day.
39. The Proponent shall not use trucks with a capacity of greater than 35 tonnes to transport product from the site, unless otherwise agreed in writing by the RTA.
40. The Proponent shall ensure that all loaded vehicles entering or leaving the site are covered, and are cleaned of materials that may fall onto public roads.

### **Rail Loading**

41. The Proponent may only load a maximum of 2 trains outside the rail loading and distribution hours in Table 1 in any 12 month period, unless agreed to in writing by the Director-General.
42. If the Proponent intends to undertake out of hours rail loading, it must use its best endeavours to notify all local residents at least 12 hours prior to the proposed rail loading, to the satisfaction of the Director-General.

### **Traffic and Transport Management Plan**

43. Prior to [undertaking any works in the Extension Area](#), the Proponent shall prepare and implement a Traffic and Transport Management Plan, to the satisfaction of the Director-General. The plan must include:
  - (a) a driver code of conduct for the project to minimise the impacts of trucks on local residents;
  - (b) the measures that would be put in place to ensure compliance with the driver code of conduct;
  - (c) the measures that would be taken to avoid night time train loading operations; and
  - (d) the procedures for notifying local residents about night time train loading activities when these occur.

## **VISUAL IMPACT**

44. The Proponent shall:
- (a) take all practicable measures to mitigate off-site lighting impacts from the project; and
  - (b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the Director-General.

## **ABORIGINAL CULTURAL HERITAGE**

45. The Proponent shall not destroy any known Aboriginal objects (as defined in the *National Parks and Wildlife Act 1974*) without the written approval of the Director-General.

## **GREENHOUSE GAS**

46. The Proponent shall:
- (a) monitor the greenhouse gas emissions generated by the project;
  - (b) investigate ways to reduce greenhouse gas emissions generated by the project; and
  - (c) report on greenhouse gas monitoring and abatement measures in the AEMR, to the satisfaction of the Director-General.

## **WASTE MINIMISATION**

47. The Proponent shall:
- (a) monitor the amount of waste generated by the project;
  - (b) investigate ways to minimise waste generated by the project;
  - (c) implement reasonable and feasible measures to minimise waste generated by the project;
  - (d) ensure irrigation of treated wastewater is undertaken in accordance with [DECCW's Use of Effluent by Irrigation](#); and
  - (e) report on waste management and minimisation in the AEMR, to the satisfaction of the Director-General.
48. The Proponent shall ensure that all waste generated or stored on site is assessed, classified and managed in accordance with the [DECCW's Waste Classification Guidelines Part 1: Classifying Waste](#).
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## **SCHEDULE 4 ADDITIONAL PROCEDURES**

### **NOTIFICATION OF LANDOWNERS**

1. If the results of monitoring required in Schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the relevant criteria.

### **INDEPENDENT REVIEW**

2. If a landowner (excluding quarry owned properties) considers that the operations of the project are exceeding the impact assessment criteria in Schedule 3 then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 3 months of the Director-General's decision:

- (a) consult with the landowner to determine his/her concerns;
  - (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land to:
    - determine whether the project is complying with the relevant impact assessment criteria in Schedule 3; and
    - identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and
  - (c) give the Director-General and landowner a copy of the independent review.
3. If the independent review determines that the project is complying with the relevant impact assessment criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.
  4. If the independent review determines that the project is not complying with the relevant impact assessment criteria in Schedule 3, and that the project is primarily responsible for this non-compliance, then the Proponent shall:
    - (a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria; and
    - (b) conduct further monitoring to determine whether these measures ensure compliance.

If the additional monitoring referred to above subsequently determines that the project is complying with the relevant criteria in Schedule 3, or the Proponent and landowner enter into a negotiated agreement to allow these exceedances, then the Proponent may discontinue the independent review with the approval of the Director-General.

5. If the independent review determines that the relevant criteria in Schedule 3 are being exceeded, then the Proponent shall:
  - (a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the relevant criteria are complied with; and
  - (b) conduct further monitoring to determine whether these measures ensure compliance; or
  - (c) secure a written agreement with the landowner to allow exceedances of the criteria in Schedule 3.

If the additional monitoring referred to above subsequently determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

6. If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 6).

## LAND ACQUISITION

7. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the project the subject of the project application, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
    - presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise mitigation measures in conditions 5 and 6 of Schedule 3;
  - (b) the reasonable costs associated with:
    - relocating within the Liverpool Plains local government area, or to any other local government area determined by the Director-General;
    - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

Within 14 days of receiving the independent valuer's determination, the Proponent shall make a written offer to purchase the land at a price not less than the independent valuer's determination.

If the landowner refuses to accept this offer within 6 months of the Proponent's offer, the Proponent's obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.

8. The Proponent shall bear the costs of any valuation or survey assessment requested by the independent valuer, or the Director-General, and the costs of determination referred above.
  9. If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.
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## **SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING**

### **ENVIRONMENTAL MANAGEMENT STRATEGY**

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General [for approval prior to any works being undertaken in the Extension Area](#), and:
  - (a) provide the strategic framework for environmental management of the project;
  - (b) identify the statutory requirements that apply to the project;
  - (c) describe in general how the environmental performance of the project would be monitored and managed;
  - (d) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the project;
    - respond to any non-compliance; and
    - respond to emergencies; and
  - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the project.

### **ENVIRONMENTAL MONITORING PROGRAM**

2. The Proponent shall prepare and implement an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General [for approval prior to any works being undertaken in the Extension Area](#), and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document, and be submitted to the Director-General concurrently with the submission of the relevant monitoring programs/plans.

### **REPORTING**

#### **Incident Reporting**

3. Within 7 days of detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall report the exceedance/incident to the Department and any relevant agencies. This report must:
  - (a) describe the date, time, and nature of the exceedance/incident;
  - (b) identify the cause (or likely cause ) of the exceedance/incident;
  - (c) describe what action has been taken to date; and
  - (d) describe the proposed measures to address the exceedance/incident.

#### **Annual Reporting**

4. Within 12 months of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and relevant agencies. This report must:
  - (a) identify the standards and performance measures that apply to the project;
  - (b) describe the works carried out in the last 12 months;
  - (c) describe the works that will be carried out in the next 12 months;
  - (d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
  - (e) include a summary of the monitoring results for the project during the past year;
  - (f) include an analysis of these monitoring results against the relevant:
    - limits/criteria in this approval;
    - monitoring results from previous years; and
    - predictions in the EA;
  - (g) identify any trends in the monitoring results over the life of the project;
  - (h) identify and discuss any non-compliance during the previous year; and
  - (i) describe what actions were, or are being, taken to ensure compliance.

## **INDEPENDENT ENVIRONMENTAL AUDIT**

5. **Prior to 31 December 2012**, and every 5 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
  - (a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Director-General;
  - (b) assess the environmental performance of the project, and its effects on the surrounding environment;
  - (c) assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
  - (d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
  - (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

*Note: This audit team must be led by a suitably qualified auditor, and include experts in the field of noise and rehabilitation.*

6. Within 6 weeks of completing this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General with a response to any recommendations contained in the audit report.
7. Within 3 months of submitting the audit report to the Director-General, the Proponent shall review and if necessary revise the strategies/plans/programs required under this approval, to the satisfaction of the Director-General.

## **COMMUNITY CONSULTATIVE COMMITTEE**

8. The Proponent shall operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General, in general accordance with the *Guideline for Establishing and Operating Community Consultative Committees for Mining Projects*.

## **ACCESS TO INFORMATION**

9. Within 3 months of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMRs required under this approval, the Proponent shall:
    - (a) provide a copy of the relevant document/s to the relevant agencies and CCC; and
    - (b) put a copy of the relevant document/s on its website.
  10. During the development, the Proponent shall:
    - (a) include a copy of this approval, as may be modified from time to time, on its website;
    - (b) provide a full summary of monitoring results required under this approval on its website; and
    - (c) update these results on a regular basis (at least every 6 months).
-

APPENDIX 1  
GENERAL PROJECT LAYOUT



## APPENDIX 2 CONCEPTUAL REHABILITATION PLAN

Jobs2005/0038419/Draft Project Approval/Appendix 2/Rehabilitation/Final Landform.cdr 08/07/05 2008 JD Environmental Resources Management Australia Pty Ltd



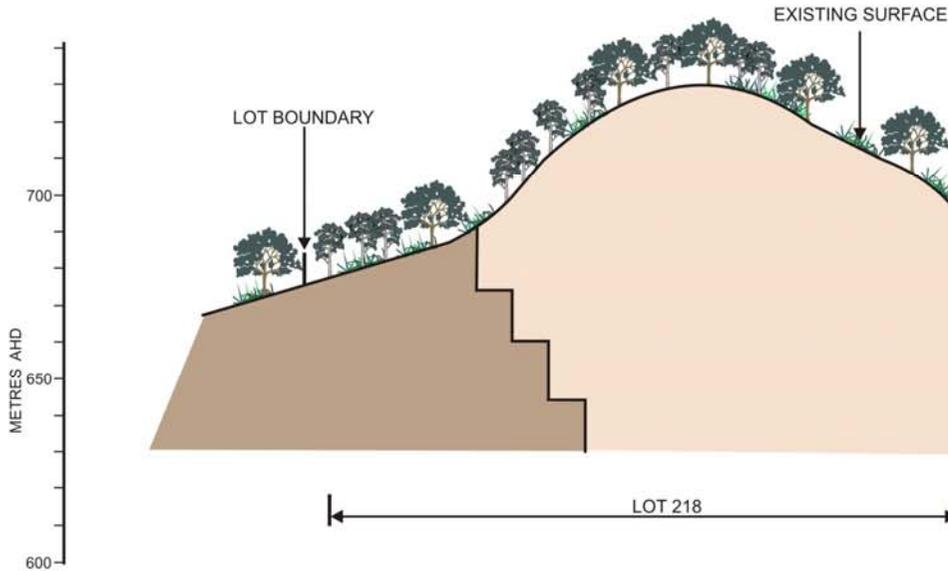
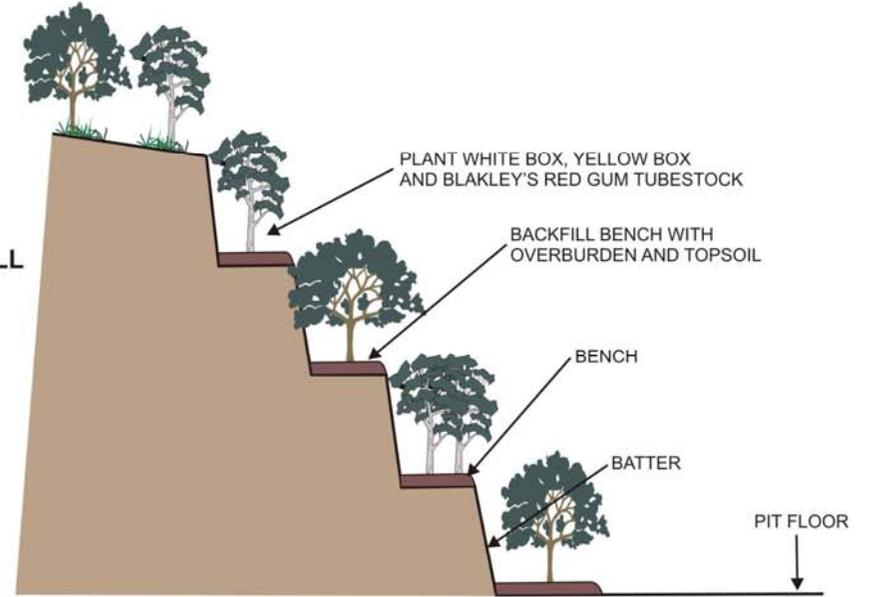
Source: Neil Charters Pty Ltd 10014/5 14-11-05



Appendix 2 **Final Landform**

Daracoon Engineering - Ardglan Quarry, NSW - Draft Project Approval

### CONCEPTUAL CROSS SECTION THROUGH SIDE WALL



### CONCEPTUAL CROSS SECTION THROUGH MAIN PIT



**APPENDIX 3  
CONCEPTUAL OFFSET PLAN**



## APPENDIX 4 STATEMENT OF COMMITMENTS

Table 1: Statement of Commitments

Item Number	Item	Commitment	Responsibility	Timing
1	Scope of Development	The project will be carried out generally in accordance with the following plans and documentation, except where amended by the conditions of the project approval: <ul style="list-style-type: none"> <li>the Environmental Assessment (EA) prepared by ERM (June, 2007) and accompanying specialist reports;</li> <li>the Response to Submissions report prepared by ERM (November, 2007); and</li> <li>this revised Statement of Commitments.</li> </ul>	Daracon Quarries	Ongoing for the duration of the project.
2	Statutory Requirements	All necessary licences, permits and approvals will be obtained and maintained for the project.	Daracon Quarries	Ongoing for the duration of the project.
3		In accordance with section 104A of the EP&A Act, the proponent will surrender the existing development consent applying to Lot 1 DP 1001734, issued by Murrurundi Shire Council in May 1994.	Daracon Quarries	Within 2 years of work commencing within the extension area.
4	General	The proponent will prepare and implement an Environmental Management System (EMS) based on the AS/NZA ISO 14001:2004 - Environmental Management Systems.  The EMS will: <ul style="list-style-type: none"> <li>incorporate an operational Environmental Management Plan (EMP);</li> <li>detail potential environmental risks due to operation of the proposed quarry;</li> <li>provide measures for the prevention, minimisation and management of these impacts to within acceptable limits; and</li> <li>provide a means for the project to improve environmental performance and move towards environmental sustainability.</li> </ul>	Daracon Quarries	EMS to be submitted for approval prior to work commencing within the extension area.
5	Water Management	The proponent will prepare and implement a Surface Water Management Plan for the project that will include: <ul style="list-style-type: none"> <li>an Erosion and Sediment Control Plan (including procedures to minimise erosion, capture of sediment on-site, and maintenance of control structures);</li> </ul>	Daracon Quarries	Plan to be submitted for approval prior to work commencing within the extension area.

Item Number	Item	Commitment	Responsibility	Timing															
		<ul style="list-style-type: none"> <li>a Site Water Balance; and</li> <li>a Water Quality Monitoring Program</li> </ul>																	
6	Biodiversity	<p>The proponent will implement the biodiversity offset strategy outlined in the EA, which includes the conservation and long term protection of the areas described in <i>Table 1</i>.</p> <p><i>Table 1 Biodiversity Offset Areas</i></p> <table border="1"> <thead> <tr> <th>Land Description</th> <th>Area (ha)</th> <th>Proposed Management Strategy</th> </tr> </thead> <tbody> <tr> <td>Lot 187 DP 751028</td> <td>8.2</td> <td>stock removal, weed control, planting of EEC trees, transport of logs and rocks, provision of nest boxes</td> </tr> <tr> <td>Lot 39 DP 751028</td> <td>11.65</td> <td>stock removal, weed control, major planting of EEC trees and grasses, transport of logs and rocks</td> </tr> <tr> <td>Lot 49 DP 751028</td> <td>16.3</td> <td>stock removal, weed control</td> </tr> <tr> <td><b>Total</b></td> <td><b>36.15</b></td> <td></td> </tr> </tbody> </table>	Land Description	Area (ha)	Proposed Management Strategy	Lot 187 DP 751028	8.2	stock removal, weed control, planting of EEC trees, transport of logs and rocks, provision of nest boxes	Lot 39 DP 751028	11.65	stock removal, weed control, major planting of EEC trees and grasses, transport of logs and rocks	Lot 49 DP 751028	16.3	stock removal, weed control	<b>Total</b>	<b>36.15</b>		Daracon Quarries	Ongoing for the duration of the project.
Land Description	Area (ha)	Proposed Management Strategy																	
Lot 187 DP 751028	8.2	stock removal, weed control, planting of EEC trees, transport of logs and rocks, provision of nest boxes																	
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Lot 49 DP 751028	16.3	stock removal, weed control																	
<b>Total</b>	<b>36.15</b>																		
7		<p>The proponent will prepare a detailed biodiversity offset management plan in consultation with the DECC and submit it for approval by the Director-General. The plan will include:</p> <ul style="list-style-type: none"> <li>proposed staging;</li> <li>planting details such as final density, species mix, sowing rates, fertiliser;</li> <li>proposed maintenance schedule;</li> <li>weed control;</li> <li>importation of rock and log shelter;</li> <li>topsoil handling;</li> <li>fencing;</li> </ul>	Daracon Quarries	Plan to be submitted for approval prior to work commencing within the extraction area.															

Item Number	Item	Commitment	Responsibility	Timing
		<ul style="list-style-type: none"> <li>▪ pre-clearing surveys of all hollow bearing trees within the proposed quarry extension area;</li> <li>▪ herbivore control; and</li> <li>▪ number and location of nest boxes.</li> </ul>		
8		The proponent will make suitable arrangements to provide appropriate long term security for the offset areas.	Daracon Quarries	Within 3 years of work commencing within the extraction area.
9	Noise	<p>The proponent will continue to implement the following measures, which are currently in place at Ardglan Quarry, to mitigate noise impacts:</p> <ul style="list-style-type: none"> <li>▪ quarry hours are restricted to between 6am and 5.30pm;</li> <li>▪ noise created by the haul trucks, both empty and loaded, is reduced by imposing a speed limit of 50 km/h when travelling on local roads between the quarry and the highway. Trucks on site are limited to a speed of 25 km/h;</li> <li>▪ all on-site, fixed and mobile diesel-powered plant, excluding road vehicles, are correctly fitted and maintained to manufacturer specifications. Particular attention is given to engine exhaust systems and the care and maintenance of mufflers.</li> </ul> <p>Further noise control is nominated through the implementation of the following measures:</p> <ul style="list-style-type: none"> <li>▪ reduction of equipment through the separation of site activities to overburden stripping and extraction, whereby they do not occur simultaneously;</li> <li>▪ rail loading will be limited to the day period (7am to 6pm) as much as practicable;</li> <li>▪ the surge bin will be lined with latex or polymer liners to reduce impulsive noise;</li> <li>▪ a sheet metal enclosure will be built around the rail loader discharge and extend to include the rail wagon being loaded. The enclosure will be constructed of sheet metal and will cover the length of a minimum of three wagons whereby the wagon being loaded will be in the centre of the enclosure. The enclosure will be open at the ends and will contain a roof which will be connected to the rail loader discharge.</li> </ul>	Daracon Quarries	Ongoing for the duration of the project.

Item Number	Item	Commitment	Responsibility	Timing																
		<p>Gaps between the loader discharge and the roof will be sealed;</p> <ul style="list-style-type: none"> <li>▪ the two scrapers initially assigned for overburden stripping will be replaced by one excavator and two articulated dump trucks;</li> <li>▪ the existing three crushers will be acoustically treated by extending the metal cladding on the crushing and screening station building to ground level with no gaps or openings;</li> <li>▪ the existing screens will be located behind earth bunds; and</li> <li>▪ mobile acoustic barriers or earth mounds will surround the drill rig and any mobile plant situated on the surface during initial stripping; and</li> <li>▪ where land slopes away from stripping activities to receivers, barriers will be raised to a height of 4 metres, so there is no direct line of sight to receivers.</li> </ul>																		
10		<p>Except during night-time rail loading activities, the proponent will ensure that the noise generated by the project does not exceed the levels set out in <i>Table 2</i>, at any privately-owned residence, unless a specific agreement is reached with the landholder, in which case the proponent may exceed the noise limits set out in <i>Table 2</i> in accordance with the negotiated noise agreement.</p> <p><i>Table 2 Noise Criteria</i></p> <table border="1"> <thead> <tr> <th>Land</th> <th>Noise Level LAeq dB(A)</th> </tr> </thead> <tbody> <tr> <td>1 - Burraston</td> <td>35</td> </tr> <tr> <td>2 - Rose</td> <td>35</td> </tr> <tr> <td>4 - CM Thomson</td> <td>44</td> </tr> <tr> <td>5 - M Taylor</td> <td>45</td> </tr> <tr> <td>6 - S Thompson</td> <td>45</td> </tr> <tr> <td>9 - Bates</td> <td>37</td> </tr> <tr> <td>10 - Avery</td> <td>38</td> </tr> </tbody> </table>	Land	Noise Level LAeq dB(A)	1 - Burraston	35	2 - Rose	35	4 - CM Thomson	44	5 - M Taylor	45	6 - S Thompson	45	9 - Bates	37	10 - Avery	38	Daracon Quarries	Ongoing for the duration of the project.
Land	Noise Level LAeq dB(A)																			
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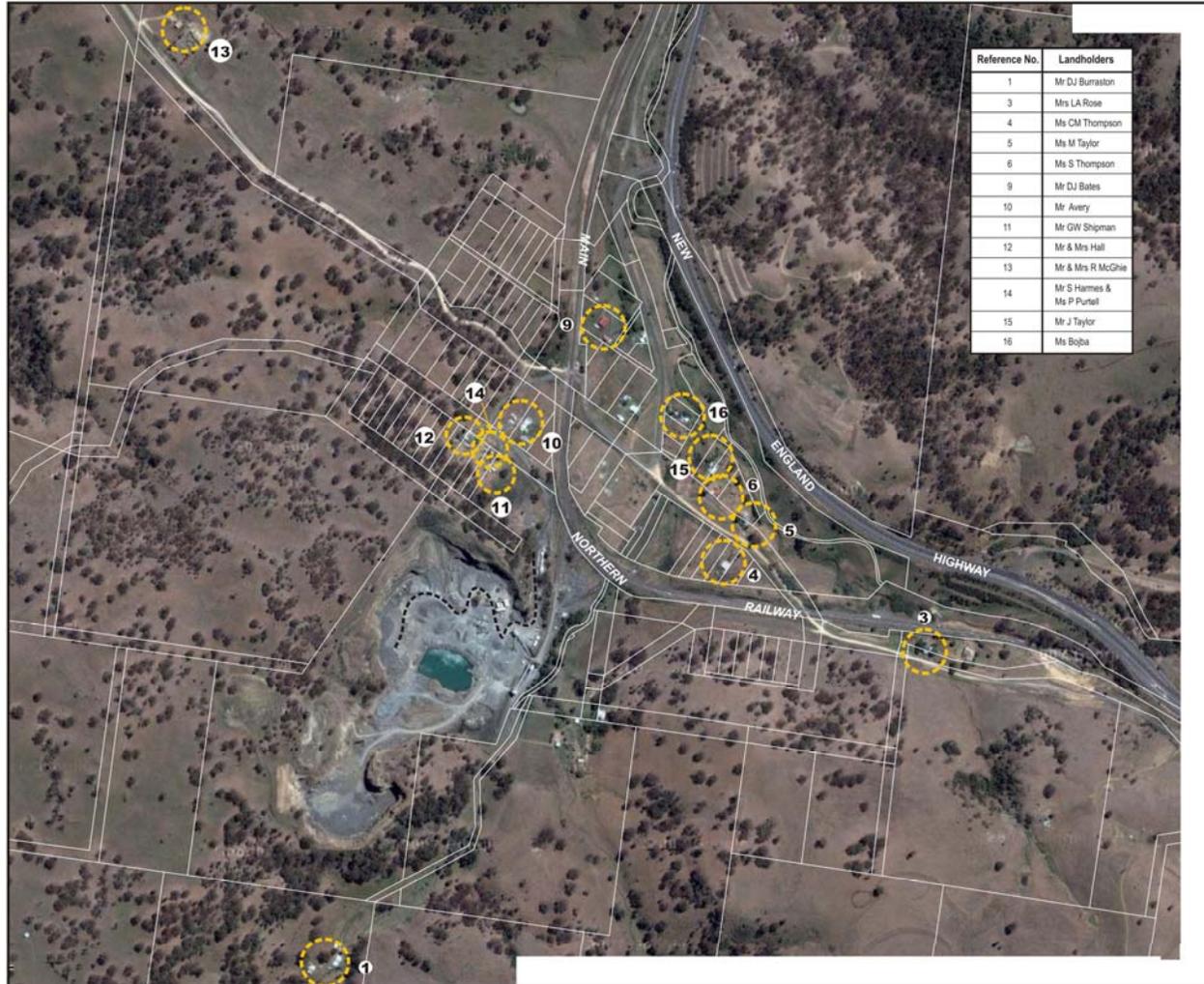
Item Number	Item	Commitment	Responsibility	Timing
		11 - Shipman		
		12 - Hall		
		13 - McGhie		
		14 - Purtell		
		15 - J Taylor		
		16 - Bojba		
11	Blasting and Vibration	<p>The proponent will implement the following measures to mitigate the impacts of blasting and vibration:</p> <ul style="list-style-type: none"> <li>▪ blasting will be limited to between the hours of 10am and 4pm, Monday to Friday and residents in the vicinity of the quarry will be given adequate notification of forthcoming blasts;</li> <li>▪ air-blast overpressure from any blast will not exceed 120 dB(Lpeak) at any privately-owned residence for more than 5% of all blasts over a 12 month period. It will not exceed 115 dB(Lpeak) at any time, unless specific prior agreement is reached with the affected landholder;</li> <li>▪ peak particle velocity (ppv) from ground vibration will not exceed 5 mm/s at any privately-owned residence for more than 5% of the total number of blasts over a 12 month period. The maximum level will not exceed 10 mm/s at any time;</li> <li>▪ the existing blast management strategy will continue to be implemented to ensure appropriate charge masses are used to avoid excessive air blast overpressure and ground vibrations; and</li> <li>▪ a Blast Monitoring Program will be prepared and submitted to the Director-General for approval</li> </ul>	Daracon Quarries	Ongoing for the duration of the project.

Item Number	Item	Commitment	Responsibility	Timing
12	Air Quality	<p>In addition to the dust mitigation measures currently employed, the proponent will implement the following measures to ensure particulate matter emissions are minimised:</p> <ul style="list-style-type: none"> <li>▪ revegetation of exposed surfaces where possible;</li> <li>▪ sealing the haul road;</li> <li>▪ limiting the speed limit on unpaved surfaces to 15 km/hr;</li> <li>▪ high level watering of unpaved road surfaces (greater than 2L/m<sup>2</sup>/hr);</li> <li>▪ covering all loads leaving the site;</li> <li>▪ building a wheel wash at the end of the unpaved section of the haul road (after the weighbridge); and</li> <li>▪ wet suppression or chemical coating of static stockpiles.</li> </ul>	Daracon Quarries	Ongoing for the duration of the project.
13		<p>The proponent will prepare and implement an air quality monitoring program for the project. The program will include:</p> <ul style="list-style-type: none"> <li>▪ a series of dust deposition gauges operated in accordance with Australian/New Zealand Standard AS/NZS 3580.10.1:2003; and</li> <li>▪ a series of high volume or low volume air samplers to monitor levels of PM10, operated in accordance with Australian/New Zealand AS/NZS 3580.9.6:2003 and AS/NZS 3580.9.6:2003.</li> </ul>	Daracon Quarries	Program to be submitted for approval prior to work commencing within the extension area.
14	Rehabilitation	The proponent will prepare a detailed biodiversity offset plan to provide an integrated plan for the whole site, considering the existing quarry areas, the western extension, the areas of box-gum woodland to be preserved and the areas to be planted as offsets. This plan will be prepared in liaison with the DECC and lodged for approval by the Director-General.	Daracon Quarries	Plan to be submitted for approval prior to work commencing within the extension area.
15		The proponent will progressively rehabilitate the site, generally in accordance with the rehabilitation strategy outlined in the EA.	Daracon Quarries	Ongoing for the duration of the project.

Item Number	Item	Commitment	Responsibility	Timing
16		The proponent will lodge a rehabilitation bond with the Director-General to ensure that rehabilitation of the site is satisfactorily completed, generally in accordance with the rehabilitation strategy outlined in the EA.	Daracon Quarries	Within 6 months of work commencing within the extension area.
17	Traffic Management and Access	The proponent will not transport more than 500,000 tonnes of product from the site each year.	Daracon Quarries	Ongoing for the duration of the project.
18		The proponent will keep daily records of: <ul style="list-style-type: none"> <li>▪ the type and amount of product transported from the site and the method of transportation i.e. road or rail; and</li> <li>▪ the type and amount of quarry material imported onto the site and the method of transportation i.e. road or rail.</li> </ul>	Daracon Quarries	Ongoing for the duration of the project.
19		The proponent will maintain the quarry access route from the New England Highway to the quarry entrance, to at least its present standard (two lane rural road), to the satisfaction of Council.	Daracon Quarries	Ongoing for the duration of the project.
20	Visual Amenity	The proponent will implement the following mitigation measures to reduce the potential visual impacts of the project: <ul style="list-style-type: none"> <li>▪ those areas of the quarry in which the resource has been exhausted will be progressively rehabilitated and revegetated; and</li> <li>▪ further planting will be undertaken along the ridgeline to the west of the proposed extension area.</li> </ul>	Daracon Quarries	Further planting to be undertaken prior to work commencing within the extension area.

21	Aboriginal Cultural Heritage	Should any Aboriginal objects (artefacts) be exposed during ground surface disturbance, all works involving ground surface disturbance will be suspended. A representative of the Nungaroo Local Aboriginal Land Council and an archaeologist will conduct an assessment of the significance of the Aboriginal object(s) and identify appropriate mitigation and management measures.	Daracon Quarries	Ongoing for the duration of the project.
22	Community Consultation	The proponent will continue to engage the community in consultation, with the aim of providing the community with up-to-date information in relation to the project and quarry operations in general, and allowing the community to provide feedback and raise any issues or concerns. On-going consultation will include distribution of an annual community newsletter and individual face-to-face meetings with adjoining landowners and other stakeholders when required.	Daracon Quarries	Ongoing for the duration of the project.
23	Annual Reporting	The proponent will prepare and submit to the Director-General an Annual Environmental Management Report (AEMR). The AEMR will: <ul style="list-style-type: none"> <li>▪ include a summary of the environmental monitoring results for the project for the past year;</li> <li>▪ include an analysis of the monitoring results against relevant limits/criteria and monitoring results from previous years; and</li> <li>▪ identify and discuss any non-compliances during the past year and detail any actions taken to ensure compliance.</li> </ul>	Daracon Quarries	Report to be submitted annually

## APPENDIX 5 LOCATION OF RESIDENCES



**Appendix 5**  
**Nearest Residences**

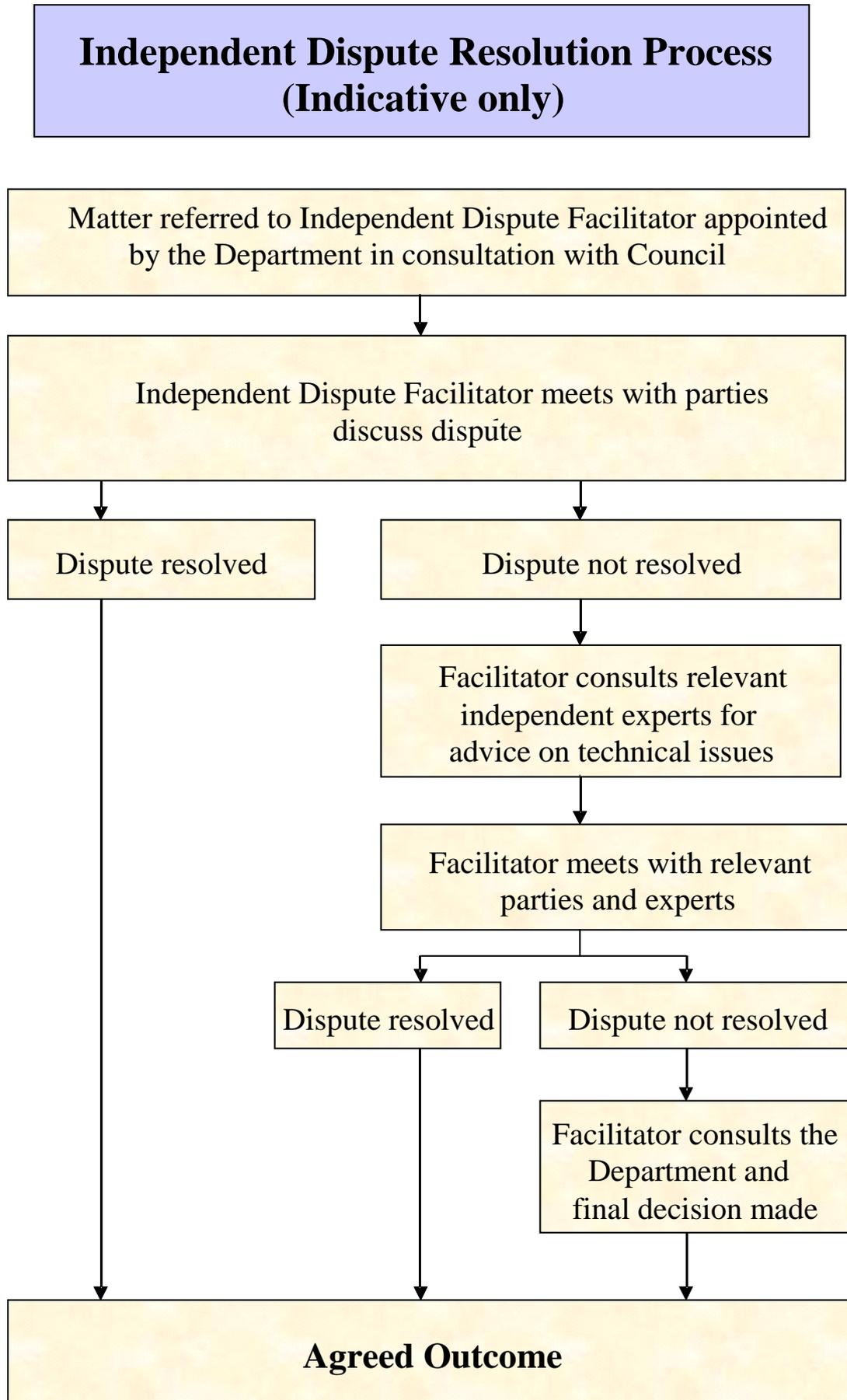
Client: Diracon Engineering  
 Project: Ardglen Quarry  
 Drawing No: 0038419rv\_DoP\_request\_let may 08\_01  
 Date: 22/05/08 Drawing size: A3  
 Drawn by: JD Reviewed by: OM  
 Source: Google Maps  
 Scale: Refer to Scale Bar

0 50 100 150 200m

Environmental Resources Management Australia Pty Ltd  
 53 Bonville Avenue, Thornton, NSW 2322  
 Telephone +61 2 4964 2150



APPENDIX 6  
INDEPENDENT DISPUTE RESOLUTION PROCESS



APPENDIX B  
Department of Planning Audit Team  
Approval

---

Mr Stuart M Murray  
Director  
Site R&D Pty Ltd  
PO Box 134  
KOTARA NSW 2289

Dear Mr Murray

**Ardglen Quarry Extension (06\_0264)  
Independent Environmental Audit**

I refer to your letter dated 27 September 2013, regarding the Independent Environmental Audit for the Ardglen Quarry Extension (06\_0264).

Please be advised that the Director-General has approved the appointment of the following team to undertake the audit:

- James McMahon, Lead Auditor;
- Ray Tumney, Auditor/Noise Technical Expert; and
- Phil Conacher, Rehabilitation Technical Expert.

Finally, please be advised that the content of the audit must satisfy condition 5 of schedule 5 of the project approval.

If you wish to discuss this matter further, please contact Carl Dumpleton.

Yours sincerely,



Howard Reed  
**Manager**  
**Mining Projects**  
as Delegate for the Director-General

*22.10.13*

# APPENDIX C

## Audit Checklist

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## THE AUDIT CHECKLIST

The conditions contained in the Audit Check list that are referenced such as **S'x' cl 'y'** indicate they are sourced from schedule 'x' clause 'y' of the CA (e.g. Condition S2 cl6 is from Schedule 2 clause 6 of the CA. Similarly, conditions referenced such as **SoC'x'** indicates the commitment number 'x' from the Statement of Commitments and conditions referenced as **EAx.y** indicates section x.y of the EA.

### C.1 Administrative Conditions

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S2 cl6</b> The Proponent shall not extract or process more than 500,000 tonnes of material on the site each year.	1	"Tran by Quarry by Carrier Summary" document 1/01/2012-31/01/2012 indicates 18,294.92 tonnes of material was shipped from the quarry. "Sales by location Period ending 12/2012" document indicates 91,980.99 tonnes of material was shipped from the quarry. These documents were prepared by different software. It appears that at total of 110,275.91tonnes was exported from the quarry in 2012 by truck.	Yes	No	No	No
<b>S2 cl7</b> The Proponent shall not transport more than: <b>(a)</b> 250,000 tonnes of product from the site by rail a year;		Daracon asserts that no material was transported from site by rail since December 2011.	Yes	Yes		
<b>(b)</b> 250,000 tonnes of product from the site by road a year."	1	The documentation presented provided data for 2012. Hence the auditors are satisfied that Daracon has complied with <b>S2 cl7(b)</b> .	Yes	No	No	
<b>S3 cl33</b> The Proponent shall: <b>(a)</b> keep records of the: amount of product transported from the site each year; number of truck movements generated by		See <b>S2 cl6</b> above for the amount of material transported by truck each year.	Yes	No	No	

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
the project, on a weekly basis; number of train movements generated by the project, on a weekly basis; date and time of each train movement generated by the project;"						
<b>S3 cl33 (b)</b> provide annual production data to the I&I NSW using the standard form for that purpose;	20	No production detail in 2012 AEMR	No	Yes	No	Daracon are to produce production data to the I&I NSW once production recommences
<b>S3 cl33 (c)</b> include these records in the AEMR.	20	No production detail in 2012 AEMR	No	Yes	No	Daracon are to produce an AEMR once production recommences.
<b>S3 cl38</b> The Proponent shall ensure that truck movements associated with the project do not exceed 50 movements on average per day		Daracon asserts that truck movements did not exceed 50 movements on average by assuming a maximum truck tonnage of 35 tonnes across a 250 day working day year equates to an average 13 truck movements per day on average.	Yes	No	No	No
<b>S3 cl39</b> The Proponent shall not use trucks with a capacity of greater than 35 tonnes to transport product from the site, unless otherwise agreed in writing by the RTA.		Daracon asserts the maximum truck capacity is 35 tonnes. Given the width of the access road the auditor is satisfied with this assertion.	Yes	No	No	No
<b>S3 cl40</b> The Proponent shall ensure that all loaded vehicles entering or leaving the site are covered, and are cleaned of materials that may fall onto public roads.		S3cl40 signage at quarry entry and induction.	Yes	No	Yes-signage on highway sighted	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>SoC17</b> The proponent will not transport more than 500,000 tonnes of product from the site each year.	1	See <b>S2 cl6</b> above	Yes	No	No	No
<b>SoC18</b> The proponent will keep daily records of: the type and amount of product transported from the site and the method of transportation i.e. road or rail; and the type and amount of quarry material imported onto site and the method of transportation i.e. road or rail.	2	"Transaction By Product" document shows daily record for the 17/04/2012. The document show the number of truck movements, the type and amount of product transported from site. No records were sighted for material imported on to site.	Yes	No	Note: The auditor assumes that the current quarry weigh bridge software can produce a daily record.	No
<b>S2 cl8</b> The Proponent shall not import more than 80,000 tonnes of materials for the purposes of blending and product quality improvement each year.		Daracon asserts that that only a precoat material (<80,000 tonnes) is brought onto site. No records were available	Yes	No records kept on the amount of material brought on to site.	No	A record of imported materials must be kept. Auditor assumes that a financial record was kept but able to be located.
<b>S3 cl33(a)</b> keep records of the amount of quarry materials imported onto the site each year		See above	No	See above	No	See above
<b>S2 cl9</b> Within 3 years of this approval, the Proponent shall surrender all development consents or continuing use rights for the Ardglen Quarry, to the satisfaction of the Director General.		Development consents or continuing use rights for the Ardglen Quarry have not been surrendered.	No	Yes	No	Daracon to-surrender all development consents as soon as practicable.

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>SoC3</b> In accordance with Section 1041A of the EP&A Act, the proponent will surrender the existing development consent applying to Lot 1 DP 1001734, issued by Murrurundi Shire Council in May 1994 (Within two years of work commencing within the extension area.)		See above. Note S2cl9 supersedes this condition.	No	Yes	No	See above
<b>S2 cl11</b> The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.		Daracon asserts that no new structures have been built since 2008. Site inspection confirms this assertion.	N.A.	No	Yes. Buildings on site appear to have been built prior to 2008.	No
<b>S2 cl12</b> The Proponent shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.		Daracon asserts that no demolition has taken place since 2008.	N.A.	No	There are at least two structures on site that are no longer in use and are in	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
					danger of falling down due to serious disrepair. Daracon should consider demolishing these structures.	
<b>S2 cl13</b> The Proponent shall ensure that all plant and equipment used at the site is: <b>(a)</b> maintained in a proper and efficient condition; and <b>(b)</b> operated in a proper and efficient manner.	3	Series of maintenance logs were viewed by auditor.	Yes	No	There is an opportunity to include noise observations on the form.	No
<b>S2 cl14</b> The Proponent shall: <b>(a)</b> repair, or pay all reasonable costs associated with repairing any public infrastructure that is damaged by the project;	4	Public infrastructure (roads and bridge) appears to be in good order. It was noted in a Community Consultative Committee (CCC) Agenda dated 6 September 2011 that the road to the site was “contracting” in some areas (particularly at the corner) due to truck movements. The action for this item was “The road is Council’s responsibility and Daracon will raise the matter with Council”	Yes	Yes (minor)	Yes. Roads appeared in good order	Daracon should ensure that the CCC consultant is aware of all the conditions of the approval.
<b>S2 cl14 (b)</b> relocate, or pay all reasonable costs associated with relocating any public infrastructure			N.A.	N.A.	N.A.	N.A.

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that needs to be relocated as a result of the project.						
<b>S2 cl15</b> Within 3 months of any modification to this approval, the Proponent shall review and if necessary revise all management and monitoring strategies, plans and programs required under this approval which are relevant to the modification to the satisfaction of the Director-General.		No modification to the approval has taken place.	N.A.	N.A.	N.A.	N.A.
<b>S3 cl1</b> The Proponent shall comply with the hours of operation in Table 1.	5	Site induction indicates that trucks are not to come off the highway before 6.30am. Trucks are to be offsite by 5:30pm Monday-Friday and 12:30pm on Saturdays.	Yes	No	No	No
<b>SoC9</b> quarry hours are restricted to between 6am and 5:30pm rail loading will be limited to the day period (7am-6pm) as much as practicable	6,7	No rail loading had occurred in 2012.	Yes	No		
<b>SoC10</b> blasting will be limited to between the hours of 10am and 4pm Monday to Friday and residents in the vicinity of the quarry will be given adequate notification of forthcoming blasts;	8	Post blast reports from 2006-2010 indicate that blasting took place between the hours of 10am and 4pm.	Yes			

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<b>S3 cl41</b> The Proponent may only load a maximum of 2 trains outside the rail loading and distribution hours in Table 1 in any 12 month period, unless agreed to in writing by the Director-General.	6,7	No train loading in 2012.	Yes	No		The auditor agrees that Daracon do not have sufficient control of train scheduling to be held accountable for out of hours train loading. The auditor recommends this condition is removed provided Daracon comply with <b>S3 cl42</b>
<b>S3 cl42</b> If the Proponent intends to undertake out of hours rail loading, it must use its best endeavours to notify all local residents at least 12 hours prior to the proposed rail loading, to the satisfaction of the Director-General.		No train loading in 2012.	Yes	No		
<b>S3 cl34</b> Prior to undertaking any works in the Extension Area, the Proponent shall undertake a Road Safety and Condition Audit for the project, to the satisfaction of the Director-General. This audit must:	9	Audit Report supplied	Yes	No	No	No
<b>(a)</b> be prepared by a suitably independent and qualified expert/s whose appointment has been approved by the Director-General;	9	Road Safety and Condition Audit was approved by the Director General	Yes	No	Letter from DoP dated 25/11/2010	No

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(b) be prepared in consultation with the RTA and Council;	9	No evidence to show consultation with RTA and Council.	No	Yes		Daracon to forward the Road Safety and Condition Audit to Council and RTA for comments
(c) assess the safety, performance and condition of the Ardglen Street-New England Highway intersection and the quarry access route from the New England Highway to the quarry entrance (Ardglen Street, High Street (Swinging Bridges Road), St Stephen Street and Warra Street); and	9	Audit report assesses safety, performance and condition	Yes	No	No	No
(d) identify any road works that are required to comply with relevant AUSROAD standards or other relevant RTA requirements.	9	Audit report states it conforms with AUSROAD Standards	Yes	No	No	No
<b>S3 cl35</b> Within 12 months of completing the Road Safety and Condition Audit, the Proponent shall undertake (and complete) any road works recommended in the Audit, to the satisfaction of the relevant roads authority (i.e. RTA or Council). If there is a dispute about the implementation of these measures, then the Proponent may refer the		Truck turning signs have been installed	Yes	No	No	No

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matter to the Director-General for resolution.						
<b>S3 cl36</b> Within 3 months of this approval, the Proponent shall install warning signs (“Truck Turning”) on the northern and southern approaches to the quarry access route on the New England Highway, to the satisfaction of the RTA.		Signs have been installed on the northern and southern approaches to the quarry access route on the New England Highway.	Yes	No	Signs sighted	
<b>S3 cl37</b> The Proponent shall maintain the quarry access route from the New England Highway to the quarry entrance (Ardglen Street, High Street (Swinging Bridges Road), St Stephen Street and Warra Street) until the cessation of quarrying on the site, to the satisfaction of Council. If the Proponent and the Council fail to reach agreement on the road maintenance requirements, then either party may refer the matter to the Director-General for resolution. Any determination by the Director-General’s on this matter will be binding on		Road appeared in good order. Daracon asserts it has no correspondence from Council stating that the public access roads are in poor condition due to quarry operations. Access roads were noted in good condition during the site visit	Yes	No	Road conditions were visually assessed during the site visit.	No

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the Proponent and the Council.						
<b>SoC19</b> The proponent will maintain the quarry access route to the New England Highway to the quarry entrance, to at least its present standard (two lane rural road), to the satisfaction of Council		See above	See above	See above	See above	See above
<b>S3 cl 43</b> Prior to undertaking any works in the Extension Area, the Proponent shall prepare and implement a Traffic and Transport Management Plan, to the satisfaction of the Director-General. The plan must include:	10	Traffic and Transport Management Plan prepared to the satisfaction of the DG.	No	Yes. Traffic and Transport Management Plan has been prepared but not fully implemented. Driver compliance forms not sighted as part of the induction.	Letter from DoP dated 25/11/2010 indicates the plan has been approved by DG	Recommendation to remove form from the Traffic and Transport Management Plan.
<b>(a)</b> a driver code of conduct for the project to minimise the impacts of trucks on local residents;	10	Section 2 of the Traffic and Transport Management Plan provides a code of conduct.	Yes	No	Yes. Plan sighted	No
<b>(b)</b> the measures that would be put in place to ensure compliance with the driver code of conduct;	10	Section 3.1 of Traffic and Transport Management Plan states the drivers to sign the document at induction.	Yes	Yes. Induction records did not include signed form from the Traffic and Transport Management Plan		
<b>(c)</b> the measures that would be taken to avoid night time	10	Section 4 of the Traffic and Transport Management Plan does not list measures	No	Yes	No	No corrective required. The auditor agrees that Daracon do not have sufficient control of train scheduling to

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train loading operations; and		that would be undertaken to avoid night time train loading.				be held accountable for out of hours train loading. The auditor recommends this condition is removed provided Daracon comply with <b>S3 cl42</b>
<b>(d)</b> the procedures for notifying local residents about night time train loading activities when these occur.	10	Section 5.0 of the Traffic and Transport Management Plan lists appropriate procedures,	Yes	No	No	No
<b>S3 cl47</b> The Proponent shall: <b>(a)</b> monitor the amount of waste generated by the project;		Amount of waste generated was not monitored. Without any information the auditor cannot make further assessment of waste management on site.	No	Yes	No	Daracon's accounting system may be able to track the waste contractors on site.
<b>(b)</b> investigate ways to minimise waste generated by the project;		Daracon asserts that waste generated onsite was very limited.	N.A.			
<b>(c)</b> implement reasonable and feasible measures to minimise waste generated by the project;		See above	N.A.			
<b>(d)</b> ensure irrigation of treated wastewater is undertaken in accordance with DECCW's Use of Effluent by Irrigation; and		Waste water (septic) pumped out and not irrigated on site.	N.A.			
<b>(e)</b> report on waste management and minimisation in the AEMR, to the satisfaction of the Director-General.		Waste management and minimisation not reported in AEMR	No	Yes	No	AEMR to be prepared as per <b>S5 cl4</b>

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<b>S3 cl48</b> The Proponent shall ensure that all waste generated or stored on site is assessed, classified and managed in accordance with the DECCW's Waste Classification Guidelines Part 1: Classifying Waste		No evidence was presented regarding waste management.	No	Yes	Small amounts of waste (e.g. wood, waste oil drums and old machinery) were stored across the quarry.	It is recommended to have a centralised waste storage area. This area should be constructed so it can contain small spills etc. and stormwater run off is not directed towards Doughboy Hollow Creek.
<b>S5 cl1</b> The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General for approval prior to any works being undertaken in the Extension Area, and: <b>(a)</b> provide the strategic framework for environmental management of the project; <b>(b)</b> identify the statutory requirements that apply to the project; <b>(c)</b> describe in general how the environmental performance of the project would be monitored and managed; <b>(d)</b> describe the procedures that would be	11	Environmental Management Strategy and approval letter sighted. Evidence of implementation is minimal since the site is not operational.	Yes	No	No	Environmental Due Diligence Checklist, Environmental Inspection Report and EMS Monthly Report need to be completed when the site becomes operational again.

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<p>implemented to:            · keep the local community and relevant agencies informed about the operation and environmental performance of the project;            · receive, handle, respond to, and record complaints;            · resolve any disputes that may arise during the course of the project;            respond to any non-compliance; and respond to emergencies;            and <b>(e)</b> describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the project.</p>						
<p><b>S5 c12</b> The Proponent shall prepare and implement an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General for approval prior to any works being undertaken in the Extension Area, and consolidate the various monitoring requirements in</p>	11	<p>Environmental Monitoring Program included in audit log document 11. Blast program appeared to be implemented, air quality monitoring program appeared to be partially implemented and site water monitoring program appeared not to be implemented.</p>				

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Schedule 3 of this approval into a single document, and be submitted to the Director-General concurrently with the submission of the relevant monitoring programs/plans.						
<b>SoC4</b> The proponent will prepare and implement an Environmental Management System (EMS) based on AS/NZA ISO 14001:2004 - Environmental Management Systems. The EMS will: incorporate an operational Environmental Management Plan (EMP); detail potential environmental risks due to operation of the proposed quarry; provide measures for the prevention, minimisation and management of these impacts to within acceptable limits; and provide a means for the project to improve environmental performance and move toward environmental sustainability.		No formalised Environmental Management System based on AS/NZA ISO 14001:2004 - Environmental Management Systems exists for the quarry.	No	Yes	No	Daracon have a corporate environmental management system which should be able to be implemented on site.
<b>S5 c13</b> Within 7 days of detecting an exceedance of the limits/performance		No evidence of noise/dust exceedances notification within 7 days of detection. Daracon asserts that dust exceedances	No	Yes	No	The exceedances are to be reported as required. If complaints are received by the Department or relevant agencies

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<p>criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall report the exceedance/incident to the Department and any relevant agencies. This report must: <b>(a)</b> describe the date, time, and nature of the exceedance/ incident; <b>(b)</b> identify the cause (or likely cause ) of the exceedance/incident; <b>(c)</b> describe what action has been taken to date; and <b>(d)</b> describe the proposed measures to address the exceedance/incident.</p>		<p>were not a result of quarry operations but rather ARTC track work.</p>				<p>then they will have the information to inform the complainants that the quarry is not at fault. EMS has a system in place to report exceedances. The system is required to be implemented.</p>
<p><b>S5 cl4</b> Within 12 months of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and relevant agencies. This report must: <b>(a)</b> identify the standards and performance measures that apply to the project; <b>(b)</b> describe the works carried out in the last 12 months; <b>(c)</b> describe the works that will be carried</p>	<p>20</p>	<p>AEMR was prepared but not to the specification</p>	<p>No</p>	<p>Yes</p>	<p>No</p>	<p>Prepare yearly AEMR and report as specified.</p>

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<p>out in the next 12 months; <b>(d)</b> include a summary of the complaints received during the past year, and compare this to the complaints received in previous years; <b>(e)</b> include a summary of the monitoring results for the project during the past year; <b>(f)</b> include an analysis of these monitoring results against the relevant: limits/criteria in this approval; monitoring results from previous years; and predictions in the EA; <b>(g)</b> identify any trends in the monitoring results over the life of the project; <b>(h)</b> identify and discuss any non-compliance during the previous year; and <b>(i)</b> describe what actions were, or are being, taken to ensure compliance.</p>						
<p><b>Soc23</b> The Proponent will prepare and submit to the Director General an Annual Environmental Management Report (AEMR). The AEMR will: include a summary of the environmental monitoring results for the</p>		See above	See above	See above	See above	See above

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<p>project for the past year; include an analysis of the monitoring results against the relevant limits/criteria and monitoring results from the previous years; and identify and discuss any non-compliances during the past year and detail any actions taken to ensure compliance.</p>						
<p><b>S5 c15</b> Prior to 31 December 2012, and every 5 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must: <b>(a)</b> be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Director-General; <b>(b)</b> assess the environmental performance of the project, and its effects on the surrounding environment; <b>(c)</b> assess whether the project is complying with</p>		<p>Audit not commissioned until December 2013. Parts <b>(a)-(e)</b> comply as per this audit report</p>	No	Yes	No	<p>The quarry is currently not operational. It is recommended that a follow up site visit is conducted 6 months following the recommencement of production if this date occurs before 31 December 2017.</p>

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the relevant standards, performance measures, and statutory requirements; <b>(d)</b> review the adequacy of any strategy/plan/ program required under this approval; and, if necessary, <b>(e)</b> recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval. Note: This audit team must be led by a suitably qualified auditor, and include experts in the field of noise and rehabilitation."						
<b>S5 c17</b> Within 3 months of submitting the audit report to the Director-General, the Proponent shall review and if necessary revise the strategies/plans/ programs required under this approval, to the satisfaction of the Director-General.		N.A.	N.A.	N.A.	N.A.	N.A.
<b>S5 c18</b> The Proponent shall operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-	4	Agendas of a CCC were sighted. Meetings appear to be scheduled 6 monthly.	Yes	No	No	No

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General, in general accordance with the Guideline for Establishing and Operating Community Consultative Committees for Mining Projects.						
<b>SoC22</b> The proponent will continue to engage the community in consultation, with the aim of providing the community with up to date information in relation to the project and quarry operations in general, and allowing the community to provide feedback and raise any issues or concerns. On-going consultation will include distribution of an annual community newsletter and individual face-to-face meetings with adjoining landowners and other stakeholders when required.	4	See above	Yes	No	No	No
<b>S5 c19</b> Within 3 months of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/ strategies/programs), or the completion of the audits or AEMRs required		S5c19 (a) copies not provided to relevant agencies or CCC. (b) copies not loaded on website	No	Yes	No	All relevant documents need to be supplied to both the relevant agencies and CCC.

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Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
under this approval, the Proponent shall: <b>(a)</b> provide a copy of the relevant document/s to the relevant agencies and CCC; and <b>(b)</b> put a copy of the relevant document/s on its website.						
<b>S5 cl10</b> During the development, the Proponent shall: <b>(a)</b> include a copy of this approval, as may be modified from time to time, on its website; <b>(b)</b> provide a full summary of monitoring results required under this approval on its website; and <b>(c)</b> update these results on a regular basis (at least every 6 months).		S5 cl10 <b>(a)</b> copy of approval not posted on website <b>(b)</b> 2007-2013 dust deposition and January October 2013 HVAS results listed on Daracon website. No water quality or noise monitoring results were listed on website. <b>(c)</b> It is not clear how often these are updated.	No	Yes		<u>All</u> monitoring results are required to be posted on the website.

**C.2 Noise and Vibration**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 c12</b> The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.	12	The project operated between 2008 and 2011 when it the quarry was shut down. In October 2010 a sound level survey was conducted by Spectrum Acoustics which showed exceedance of the project specific Noise Goals as a result of quarry operations	No	Yes. The project does not comply with Consent condition S3Cl2 when it is operational but it is currently not operational so it does not presently emit operational noise	No	Satisfactory Noise Control works are to be implemented before operations recommence.
<b>Soc10</b> Except during the night-time rail loading activities the proponent will ensure that the noise generated by the project does not exceed the levels set out in Table 2, at any privately owned residence, unless a specific agreement is reached with the land holder, in which case the proponent may exceed the noise limits set out in Table 2			No Reasonable and feasible not implemented	As Above	No	Satisfactory Noise Control works are to be implemented before operations recommence

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Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
in accordance with the negotiated noise agreement.						
<p><b>S3 cl3</b> If the noise generated by the project exceeds the criteria in Table 3 at any residence on privately owned land or on more than 25 percent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 7-9 of Schedule 4.</p>		<p>Although the sound levels from the quarry operations exceed the Target Noise Goals no evidence of written Request for Acquisition was found.</p>	Yes	No	No	N.A.
<p><b>S3 cl4</b> Upon receiving a written request from the owner of any privately-owned residence where subsequent noise monitoring shows the noise generated by the project is greater than the relevant criteria in Table</p>		<p>No Written request for action</p>	Yes	No	No	N.A.

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4, the Proponent shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.						
<b>S3 cl4</b> If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.		No Written request for action	Yes	No	No	N.A.
Within 3 months of this approval, the Proponent shall notify all applicable landowners of their rights under this condition, to the satisfaction of the Director-General.		Community Liaison	Yes	No	No	

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Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p><b>S3 c15</b> The Proponent shall: <b>(a)</b> implement all reasonable and feasible noise mitigation measures; <b>(b)</b> investigate ways to reduce the noise generated by the project, including off-site road and rail noise and maximum noise levels which may result in sleep disturbance; and <b>(c)</b> report on these investigations and the implementation and effectiveness of these measures in the AEMR, to the satisfaction of the Director-General."</p>		<p>The required treatments have been specified the statement of commitments and the noise management plan and these have not Implemented. The manner of operation of the quarry will change substantially when it restarts because the existing plant that was specified for treatment will not be used. Some of the Treatments specified in the Noise management plan no longer apply and some new treatments will need to be specified. Daily check lists for equipment do not contain an item to identify excessively noisy equipment.</p>	No	Yes	<p>Yes. Item b in this condition is considered to be impractical since the quarry operator has no control over rail operations and only limited control over road operations when the operator provides their own vehicles for product transport. Item b in the condition should be</p>	<p>The proposed noise control treatments should be reviewed and redesigned as necessary and the NMP and other applicable documents are to be updated to reflect proposed new operating methods.</p>

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Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
					removed or amended.	
<p><b>S3 cl6</b> Prior to any works being undertaken in the Extension Area, the Proponent shall prepare and implement a Noise Monitoring Program for the project, in consultation with DECCW, and to the satisfaction of the Director-General. The program must include: <b>(a)</b> a combination of attended and unattended</p>	11	Noise monitoring program has been adequately prepared but not implemented because no work has started in the expansion area	Yes	No	No	N.A.

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noise monitoring measures; and <b>(b)</b> a noise monitoring protocol for evaluating compliance with the noise impact assessment and land acquisition criteria in this approval.						
<p><b>S3 c17</b> The Proponent shall ensure that the airblast overpressure level from blasting at the project does not exceed the criteria in Table 5 at any privately-owned residence. <b>SoC11</b> air-blast over pressure from any blast will not exceed 120dB(Lpeak) at any privately-owned residence for more than 5% of all blasts over a twelve month period. It will not exceed 115dB(Lpeak) at any time, unless specific prior agreement is reached with the affected landholder;</p>	11, 8	<p>Review of the Blast operations procedures and monitoring results show that good design practice is being followed and compliance with limits is being achieved.</p>	Yes	No	<p>Yes. Blast tie up designs show that blast initiation tends to run in towards residential properties. This may cause overpressure enhancement at nearby residences and may cause unforeseen exceedance not predicted in</p>	No

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					the blast design. Additional consideration should be given to the direction of blast initiation so that it runs away from residences except whenever possible.	
<p><b>S3 c18</b> The Proponent shall ensure that the ground vibration level from blasting at the project does not exceed the criteria in Table 6 at any privately-owned residence. <b>SoC11</b> peak particle velocity (ppv) from ground vibration will not exceed 5mm/s at any privately owned residence for more than 5% of the total amount number of blast over a twelve month period. The</p>	11, 8	<p>Review of the Blast operations procedures and monitoring results show that good design practice is being followed and compliance with limits is being achieved.</p>	Yes	No	No	

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maximum level will not exceed 10mm/s at any time; the existing blast management strategy will continued to be implemented to ensure appropriate charge masses are used to avoid excessive air blast over pressure and ground vibrations; and a Blast Monitoring Program will be prepared and submitted to the Director General for approval.						
<b>S3 cl9</b> The Proponent shall not carry out more than 30 blasts a year, or more than 1 blast per day, without the written approval of the Director-General.	8	A review of the blasts conducted showed that the number of blasts carried out in any year 208 to 2010 did not exceed 30. No blasting has been conducted since e2010	Yes	No	No	
<b>S3 cl10</b> The Proponent shall implement best blasting practice to: <b>(a)</b> protect the safety of people, property, public infrastructure and livestock; and <b>(b)</b> minimise the dust and fume emissions from blasting at the project,	8	Yes A review of the blast design reports show that up to date blast design practice is being used and that	Yes		No	

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to the satisfaction of the Director-General.						
<b>S3 cl11</b> The Proponent shall not undertake blasting within 500 metres of any privately-owned land or any land not owned by the Proponent, unless suitable arrangements have been made with the landowner and any tenants to minimise the risk of flyrock-related impact to the property to the satisfaction of the Director-General.	8	Much of the quarry is within 500 metres of other land and so a good deal of the blasting would need to have specific arrangements in place with nearby land owners. A review of the Drill and blast SWMS shows that it does not Identify specific actions when blasting within is to 500 meters of non quarry owned land. No specific arrangements have been identified.	No. Drill and Blast SWMS for control of Fly rock does not identify 500 metre permissions requirement.	Yes	No	Blast SWMS should be updated to ensure that appropriate communication s and fly rock protection are in place for blasting a within 500 m of adjacent land. It would be wise to make this a standard provision for all blasts since much of the quarry is with 500 m of adjacent land
<b>S3 cl12 (a)</b> notify the landowner/occupier of any residence within 1 kilometre of the quarry pit who registers an interest in being notified about the blasting schedule at the quarry; <b>(b)</b> operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on the blasting schedule at the quarry; <b>(c)</b> keep local residents informed about	4	CCC Minutes show appropriate communications	Yes	No	No	

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Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
this hotline (or any alternative notification protocols), to the satisfaction of the Director-General.						
<p><b>S3 cl13</b> If any landowner of privately-owned land within 1 kilometre of the site claims that buildings and/or structures on his/her land have been damaged as a result of blasting at the site, following commencement of operations within the extension area, then he/she may ask the Director-General inwriting to investigate the claim.If the Director-General is satisfied that an independent property investigation is warranted, the Proponent shall within 3 months of the Director-General’s determination:(a) commission a suitably qualified, experienced and independent person, whose appointment hasbeen approved by the Director-General, to investigate the</p>		<p>Blasting has occurred since the 2008 approval and there is no evidence of a blasting related complaint.</p>	Yes	No	No	No

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Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>claim; and<b>(b)</b> give the landowner a copy of the property investigation report. If this independent property investigation confirms the landowner’s claim, and both parties agree withthese findings, then the Proponent shall repair the damages to the satisfaction of the Director-General.If the Proponent or landowner disagrees with the findings of the independent property investigation,then either party may refer the matter to the Director-General for resolution.If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to anIndependent Dispute Resolution Process.</p>						

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 cl14</b> Prior to carrying out any blasting in the Extension Area, the Proponent shall prepare and implement a Blast Monitoring Program for the project, in consultation with the DECCW, and to the satisfaction of the Director-General. This program must include a protocol for demonstrating compliance with the blasting criteria in this approval.	11	An adequate blast management and monitoring program has been prepared but no blasting has been conducted in the extension area	Yes	No	No	
<b>SoC9 and EA6.4</b> The proponent will continue to implement the following measures which are currently in place at Ardglen Quarry to mitigate noise impacts noise created by the haul trucks, both empty and loaded, is reduced by imposing limit of 50 km/h when travelling on local roads between the quarry and the highway, Trucks on site are limited to a speed of 25km/h; all onsite, fixed and mobile diesel powered plant,		Local traffic sign posted as 50km/h. Vehicles on site limited to 15km/h as per entrance sign	Yes	No	The Quarry induction does not specifically address the speed limits and should be amended to include a specific mention of speed limits for noise control purposes.	

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>excluding road vehicles, are correctly fitted and maintained to manufacturer specifications. Particular attention is given to engine exhaust systems and the care and maintenance of mufflers. Further noise control is nominated through the implementation of the following measures: reduction of equipment through the separation of site activities to overburden stripping and extraction where by they do not occur simultaneously;</p>						

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>The surge bins will be lined with latex or polymer liners to reduce impulsive noise; a sheet metal enclosure will be built around the rail loader discharge and extend to include the rail wagon being loaded. The enclosure will be constructed of sheet metal and will cover the length of a minimum of three wagons whereby the wagon being loaded will be in the centre of the enclosure. The enclosure will be open at the ends and will contain a roof which is connected to the rail loader discharge. Gaps between the loader discharge and the roof will be sealed; the two scrapers initially assigned for over burden stripping will be replaced by one excavator and two articulated dump trucks; the existing three crushers will be acoustically treated by extending the metal cladding on the</p>		<p>The screen decks have been lined but the surge bin has not been lined Other noise control elements have not been implemented including the construction of the enclosure for the rail loader and treatment of crushing plant. Much of the specified treatment is now redundant because of the proposed changes in operational procedures and methods.</p>	No	Yes	No	<p>Review specified Noise control treatments and re-evaluate need for each as part of updated NMP. Redesign noise treatments accordingly to match new operating methods and procedures</p>

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>crusher and screening station to ground level with no gaps or openings; the existing screens will be located behind earth bunds; and mobile acoustic barriers or earth mounds will surround the drill rig and any mobile plant situated on the surface during initial stripping; and where land slopes away from stripping activities to receivers, barriers will be raised to a height of 4m, so there is no direct line of sight to receivers.</p>						
<p><b>EA6.4</b> purchase of Quambi property.</p>		<p>Purchased effected property</p>	<p>Yes</p>	<p>No</p>	<p>No</p>	<p>No</p>

**C.3 Air Quality**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 cl15</b> The Proponent shall ensure that the dust emissions generated by the project do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 8, 9 and 10 at any residence, on privately-owned land, or on more than 25 percent of any privately-owned land.	13,14	<b>S3 cl15</b> 2007-2013 dust deposition and January October 2013 HVAS results listed on Daracon website. No exceedances were noted in the HVAS data. There were exceedances for three consecutive months November 2009-Januray 2010 in the total maximum deposited dust level (4g/m <sup>2</sup> /month) at one of three locations.	Yes	The auditor considers these conditions are met based on the monitoring results. The auditor seeks clarification on the term "additional exceedances" from the Department of Planning	No	No
<b>SoC 12 and EA7.5</b> In addition to the dust mitigation measures currently employed, the proponent will implement the following measures to ensure particulate matter emissions are minimised <b>(a)</b> revegetation of exposed surface where possible <b>(b)</b> sealing of the haul road; <b>(c)</b> limiting the speed limit on unpaved surfaces to 15 km/h <b>(d)</b> high level watering of unpaved road surfaces (greater than 2L/m <sup>2</sup> /hr); <b>(e)</b> covering all loads leaving the site; <b>(f)</b> building a wheel wash		<b>SoC 12 and EA7.5 (a)</b> Daracon assert possible exposed surfaces have been hydro mulched and revegetated. <b>(b)</b> haul road has been sealed up to 20m into the quarry. <b>(c)</b> speed limited posted on entry sign and noted in site induction. <b>(d)</b> Water cart log was sighted. <b>(e)</b> requirement for covering loads posted on entry sign and noted in site induction <b>(f)</b> wheel wash not constructed <b>(g)</b> wet suppression of stockpiles using water. Daracon asserts that the wheel wash is no longer necessary as the haul round has been paved approximately 20m into the quarry. It was not possible to visually assess	Yes			

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
at the end of the unpaved section of the haul road (after the weigh bridge); and <b>(g)</b> wet suppression or chemical coating of static of static stockpiles		the effectiveness of this improvement as the quarry has not operated since February 2012.				
<b>S3 cl16</b> The Proponent shall ensure any visible air pollution generated by the project is assessed regularly, and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately-owned land, to the satisfaction of the Director-General.	NR	Daily environmental observation check list was sighted. It indicated that action was taken if visible dust was observed.	Yes			
<b>S3 cl17</b> The Proponent shall prepare and implement an Air Quality Monitoring Program for the project, in consultation with DECCW, and to the satisfaction of the Director-General. This program must: <b>(a)</b> use a combination of high volume air samplers and dust deposition gauges to monitor the dust emissions from the project; <b>(b)</b> include a protocol for demonstrating compliance with the air quality impact assessment criteria in this	11,15	AQMP and Letter from DoP dated 25/11/2010 supplied. AQMP is written to satisfy the requirements of SOC13 including the use of the low volume air samplers.	Yes	No. AQMP was written to satisfy the requirements of SOC13 including the use of the low volume air samplers. No evidence of low volume sampling was supplied. The auditor recommends the AQMP is		

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
approval; and (c) be submitted to the Director-General for approval prior to any works being undertaken in the Extension Area.				updated to remove requirement of low volume air sampling.		
<b>SoC13</b> The proponent will prepare and implement an air quality monitoring program for the project: The project will include: a series of dust deposition gauges operated in accordance with Australian/New Zealand Standard AS/NZS380.10.1:2003 a series of high volume and low volume air samplers to monitor levels of PM10, in accordance with Australian/New Zealand Standard AS/NZS 380.9.6:2003 and AS/NZS 3580.9.6:2003	11	AQMP was written to satisfy the requirements of SOC13 including the use of the low volume air samplers. No evidence of low volume sampling was supplied.	No as it is not fully implemented			The auditor recommends the AQMP is updated to remove requirement of low volume air sampling
<b>S3 cl18</b> The Proponent shall ensure the project has a suitable meteorological station in the vicinity of the site that complies with the requirements in Approved Methods for Sampling of Air		Metrological station was installed in the vicinity of the quarry.	Yes	Daracon to supply specifications or a statement from supplier that the meteorological		

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
Pollutants in New South Wales guideline, to the satisfaction of the DECCW and the Director-General.				station meets the requirements in Approved Methods for Sampling of Air Pollutants in New South Wales guideline.		
<b>S3 cl46</b> The Proponent shall: <b>(a)</b> monitor the greenhouse gas emissions generated by the project; <b>(b)</b> investigate ways to reduce greenhouse gas emissions generated by the project; and <b>(c)</b> report on greenhouse gas monitoring and abatement measures in the AEMR, to the satisfaction of the Director-General.	16	Diesel usage logs were sighted. Vehicle maintenance logs were sighted. AEMR does not report greenhouse gas monitoring.	No	AEMR not produced in accordance of the specifications.		AEMR is required to be produced according to the specifications and submitted to the relevant authorities/CCC.

**C.4 Flora and Fauna**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 c124</b> The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the conceptual rehabilitation principles and proposed rehabilitation strategy in the EA (shown conceptually in Appendix 2), to the satisfaction of the Director-General.		The rehabilitation strategy shown conceptually in Appendix 2 of the consolidated approval is for the proposed extension area. The resources of the current quarry area are yet to be exhausted and as such minimal rehabilitation has taken place.	N.A.	No		No
<b>Soc15</b> The proponent will progressively rehabilitate the site, generally in accordance with the rehabilitation strategy outlined in the EA.		See above	N.A.	No	N.A.	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 c125</b> Prior to undertaking any works in the Extension Area, the Proponent shall revise the Biodiversity Offset Strategy described in the EA and Response to Submissions (shown conceptually in Appendix 3), to the satisfaction of the Director-General. The revised strategy must be prepared in consultation with the DECCW, and include additional areas where Yellow Box White Box Blakely's Red Gum Woodland EEC would be actively re-established within the identified biodiversity offset areas shown in Appendix 3.	11, 15	Revised Biodiversity Offset Strategy has been revised to the satisfaction of DG.	Yes	No	No	No
<b>SoC6 and EA5.3</b> The proponent will implement the biodiversity offset strategy outlined in the EA, which includes the conservation and long term protection of areas described in Table 1.		See above	See above	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 cl26</b> Within 3 years of this approval, the Proponent shall make suitable arrangements to provide appropriate long term security for the offset areas to the satisfaction of the Director-General.		Section 4.9 of the LMP states “Daracon is committed to securing the long term security of the offset sites by November 2011 either through a Voluntary Conservation Agreement (VCA) with the NSW Minister of Environment, Climate Change and Water (DECCW) or via other mechanisms.” No Voluntary Conservation Agreement or other mechanisms have been implemented to date.	No	Yes	No	A VCA, or similar mechanism should be implemented as soon as practicable.
<b>Soc8</b> The proponent will make suitable arrangements to provide appropriate long term security for the offset area		See above	See above	See above	No	See above
<b>S3 cl27</b> The Proponent shall prepare and implement a detailed Landscape Management Plan for the project to the satisfaction of the Director-General. This plan must:	11,15	Landscape Management Plan (LMP) has been prepared to the satisfaction of the DG.	Yes	No	No	No
<b>(a)</b> be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General;	11,15	See above. No formal appointment approval letter of Orogen from DG was sighted. However the final LMP was approved hence the auditor assumes Orogen was formally approved by DG.	Yes	No	No	No
<b>(b)</b> submitted to the Director-General for approval prior to undertaking any works in the Extension Area; and	11,15	LMP was approved by the DG.	Yes	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
(c) include a Doughboy Hollow Creek Rehabilitation Strategy; Rehabilitation (DHCRS) and Biodiversity Offset Management Plan (RBOMP); and Quarry Closure Plan (QCP).	11,15	DHCRS, RBOMP and QCP included in LMP.	Yes	No	No	No
<b>S3 c128</b> The Doughboy Hollow Creek Rehabilitation Strategy must: (a) be prepared in consultation with the I&I NSW and NOW;	11	(a)DHCRS was prepared in consultation with DECCW, Namoi CMA and CSIRO. No consultation with I&I NSW (DPI) and NOW (DWE) was undertaken.	No	Yes (minor)	No	No as DHCRHS approved by DG.
(b) describe the measures that would be implemented to: remove the weir from Doughboy Hollow Creek; rehabilitate the creek; and rehabilitate and/or re-establish riparian vegetation.	11	(b) measures are described	Yes	No	No	No
<b>S3 c129</b> The Rehabilitation and Biodiversity Offset Management Plan must (RBOMP):(a) be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General;	11	(a) No formal appointment approval letter of Orogen from DG was sighted. However the final RBOMP was approved hence the auditor assumes Orogen was formally approved by DG.	Yes	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>(b)</b> describe in general the short, medium, and long term measures that would be implemented to: rehabilitate the site; implement the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy; and manage the remnant vegetation and habitat on the site;	11	<b>(b)</b> The RBOMP described the short, medium, and long term measures to be implemented. The short term measures of fencing and stock exclusion from offset lands, the nest box program and the salvage and relocation of Terrestrial Habitat Structures have been implemented. Spraying of herbicide to control weeds has been implemented. Daracon asserts that no hollows were deemed salvageable. Weed management (cool burns/slashing) have not been implemented)	Yes	No	No	No
<b>(c)</b> include a detailed description of what measures would be implemented over the next 3 years to implement the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy;	11	<b>(c)</b> RBOMP included a detailed description of what measures would be implemented over the 3 years from approval.	Yes	No	No	Daracon should either implement the approved plans or revise the approved plans as soon as practical. Revised plans are required to be approved by the DG prior to implementation.
<b>(d)</b> include a detailed description of what measures would be implemented over the next 5 years to rehabilitate the site, including the procedures to be implemented for: progressively rehabilitating areas disturbed by quarrying; implementing	11	<b>(d)</b> RBOMP included a detailed description of what measures would be implemented over the 5 years from approval. The approval was granted in 2010 hence these are not required to be implemented until 2015.	N.A.	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>revegetation and regeneration within the disturbance areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata; managing the remnant vegetation and habitat on site; managing impacts on fauna; reducing the visual impacts of the project; landscaping the site to minimise visual impacts; protecting areas outside the disturbance areas; conserving and reusing topsoil; collecting and propagating seeds for rehabilitation works; salvaging and reusing material from the site for habitat enhancement; controlling weeds and feral pests; controlling access; and bushfire management.</p>						
<p>(e) detailed performance and completion criteria for the rehabilitation of the site and implementation of the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy;</p>	11	<p>Section 4.3.3 of the RBOMP contains a Summary of Performance/Completion Criteria and Monitoring. Table 4.1 contains Performance/Completion Criteria and Monitoring information.</p>	Yes	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
(f) a detailed description of how the performance of the rehabilitation of the site and implementation of the Biodiversity Offset Strategy and Doughboy Hollow Creek Rehabilitation Strategy would be monitored over time to achieve the relevant objectives and completion criteria;	11	See above	Yes	No	No	No
(g) a description of the potential risks to successful revegetation and/or rehabilitation in the offset areas and project area, and a description of the contingency measures that would be implemented to mitigate these risks; and	11	Potential Risks and Contingencies are listed in Table 4.2 of LMP.	Yes	No	No	No
(h) details of who is responsible for monitoring, reviewing and implementing the plan.	11	The LMP named the Quarry Manager as the person responsible for monitoring, reviewing and implementing the plan.	Yes	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p><b>SoC7</b> The proponent will prepare a detailed biodiversity offset management plan in consultation with the DECC and submit it for approval by the Director-General. The plan will include: proposed staging planting details such as final density, species mix, sowing rates, fertiliser proposed maintenance schedule, weed control, importation of rock and log shelter, topsoil handling, fencing, pre-clearing surveys of all hollow bearing trees within the proposed quarry extension area; herbivore control; and number and location of nest boxes.</p>		<p>See condition <b>S3 cl29</b> findings.</p>	<p>Yes</p>	<p>No</p>	<p>No</p>	<p>Daracon should consider additional measures to control wild goats as the fencing is not considered sufficient control.</p>

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>Soc14</b> The proponent will prepare a detail biodiversity offset plan to provide an integrated plan for the whole site, considering the existing quarry areas, the western extension, the areas of box gum woodland to be preserved and the areas to be planted as offsets. The plan will be prepared in liaison with the DECC and lodged for approval by the Director General	11	See above	Yes	No	No	No
<b>S3 c130</b> The Quarry Closure Plan must: <b>(a)</b> define the objectives and criteria for quarry closure; <b>(b)</b> investigate options for the future use of the site, including any final void(s); <b>(c)</b> describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and <b>(d)</b> describe how the performance of these measures would be monitored over time."	11	The QCP defines the objectives for closure of the quarry is that it be left in a condition that is stable, does not present a hazard to stock, wildlife or people and does not present an adverse visual impact on the environment. The quarry may close when the extraction limit of 15 million tonnes (500,000 t/annum) has been reached after about a 30 year period. The QCP lists 5 feasible options for future use. The EA determined that the "Ardglen Quarry expansion was unlikely to result in any cumulative or long term environmental impacts. Following quarry closure, ongoing management may include quarry rehabilitation monitoring, periodic inspections of exclusion fencing and abandonment bunds, monitoring of any	Yes	No	No	No

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
		visual screening and wall stability testing. Such issues would be detailed in the Final Quarry Closure Plan.”				
<b>S3 cI31</b> Within 3 months of the approval of the Landscape Management Plan, the Proponent shall lodge a rehabilitation bond with the Director-General to ensure that the rehabilitation and biodiversity offset obligations required in this approval are implemented in accordance with the performance and completion criteria in the Rehabilitation and Biodiversity Offset Management Plan. The rehabilitation bond may in the form of a bank guarantee or security bond. The sum of the bond shall be calculated by: <b>(a)</b> a suitably qualified quantity surveyor at \$2.50/m2 for the area to be disturbed over the next 5 year period at the quarry; and <b>(b)</b> a suitably qualified rehabilitation expert for land within the biodiversity	17	Rehab Bond Number 201102-0092 sighted	Yes	No	No	

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>offset areas where reestablishment of the EEC is proposed, to the satisfaction of the Director-General.</p> <p><b>SoC16</b> The proponent will lodge a rehabilitation bond with the Director General to ensure that rehabilitation of the site is satisfactorily completed, generally in accordance with the rehabilitation strategy outlined in the EA</p>						
<p><b>S3 c132</b> Every 5 years, following the provision of the rehabilitation bond (see condition 31), the Proponent shall review, and if necessary revise, the sum of the bond to the satisfaction of the Director-General. This review must consider:"</p> <p><b>(a)</b> the effects of inflation;  <b>(b)</b> any changes to the total area of disturbance; and <b>(c)</b> the performance of the rehabilitation against the completion criteria of the Rehabilitation, Biodiversity Offset Management Plan.</p>		<p>Rehabilitation bond review is due by February 2016.</p>	<p>N.A.</p>	<p>N.A.</p>	<p>N.A</p>	<p>N.A.</p>

**C.5 Water Quality**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 c119</b> The Proponent shall only discharge water from the site in accordance with the provisions of an EPL.	18,19	There is no provision in Environmental Protection Licence 1115 for the discharge of water from the site. However The license states that the licensee must comply with Section 120 of the Protection of the Environment Operations Act, 1997 which prohibits the pollution of any waters.	Yes.	No	During the site visit two separate flows of surface water to a holding dam near Doughboy Hollow Creek. One flow was from the main sump and was observed to be very clear and colourless. The second flow was from stormwater that had collected around the "Lube Shed". This flow was observed to be cloudy and had visible (slight) oil slick.	The Lube Shed area potentially contains chemicals that may significantly impact on the water quality of Doughboy Hollow Creek. It is recommended that the stormwater is directed from the Lube Area to one of the smaller sumps located on site. This action should be undertaken as soon as practicable.
<b>S3 c120</b> Prior to any works being undertaken in the Extension Area, the Proponent shall prepare and implement a Site Water	11,15	<b>Preparation:</b> SWMP was prepared by AECOM in consultation with DECCW. It appears that NOW were not consulted. SWMP was approved by DG. SWMP contained SWB, ESCP and WMP.	Yes	No		

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<p>Management Plan (SWMP) for the project, in consultation with DECCW and NOW, and to the satisfaction of the Director-General. This plan must be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General, and must include: <b>(a)</b> a Site Water Balance (SWB); <b>(b)</b> an Erosion and Sediment Control Plan (ESCP); and <b>(c)</b> a Water Monitoring Program (WMP). Note: The Site Water Management Plan must incorporate the existing quarry operations and operations within the extension area.</p>						
<p><b>SoC5</b> The proponent will prepare and implement a Surface Water Management Plan for the project that will include: an Erosion and Sediment Control Plan (including procedures to minimise erosion, capture of sediment on site and maintenance of control structures); a Site Water</p>	11	See above	See above	See above	See above	See above

Ardglen Quarry  
Environmental Audit

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
Balance; and a Water Quality Monitoring Program						
<b>EA9.3.3</b> Should the in pit sump require wet weather discharge to Doughboy Hollow Creek, the water will be tested to ensure it meets the licence conditions.	18,19	Pit sump discharges to a holding dam adjacent to Doughboy Hollow Creek. There are no licence conditions to meet.	N.A.	N.A.	N.A.	N.A.
<b>EA9.3.3</b> Spill kits will be provided and site personnel trained in their use to ensure that in the event of any spills, appropriate action can be taken to prevent and minimise impacts to surface waters or groundwater		Spill kits sited in store room	Yes	No	No	No

**C.6 Visual Impact**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 cI44</b> The Proponent shall: <b>(a)</b> take all practicable measures to mitigate off-site lighting impacts from the project; and <b>(b)</b> ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting, to the Satisfaction of the Director-General.		The auditor is satisfied that the hours of operation are predominantly daylight hours thus mitigating the need for site lighting. There was no evidence produced to demonstrate that external lighting complies with AS4282 (INT) 1995.	No	Yes (minor)	Very little external lighting.	An assessment of external lighting against AS4282 (INT) 1995 is required to be submitted to the DG.
<b>SoC20</b> The proponent will implement the following mitigation measures to reduce the visual impacts of the project: those areas of the quarry in which the resource has been exhausted will be progressively rehabilitated and revegetated; and further planting will be undertaken along the ridgeline to the west of the proposed extension area.		No areas of resources from the existing quarry have been exhausted the available resource and, as such, no rehabilitation/ revegetation has taken place	Yes	No	.	

Ardglen Quarry  
Environmental Audit

**C.7 Heritage**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S3 c145</b> The Proponent shall not destroy any known Aboriginal objects (as defined in the National Parks and Wildlife Act 1974) without the written approval of the Director-General.		Daracon asserts that no Aboriginal objects have been observed at the quarry.	Yes	No	No	No
<b>SoC21</b> Should any Aboriginal objects (artefacts) be exposed during ground surface disturbance, all works involving groundworks surface disturbance will be suspended. A representative of the Nungaroo Local Aboriginal Land Council and an archaeologist will conduct an assessment of the significance of the Aboriginal object(s) and identify appropriate mitigation and management measures.		See above	Yes	No	No	No

**C.8 Additional Procedures**

Conditions	Audit Log	Audit Finding	Complies	Non Conformance	Observation	Corrective Action
<b>S4c11</b> If the results of monitoring required in Schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the relevant criteria.		Exceedances were noted for noise and vibration, air quality and water quality. Air quality results were reported to the NSW EPA via the required annual returns and were also posted on Daracon's website. It appears that the remaining exceedances have not been reported as required.	No	Yes	No	Monitoring results are to be reported to the relevant authorities/people in the required timeframes.
<b>S4 c12, c13, c14, c15 and c16 Independent Review</b>		Daracon asserted that no independent reviews were requested	N.A.	N.A.	N.A.	N.A.
<b>(c)</b> give the Director-General and landowner a copy of the independent review.		See above	N.A.	N.A.	N.A.	N.A.
<b>S4 c17, c18 and c19</b> Land Acquisition		Daracon asserted that no requests for land acquisition have been received.	N.A.	N.A.	N.A.	N.A.

## APPENDIX D

# Audit Opening Meeting Agenda

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## **Independent Environmental Audit Ardglen Quarry**

This audit was commissioned by Buttai Gravel Pty Limited (Daracon Quarries) to fulfil its statutory obligations under Schedule 5 Item 5 of the Project Approval issued by the Department of Planning for the Ardglen Quarry Extension.

“Prior to 31 December 2012, and every 5 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- (a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Director-General;
- (b) assess the environmental performance of the project, and its effects on the surrounding environment;
- (c) assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
- (d) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
- (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.”

### **Audit Team:**

The Audit team has been approved by a delegate for the Director-General and comprises the following members.

Lead Auditor	James McMahon
Auditor/Noise Technical Expert	Ray Tumney
Rehabilitation Technical Expert	Phil Conacher

### **Legal Requirements**

#### **Protection of the Environment Operations Act 1997 Chapter 6 Clause 177 Offences**

- (1) False or misleading information to auditor: A person who provides information to an environmental auditor in connection with a mandatory environmental audit, knowing the information to be false or misleading in a material respect, is guilty of an offence.
- (2) Information not provided to auditor: The holder of a licence who fails to provide information to an environmental auditor in connection with a mandatory environmental

audit being carried out in relation to the licence, knowing the information to be materially relevant to the audit, is guilty of an offence.

(3) False or misleading information in audit report: An environmental auditor who includes information in an audit report produced to the appropriate regulatory authority in connection with a mandatory environmental audit, knowing the information to be false or misleading in a material respect, is guilty of an offence.

(4) Information not included in audit report: An environmental auditor who fails to provide information in an audit report produced to the appropriate regulatory authority in connection with a mandatory environmental audit, knowing the information to be materially relevant to the audit, is guilty of an offence.

(5) Retention of audit documentation: The holder of a licence who:

(a) fails to retain any written documentation required to be prepared by the holder in connection with a mandatory environmental audit for a period of at least 5 years after the audit report concerned was produced to the appropriate regulatory authority (or such other period as is prescribed by the regulations), or

(b) fails to produce during that period any such documentation to the appropriate regulatory authority on request, is guilty of an offence.

Maximum penalty:

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

### **Audit Programme**

A draft audit programme has been prepared and issued to Daracon and the audit team. A list of documents has been requested from Daracon. These will be reviewed by the relevant member of the audit team. The audit programme may be altered by the audit team during the course of the audit dependent on the findings at the time. Daracon will be informed of any changes to the programme prior to the changes being undertaken.

The audit will be conducted at Ardglen Quarry on Monday 2 December (and if necessary) Tuesday 3 December (It may not be necessary for Ray Tumney (Noise) to attend site and may conduct that part of the audit remotely. If Ray believes he is required to attend site it will require a variation to the cost of the project). The audit will consist of viewing documents and records that are mentioned in the audit program, interviews with Daracon staff that are familiar with Daracon business/environmental systems and a site tour. Daracon are encouraged to provide other lines of evidence to demonstrate

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compliance if the requested lines of evidence cannot be produced on the day. If existing lines of evidence cannot be produced on the day Daracon will be given five additional working days to produce them.

Following the site audit the audit team will have a brief meeting to review the audit findings and agree on the audit conclusions. Following which a closing meeting will be held between Daracon and the audit team. At the meeting, a preliminary audit result will be presented and follow up activities to the audit will be discussed.

It is assumed that toilet amenities, drinking water and power are provided at the quarry and a takeaway/restaurant is located nearby for lunch morning/tea/refreshments

# APPENDIX E

## Audit Document Log

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Document Number	Document Title	Date	Conditions
1	Tran by Quarry by Carrier Summary	28/11/2013	S2 cl6, S2 cl7(b), SoC17,
2	Transaction by Product	18/04/2012	SoC18,
3	Daily Mobile Plant Inspection Checklist #098479	15/03/2013	Sc cl13 (a) and (b)
4	AGENDA-Ardglen Community Consultative Committee	06/08/2011	S2 cl14, S5 cl8, SoC22, S3 cl12 (a)
5	Ardglen Quarry Site Induction, "Shaping the Future Safely"	No date	S3 cl1
6	ARTC BALLAST DELIVERY TRAIN	5-16/7/2010	SoC9, S3 cl41
7	ARTC TRAIN ALTERATION ADVICE No. 0589-2010	20/6/2010	SoC9, S3 cl41
8	Postblast Report	09/04/2010	SoC10, S3 cl7, SoC11, S3, cl8, SoC11, S3 cl9, S3 cl10
9	Road Safety Audit – New England Highway to Quarry Access, Ardglen St, Ardglen NSW	June 2010	S3 cl34
10	Traffic & Transport Management Plan Including Driver Code of Conduct	July 2010	S3 cl43
11	Environmental Management Strategy Ardglen Extension Major Project 06/0264	September 2010	S5 cl1 and cl2, S3 cl7, SoC11, S3, cl8, SoC11, S3 cl14, S3 cl25, S3 cl27, S3 cl29, SoC7, SoC14, S3 cl30, S3 cl20, Soc5
12	October 2010 Attended Noise Monitoring Results – Ardglen Quarry	26 October 2010	S3 cl2
13	Report Compiled for Daracon Group Detailing the Analysis of High Volume Air Samples from Ardglen Quarry March 2013	8 April 2013	S3 cl15
14	Report Compiled for Daracon Group Detailing the Analysis of Depositional Dust Gauges from the Ardglen Quarry	8 April 2013	S3 cl15
15	Ardglen Quarry Extension (06_0264) Approval of EMS, Environmental Management Plans and Monitoring Programs	25/11/2010	S3 cl 17, SoC13, S3 cl25, S3 cl25, S3 cl27, S3 cl20
16	Fuel Recording Sheet	1-29/3/2012	S3 cl46 (a)
17	Unconditional Undertaking – Bond Number 201102-0092	25/2/2011	S3 cl31, SoC16
18	Environment Protection Licence-1115	2/10/2011	S3 cl19, EA9.3.3
19	Water Quality Monitoring Log	04/02/2011	S3 cl19, EA9.3.3
20	Annual Environmental Management Report 2011- 2012	No date	

# APPENDIX F

## Site Photographs

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Photograph 1: Information sign at the front gate of site



Photograph 2: Sign at the front gate of site



Photograph 3: Signs at the entrance of site



Photograph 4: EPA complaints number and weighbridge in the background

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**Photograph 5:** Water flow across site from main sump

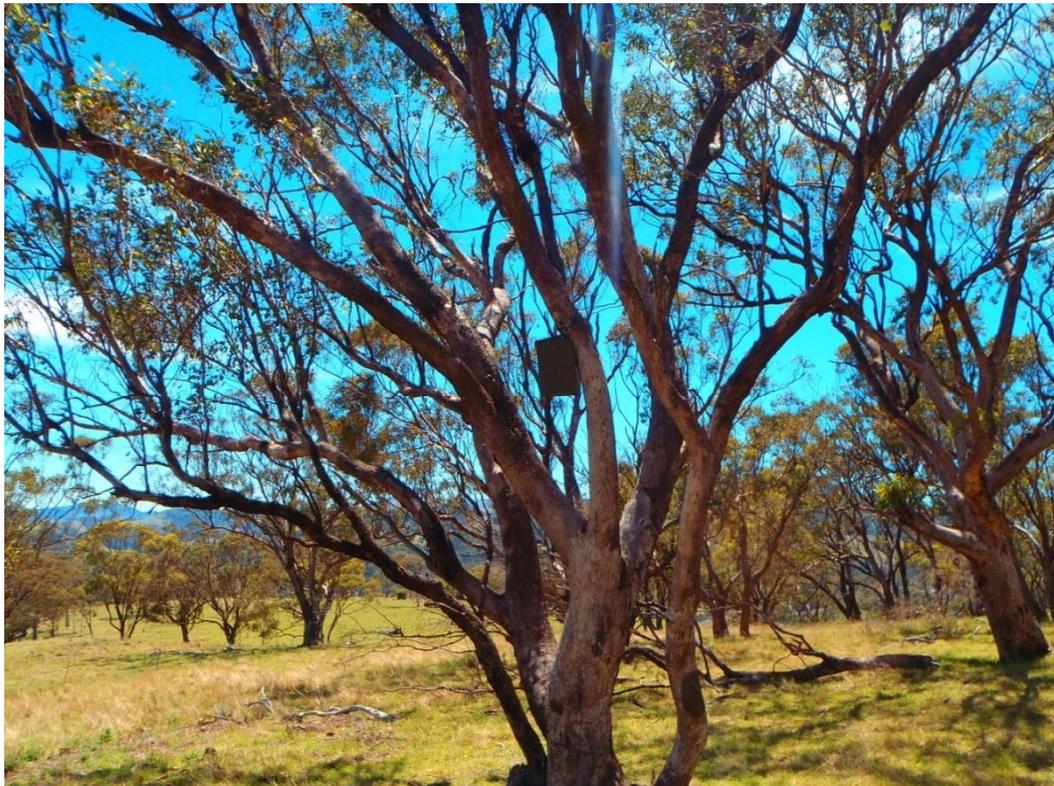


**Photograph 6:** Pooled water around the lube shed

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**Photograph 7:** Train loader



**Photograph 8:** Example of a nesting box



**Photograph 9:** Dilapidated buildings



**Photograph 10:** Offsite causeway constructed by local residents



**Photograph 11:** Weather station



**Photograph 12:** Example traffic sign on New England Highway