

# DUNMORE HARD ROCK QUARRY INDEPENDENT ENVIRONMENTAL AUDIT 2023

Prepared for Boral Resources (NSW) Pty Ltd

*Prepared by EPS*

LOT 1 DP 213575  
LOT 3 DP 1030504  
LOT 4 DP 1030504  
LOT 4 DP 227046  
LOT 1 DP 1002951  
LOT 1 DP 224597  
LOT 2 DP 224597  
LOT 4 DP 571406  
LOT 6 DP 1001931

## Contact Information and Declaration

**Declaration:** The opinions and declarations in this Independent Environmental Audit (IEA) are ascribed to Environmental Property Services (EPS) and are made in good faith and trust that such statements are neither false nor misleading. In preparing this IEA, EPS has considered and relied upon information obtained from Boral Resources (NSW) and the public domain, supplemented by discussions between key EPS staff, representatives from governing agencies and independents.

**Prepared by:**

**Steve McCall**  
Principal Planner/Director EPS  
Environmental Property Services

**Simon Duffy**  
Team Leader – Planning and Law  
Environmental Property Services

**Alina Tipper**  
Senior Environmental Consultant  
Environmental Property Services

**Taylah Pye**  
Environmental Consultant  
Environmental Property Services

**Subject land and address:**

Lot 1, DP 213575  
Lot 3, DP 1030504  
Lot 4, DP 1030504  
Lot 4, DP 227046  
Lot 1, DP 1002951  
Lot 1, DP 224597  
Lot 2, DP 224597  
Lot 4, DP 571406  
Lot 6, DP 1001931

## Quality Assurance and Version Control Table

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**Checked by** S.Duffy

**Approved by** S.McCall

### Environmental Property Services

Hunter  
61 – 63 Parry Street,  
Newcastle West NSW 2302  
02 4981 1600

Sydney  
Level 22-23, Salesforce Tower, Sydney  
Place, 180 George Street  
Sydney NSW 2000  
(02) 9258 1985

**Website:** [www.enviroproperty.com.au](http://www.enviroproperty.com.au)



## EXECUTIVE SUMMARY

This Independent Environmental Audit has been prepared in accordance with Schedule 5, Condition 10 of the Development Consent DA 470-11-2003 for Boral Hard Rock Quarry. The quarry is owned and operated by Boral Resources (NSW) Pty Ltd. Schedule 5, Condition 10 includes requirements for assessment of compliance with the Development Consent and the Environmental Protection Licence (EPL). It also provides for assessment of environmental performance of the site and, where applicable, issuing recommendations for improvement.

This audit has been conducted and prepared with consideration of the *AS/NZS 19011:2019 Guidelines for auditing management systems*.

### CLOSE-OUT OF 2020 AUDIT

The 2020 audit findings were reviewed, and an assessment was made regarding the sufficiency of actions implemented by Boral Resources in response. Of the 22 recommendations identified the status is as follows:

- Complete and Satisfactory: 16
- Complete and Unsatisfactory: 0
- Incomplete and Satisfactory or N/A: 0
- Incomplete and Unsatisfactory: 6

### COMPLIANCE WITH DEVELOPMENT CONSENT 2023 AUDIT

The findings of assessment against the conditions in Schedule 3 – 5 of the Development Consent is presented below. Of the 124 conditions, 93 were assessed as compliant, 5 non-compliant, 25 N/A and 1 not able to be determined.

Table 1-1: Assessment findings against conditions in Schedule 3-5

Schedule	Audit Findings				Total
	Compliant	Non-compliant	N/A	Not Able to Determine	
3	9	0	6	0	15
4	71	1	16	1	89
4a	2	0	3	0	5
5	11	4	0	0	15
<b>Total</b>	<b>93</b>	<b>5</b>	<b>25</b>	<b>1</b>	<b>124</b>

### COMPLIANCE WITH EPL 2023 AUDIT

Since 2019/2020, four non-compliances were recorded, and it relates to licence condition M2.2. The non-compliance resulted in the issue of an EPA Formal Warning but did not result in the issue of a Penalty Notice.





## ADEQUACY OF STRATEGIES, PLANS AND PROGRAMS 2023 AUDIT

A number of project strategies, plans and programs have been reviewed and updated since the 2020 audit in line with the revised consent conditions. Overall, documents are considered adequate for the purposes as they meet the conditioned requirements, follow a relatively consistent structure and are operational documents.

In summary, some of the plans have not been reviewed and revised in accordance with the conditions of consent, the 2020 Audit recommendations and require update/finalisation/approval (e.g. the Bushfire Management Plan and Water Management Plan). A number of recommendations are made to improve the project documents and to help ensure they remain current, including updating the document control table for each plan following each review and any change.

### OPPORTUNITIES FOR IMPROVEMENT 2023 AUDIT

A total of 19 opportunities to promote improvement in terms of regulatory compliance and environmental performance are included in the audit report for Boral's consideration and action.

### OVERALL ASSESSMENT OF ENVIRONMENTAL PERFORMANCE 2023 AUDIT

Noting there are a number of matters that require improvement, the overall environmental performance based on the observed condition of the site, the low number of non-compliances and incidents, and low number of complaints, is considered **'satisfactory'**.

The interviews with DP&E, EPA, CCC and Shoalhaven Council all confirmed that Boral operate the quarry well, with no major concerns raised and commendation for the responsiveness of the Boral staff. Some of the minor non-compliance actions appear to have occurred as a result of change in staff over the audit period. The re-occurrence of similar non-compliance actions have been addressed by Boral through improved environmental management systems.

The site inspection and interviews undertaken as part of this audit also confirmed that Boral have good environmental management systems in operation, with a high level of confidence in implementation of the environmental management systems, that extends to accountability and follow up from staff on the ground to senior management within Boral.



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## APPENDICES

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**APPENDIX 2 ENVIRONMENT PROTECTION LICENCE**

**APPENDIX 3 2023 AUDIT PHOTOGRAPHIC EVIDENCE**

**APPENDIX 4 LIST OF DOCUMENTS REVIEWED FOR AUDIT**

**APPENDIX 5 DEPARTMENT OF PLANNING AND ENVIRONMENT – INDEPENDENT ENVIRONMENTAL AUDIT 2023 CORRESPONDENCE**





# 1. INTRODUCTION

## 1.1. BACKGROUND

Environmental Property Services (EPS) has been approved by Department of Planning and Environment (DP&E) to complete the Independent Environmental Audit (IEA) of the Dunmore Hard Rock Quarry. The quarry is owned and operated by Boral Resources (NSW) Pty Ltd (Boral). Located on Tabbita Road, approximately 12km north-west of Kiama, the quarry is adjacent to Boral Dunmore Sand and Soil Quarry and the Boral Dunmore Concrete Batching Plant. The audited quarry produces hard rock which is crushed to produce coarse aggregates, road construction materials and fines which are typically used as manufactured sand, bedding material or soil additive.

The quarry, originally approved in November of 2004 (DA 470-11-2003), has been the subject of twelve (12) modifications. A summary of the approved modifications is as follows:

- Modification 1 – New amenities block.
- Modification 2 – Vegetation offsets and transport route.
- Modification 3 – New workshop, office and amenities buildings.
- Modification 4 & 5 – Extension to extraction area and truck parking facility.
- Modification 6 – Increase extraction area and road haulage.
- Modification 7 – Proposed blending plant and modification to noise monitoring requirements.
- Modification 8 – Construction of a bund in preparation for extension of the extraction area and modernising of various conditions.
- Modification 9 – Extension of the extraction area into the Croom West Pit.
- Modification 10 – Modification of Condition 33 of Schedule 4 of the consent to rectify the inconsistency of the lower dams capacity specified in the development consent and the existing dams capacity.
- Modification 11 – Increased road transport tonnage.
- Modification 12 – Amendment to hourly dispatch limits.

At the time of writing a modification (Modification 13) to expand the quarry pit has been lodged and is in the 'Response to Submissions' phase.

The current consolidated consent is attached in Appendix 1.

This audit has been completed to satisfy Schedule 5, Condition 10 of the current development consent.

The previous audit was completed by EPS in 2020.



## 1.2. AUDIT SCOPE AND SCHEDULE

### 1.2.1. Audit Scope

This audit is designed to address the requirements of Schedule 5, Condition 10 of DA 470-11-2003 as amended by Modification 12. The requirements are as follows:

- a. Be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;
- b. Include consultation with the relevant agencies and the CCC;
- c. Assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licences (including any assessment, plan or program required under these approvals);
- d. Review the adequacy of any approved strategies, plans or programs required under the abovementioned approvals;
- e. Recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals; and
- f. Be conducted and reported to the satisfaction of the Planning Secretary.

### 1.2.2. Audit Timeframe

The audit period for the 2023 IEA is April 2020 to November 2023.

## 1.3. REPORT STRUCTURE

This report has been structured to be consistent with the previous IEA. The structure is as follows:

- Executive Summary
- Section 1 – Introduction: background, scope, timeframe and contextual information.
- Section 2 – Audit Methodology: overview of the methodology used to conduct and deliver the audit and the terminology used within the audit report.
- Section 3 – Previous Environmental Audit: results and responses to the previous environmental audit and an assessment of response adequacy.
- Section 4 – Compliance with the Development Consent: review of compliance with the development consent DA 470-11-2003 as amended by Modification 12.
- Section 5 – Compliance with the EPL: review of compliance with EPL 77.
- Section 6 – Adequacy of Strategies, Plans and Programs: review of adequacy of approved strategies, plans or programs required under the consent.
- Section 7 – Audit Conclusions.



## 2. AUDIT METHODOLOGY

This audit has been conducted and prepared with consideration of the *AS/NZS 19011:2019 Guidelines for auditing management systems*. The method used to conduct the audit can be summarised as follows:

### **Document Review**

The following documents were reviewed as part of the document review process:

- The project Environmental Impact Statement (EIS) and modifications;
- Previous audit report;
- Management strategies, plans and programs;
- Monitoring records and reports;
- Correspondence between Boral and relevant agencies; and
- Guidelines and standards.

A complete list of the documents reviewed as part of this audit is contained in Appendix 4.

### **Consultation**

Consultation was undertaken with the following key government agency and Community Consultative Committee members as part of the audit:

- Georgia Dragicevic – Department of Planning and Environment;
- James Crawford – Environmental Protection Agency;
- Mark Miller – Shellharbour City Council; and
- James Bailey – Community Consultative Committee.

### **Interviews**

Interviews with the following relevant staff members were completed as part of the audit:

- Glenn Lowerson - Quarry Manager - Dunmore Quarry
- Matt Bray - Environment and Stakeholder Advisor - Dunmore Operations
- David Van Lent - Production Supervisor - Dunmore Quarry
- Stuart McLean - Maintenance Superintendent - Dunmore Quarry
- Sharon Makin - Environment Business Partner - Southern NSW

### **Site Inspection/Visual Verification**

The site was inspected, and interviews undertaken, over the course of two days 21/11/2023 – 22/11/2023 by the Lead Auditor (Steve McCall) and an Assistant (Ruby McCall). The interviews occurred on 21/11/2023 and the site inspection on 22/11/2023.

## 2.1. TERMINOLOGY

In accordance with the previous audit, the terminology listed in Table 2-1 has been applied when assessing compliance with the Development Consent, Environment Protection Licence (EPL) and the adequacy of other strategies, plans and programs.

Table 2-1: Terminology

Term	Definition
<b>Compliant</b>	Processes have been established and implemented that are consistent with the requirement.
<b>Non-compliant</b>	Failure to develop and/or implement processes to meet the requirement to an effective standard.
<b>Opportunity for improvement (recommendation)</b>	Identification of an opportunity to improve processes or implement changes to add value or clarify compliance with requirements.
<b>N/A, Non-applicable</b>	Requirement not applicable to this audit. May have been updated in previous audit.
<b>Not able to determine</b>	Compliance not able to be assessed as the information available was not sufficient.
<b>Complete</b>	Non-compliances from the previous audit have been addressed and finalised.
<b>Incomplete</b>	Non-compliances and recommendations from the previous audit have not been finalised.
<b>Satisfactory</b>	The actions implemented in response to non-compliances and recommendations from the previous audit are sufficient.

## 2.2. AUDITOR QUALIFICATIONS


Schedule 5, Condition 10 specifies the audit *“be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary”*.

Correspondence from nominee of the Planning Secretary dated 19/10/2023 endorsed Steve McCall as lead auditor.

EPS previously completed the 2017 and 2020 IEA for the site, but otherwise do not have prior involvement with the Dunmore Hard Rock Quarry.

## 2.3. AUDIT RESPONSE AND CLOSE-OUT

Boral was provided the opportunity to respond to the recommendations and provide evidence of implementation of actions prior to audit close out. Where applicable, these responses are presented in the compliance tables as evidence or commitments. Where the response was



deemed sufficient to close-out the audit finding and assessment of ‘satisfactory’ or ‘complete’ has been provided in parentheses.

## 2.4. RISK ASSESSMENT

In accordance with *AS/NZS 19011:2019 Guidelines for auditing management systems*, each non-compliance has been assigned as risk rating.

Table 2-2: Risk Assessment Definitions

Risk Rating	Definition
Low	Minor/administrative risk.
Medium	Significant risk that can cause an impact but not considered serious or major.
High	Serious major risk to environment and project.





### 3. 2020 INDEPENDENT ENVIRONMENTAL AUDIT CLOSE-OUT

This section provides an overview of the *Boral Resources (NSW) Pty Ltd Dunmore Quarry Independent Environmental Audit 2020* (EPS, 2020). It summarises the actions taken by Boral in response to the recommendations and non-compliances identified in the previous audit.

#### 3.1. 2020 AUDIT FINDINGS PROGRESS

Twenty-two (22) recommendations were made in the 2020 audit and are presented in Table 3-1 along with progress noted during the 2023 audit. The 2020 audit concluded the overall environmental performance of the site was 'satisfactory'.

Table 3-1: 2020 Audit Close-Out

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
DQ1/20	2017 Audit: DQ3/17	Finalise revised Water Management Plan.	<p><b>Response:</b> Updated WMP is currently under review with DPI (Water)</p> <p><b>Action:</b> Boral to follow up on status of the review and approval of the WMP with DPI (Water). Previous advice from DPI (Water) is that the plan won't be reviewed for a month due to backlog. Once review by DPI (Water) has been completed then Boral will submit the plan to DP&amp;E for approval.</p>	During site interview Boral confirmed the Water Management Plan in draft format and is with Boral Management for review. The draft WMP contains a trigger for upgrade works to lower dam. The budget for the lower dam works is still under consideration.	<p><b>Incomplete</b></p> <p><b>Opportunity for Improvement [DQ1/23]:</b> Boral to confirm budget for lower dam and implement WMP once approved by Boral Management.</p>
DQ2/20	2017 Audit: DQ5/17	Follow up approval of works required under S4, C38 from DP&E.	<p><b>Response:</b> EPA have approved works as completed. A letter describing the completion of the works to be drafted by Boral and sent to DPI (Water) to confirm completion to satisfaction to the Secretary.</p> <p><b>Action:</b> Boral to draft letter and send to DP&amp;E via the major projects portal.</p>	Boral showed a copy during the site interview.	<b>Complete</b>
DQ3/20	2017 Audit: DQ6/17	Determine if 'regional' monitoring that has been completed is satisfactory and the regional monitoring can be suspended.	<p><b>Response:</b> Boral to correspond with DP&amp;E to clarify the definition of 'regional' monitoring and propose cessation of monitoring as a function of the</p>	Boral advised during site interview they are still monitoring at a regional level.	<b>Complete</b>

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
			satisfactory completion of the monitoring program. <b>Action:</b> Boral to draft letter and send to DP&E via the major projects portal.		
DQ4/20	2017 Audit: DQ7/17	Ensure updated WMP includes plan to prevent mud tracking onto public roads.	<b>Response:</b> The updated WMP includes an Erosion and Sediment Control Plan located in Section 6. The effectiveness of the controls described in the plan are monitored via the site environmental checklist (monthly checklist and EPP) <b>Action:</b> Procedures for managing sediment tracking onto the road are to be addressed as part of the Erosion and Sediment Control Plan and monitored via existing environmental inspection tools.	Review of WMP to confirm complete and inclusion of ESCP. The ESCP includes procedures for managing sediment tracking onto the road. Inspections are used to monitor conditions and recorded via existing environmental monthly inspection checklist. Evidence also received of street sweeping subcontractor records showing cleaning occurring more than 3 times per week.	Complete
DQ5/20	2017 Audit: DQ8/17	Confirm tyres stored on site is less than 500, and if there is a requirement for more than 500 tyres, consult with EPA regarding a licence.	<b>Response:</b> Boral confirms that less than 500 tyres are stored on the premises. A contract is currently being tendered for the removal of the tyres not currently being utilised for re-use onsite by an appropriately licensed external contractor. <b>Action:</b> Boral to finalise contract for removal of excess tyres.	The tyre register record was sighted during the site interview and confirmed 422 tyres at 2021 and less now on site. Site inspection confirmed tyres are limited in use and no stockpiles were evident.	Complete

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
			Boral to update the onsite tyre register as per the Johns River Quarry template.		
<b>DQ6/20</b>	2017 Audit: DQ8/17	Finalise revised Bushfire Management Plan and ensure it covers safe storage of tyres in accordance with Tyre Stewardship Australia <i>Best Practice Guidelines for Tyre Storage and Emergency Preparedness</i> (March 2019) guidelines and Fire & Rescue NSW <i>Fire Safety Guideline – Guideline for bulk storage of rubber tyres</i> (December 2014).	<b>Response:</b> The Bushfire Management Plan will be updated by Boral in accordance with the requirements of these guidelines. <b>Action:</b> Boral to update Bushfire Management Plan to address relevant industry and NSW Fire and Rescue guidelines.	Review of Bushfire Management Plan to confirm the document has not been updated to cover safe storage of tyres in accordance with Tyre Stewardship Australia <i>Best Practice Guidelines for Tyre Storage and Emergency Preparedness</i> (March 2019) guidelines and Fire & Rescue NSW <i>Fire Safety Guideline – Guideline for bulk storage of rubber tyres</i> (December 2014).	<b>Incomplete</b>  <b>Opportunity for improvement [DQ2/23]:</b> The Bushfire Management Plan is to be updated to include information listed in 2020 Audit.
<b>DQ7/20</b>	2017 Audit: DQ10/17	Ensure all management plans are prepared and reviewed in accordance with the requirements of the conditions of consent. It is suggested a review record/register is maintained.	<b>Response:</b> A record will be created and attached to the Environmental Permit Planner. <b>Action:</b> BW to complete review of EPP.	Documents sighted during site interview of record/register created as well as Environmental Permit Planner.	<b>Complete</b> <b>Opportunity for improvement [DQ3/23]:</b> The document control table in each management plan should include a record of the annual review of the plan and whether any



#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
					amendments were made.
<b>DQ8/20</b>	Schedule 3, Condition 7a – Transportation	A Traffic Management System should be developed to monitor and control truck dispatch movements in accordance with limitations.	<p><b>Response:</b> Upon approval of the revised TMP, relevant staff will be presented with a toolbox session to educate them about the updated management plan requirements and a sign off sheet will be collected and filed. Boral Land and Property Group (BLPG) to consult with DP&amp;E regarding modification of this condition as transport dispatch limits are not practical. Due to supplying local NSW government infrastructure projects; Boral highlighted to DP&amp;E that these limits would be problematic regarding local projects such as Albion Park Bypass. The Transport Management Plan (TMP) will be updated once agreement has been reached with consent authority.</p> <p><b>Action:</b> Engage contractor (TTPP) to revise the plan as per recommendation. In the interim staff will participate in a toolbox session to notify them of the requirements in order to reduce instances of</p>	<p>Modification 12 has been approved to address Boral’s supply requirements. A new TMP has been prepared by EMM and is with DP&amp;E for review. Boral verbally advised confirmation that toolbox presentations were conducted. Site interviews included the weigh bridge operator and Quarry Manager who all confirmed the approach to manage of truck dispatch limits and how truck limits are recorded and controlled to comply. Evidence of Boral QRS was sighted during the site interview to confirm no truck movement exceedances.</p>	<b>Complete</b>



#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
			non-compliance with the existing plan. Another toolbox presentation will also be conducted once the updated plan is finalised. Sign on sheets will be collected and filed. The updated TMP		
DQ9/20	Schedule 3, Condition 7a – Transportation	If the hourly truck dispatch limitations are not practical for operations, consultation with DP&E should occur to understand if modification of this condition is appropriate.	<b>Response:</b> BLPG to correspond with DP&E to determine if a modification of limits is practical. <b>Action:</b> If transport dispatch limits are not practical, consult with DP&E regarding modification of this condition. BLPG to correspond	Modification 12 has been approved to address Boral's supply requirements.	<b>Complete</b>
DQ10/20	Schedule 3, Condition 1 – Operation of Plant and Equipment	Prioritise maintenance checks of bag houses in crushing and screening plants to ensure they are maintained in a proper and efficient condition.	<b>Response:</b> A plant inspection checklist is undertaken daily by staff to ensure that plant components are working correctly, and any corrective actions are completed. <b>Action:</b> Ensure plant inspection checklists are completed and filed into G drive so we can provide evidence in audit.	During site interview, Boral's online "Maximo" system was reviewed confirming the process and record plant maintenance and inspections, as well as procedures for work orders to rectify any issues identified from inspections.	<b>Complete</b>
DQ11/20	Schedule 4, Condition 12 – Identification of Boundaries	Confirm survey plan has been submitted to the Secretary.	<b>Response:</b> A letter will be drafted and submitted to DP&E to confirm receipt of the survey plan.	During site interview a copy of letter submitted to the Secretary was sighted.	<b>Complete</b>



#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
			<b>Action:</b> Boral to draft letter to DP&E for submission to the portal		
<b>DQ12/20</b>	Schedule 4, Condition 28 – Water Discharge Limits	Implement updated Water Management Plan when approved to reconfigure storage on site and prevent uncontrolled discharge events.	<p><b>Response:</b> The updated Water Management Plan is currently under review with the department, which details the dam upgrade works designed to meet this condition.</p> <p><b>Action:</b> Complete works once the updated WMP is approved in accordance with the approved plan. Senior management to discuss capital requirement for completion of the works once the WMP has been finalised. Once works are completed a letter is to be drafted notifying EPA/DP&amp;E of completion of the physical works.</p>	Water Management Plan in draft format and is with Boral Management for review. The draft WMP contains a trigger for upgrade works to lower dam. The budget for the lower dam works is still under consideration.	<b>Incomplete Opportunity for Improvement [DQ4/23]:</b> Implement updated Water Management Plan when approved to reconfigure storage on site and prevent uncontrolled discharge events.
<b>DQ13/20</b>	Schedule 4, Condition 29 – Site Water Balance	Ensure all future Annual Reviews address the reporting requirements in Schedule 4, Condition 29.	<p><b>Response:</b> Boral to ensure requirements in Schedule 4, Condition 29 are met in the next Annual Review.</p> <p><b>Action:</b> Boral to complete Annual Review in accordance with Schedule 4, Condition 29</p>	Annual Reviews 2021-2022 and 2022-2023 included a site water balance and reported in accordance with requirements in Schedule 4, Condition 29.	<b>Complete</b>
<b>DQ14/20</b>	Schedule 4, Condition 33 – Offline Dam	Ensure Dam Upgrade Plan is updated or incorporated	<b>Response:</b> The dam upgrade plan is included in Appendix G of the	During site interview Boral confirmed the Water	<b>Complete</b>

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
		into the updated approved Water Management Plan.	updated WMP currently under review by DPI (Water). <b>Action:</b> Completed	Management Plan included the Dam Upgrade Plan. Water Management Plan in draft format and is with Boral Management for review.	
DQ15/20	Schedule 4, Condition 35A – Lower Dam Transition Plan	Ensure the approved updated Water Management Plan includes the Lower Dam Transition Plan.	<b>Response:</b> The dam transition plan is included in the Options Assessment (Section 5.3) of the updated WMP currently under review by DPI (Water). <b>Action:</b> Completed	During site interview Boral confirmed the Water Management Plan included the Lower Dam Transition Plan. Water Management Plan in draft format and is with Boral Management for review.	<b>Complete</b>
DQ16/20	Schedule 4, Condition 37 – Other Water Management Works	Bunded fuel drum storage area to be used correctly with all oil drums to be positioned within the bunded area.	<b>Response:</b> Delivery drivers to sign in onsite to ensure that goods are delivered and correctly placed into the bund. One point lessons (OPL) to be created for bunded area to instruct storage requirements. <b>Actions:</b> Boral to complete an inventory of the stored chemicals across the site to ensure bunds are available and capacity is adequate. Boral to create an OPL for bunded areas and training package for staff to complete, with a sign on sheet to be recorded and filed.	During site interview the monthly inspection checklist was sited and copy provided post site inspection. Additional document named 'Liquid Chemical and Fuel storage operation and maintenance monthly checklist' was sited during site interview. Boral are currently undertaking an internal audit of dangerous goods and storage capacity. Visual inspection of bunded area during site visit confirmed compliance.	<b>Complete</b>

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
			Delivery drivers to sign in onsite to ensure that goods are delivered and placed into the bund.		
<b>DQ17/20</b>	Schedule 4, Condition 38 – Bunding	Ensure all fuel, oil and chemical storage areas occurs in appropriately bunded areas.	<b>Response and Action</b> as above.	Visual inspection of bunded area during site visit confirmed compliance.	<b>Complete</b>
<b>DQ18/20</b>	Schedule 4, Condition 46 – Flora and Fauna Management Plan	Condition numbering references are incorrect throughout document (see Table 2.1 for an example). Update condition reference numbering in next review.	<b>Response:</b> Condition references will be amended in the next review of the Flora and Fauna Management Plan document as per the recommendation. <b>Action:</b> Boral will update the condition reference numbering as part of the next review cycle of the Flora and Fauna Management Plan.	During site interview Boral confirmed the Flora and Fauna Management Plan will be reviewed and amendment of condition references updated. Flora and Fauna Management Plan to be updated post IEA.	<b>Incomplete</b>
<b>DQ19/20</b>	Schedule 4, Condition 47 – Flora and Fauna Management Plan	Vegetation Clearing Protocol to be updated to address collecting seed from site and conserving and reusing topsoil.	<b>Response:</b> The VCP will be updated in the next review of FFMP. <b>Action:</b> Boral will update the VCP as per the recommendations as part of the next review cycle of the Flora and Fauna Management Plan.	During site interview Boral confirmed the Flora and Fauna Management Plan review will include Vegetation Clearing Protocol updates to address collecting seed from site and conserving and reusing topsoil. Flora and Fauna Management Plan to be updated post IEA.	<b>Incomplete</b>
<b>DQ20/20</b>	Schedule 4, Condition 54 – Rehabilitation and Conservation Bond	Rehabilitation Conservation Bond not lodged within the required	<b>Response:</b> Rehabilitation Conservation Bond to be recalculated and lodged in	During the site interview Boral provided evidence of recalculated Rehabilitation	<b>Complete</b>

#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
		timeframe. Boral to ensure timing requirements are met for obligations under this consent.	accordance with the obligations under the consent. <b>Action:</b> Boral to lodge bond in accordance with the obligations.	Conservation Bond had been lodged in accordance with the obligations under the consent and is with DP&E.	
<b>DQ21/20</b>	Schedule 4, Condition 62 – Road Haulage	It is recommended that sweeping increase to three times per week and consideration of further mitigation measures is undertaken.	<b>Response:</b> Sweeping of the Princes Motorway on ramp currently occurs. Further mitigation methods will be investigated once extent of sediment being tracked onto the road is quantified and response measures evaluated. The updated WMP details Erosion and Sediment Controls in Section 6 and these controls will be monitored via the site environmental checklist rather than the PIRMP, which is not considered the appropriate document for this activity. <b>Action:</b> Assess effectiveness of the wheel wash and implement improvements if necessary to address sediment tracking on access roads.	During site interview Boral provided evidence of monitoring via the site environmental checklist, assessment of effectiveness of wheel wash and action taken to address the recommendation. Boral confirmed inspections are used to monitor conditions and recorded via existing environmental monthly inspection checklist. Evidence was also provided of street sweeping subcontractor records showing cleaning occurring more than 3 times per week.	<b>Complete</b>
<b>DQ22/20</b>	Schedule 5, Condition 4 – Revision of Strategies, Plans and Programs	The document control tables within the all the plans, strategies and programs required under	<b>Response:</b> Subsequent management plans to include a more accurate description of the document control process,	During the site interview, Boral advised all management plans are being updated to ensure document control tables	<b>Incomplete Opportunity for improvement [DQ5/23]:</b> The





#	Consent Condition/Issue	2020 Audit Finding	Response/Action	Evidence Noted During the 2023 Audit	2023 Conclusion
		this consent do not reflect the reviews have occurred. Ensure all documents are reviewed in accordance with this condition of consent. Update the relevant management plans to contain information on timing of review.	include reviews that have been undertaken and then main focus of the review. <b>Action:</b> Boral to present a more detailed and accurate document control section in the relevant management plans as per the recommendations.	include details of management plan reviews.	document control table in each management plan should include a record of the annual review of the plan and whether any amendments were made.

Table 3-2: 2020 Audit Close - Out Findings

	Audit Findings				Total
	Complete	Incomplete	N/A	Not Able to Determine	
<b>2020 Audit Close - Out</b>	16	6	0	0	<b>22</b>

## 4. COMPLIANCE WITH DEVELOPMENT CONSENT

An assessment of compliance with the conditions contained within Schedule 3, 4, 4a and 5 of Development Consent has been completed and presented in Table 4-2. The assessment lists the conditions, evidence and information sources considered and an assessment against compliance. Where applicable, opportunities for improvement have been identified.

Modifications of the Development Consent since it was issued in 2004 have been included in Table 4-2. Changes are noted in coloured highlighted as follows:

- **Modification 1 – Blue;**
- **Modification 2 – Red;**
- **Modification 3 – Green;**
- **Modification 4 and 5 – Pink;**
- **Modification 6 – Purple;**
- **Modification 7 – Maroon;**
- **Modification 8 – Orange;**
- **Modification 10 – Aqua;**
- **Modification 9 – Light green;**
- **Modification 11 – Yellow highlight; and**
- **Modification 12 – Cornflower blue**

### 4.1. SUMMARY OF FINDINGS

A summary of findings is presented in Table 4-1.

Table 4-1: Summary of Findings

Schedule	Audit Findings				Total
	Compliant	Non-compliant	N/A	Not Able to Determine	
3	9	0	6	0	15
4	71	1	16	1	89
4a	2	0	3	0	5
5	11	4	0	0	15
<b>Total</b>	<b>93</b>	<b>5</b>	<b>25</b>	<b>1</b>	<b>124</b>

All five of the non-compliances are considered low risk. Where non-compliances are identified the associated risk is noted in Table 4-2.

Table 4-2: Table of Compliance with Development Consent

Number	Details	Evidence Sources/Questions	Audit Finding
<b>Schedule 3</b>			
<b>Obligation to Minimise Harm to the Environment</b>			
1	In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	Environmental Controls, Environmental Management Plans and responses provided during site interviews.	<b>Compliant</b>
<b>Terms of Approval</b>			
2	The Applicant <b>must</b> carry out the development generally in accordance with the: <ul style="list-style-type: none"> <li>(a) DA 470-11-2003;</li> <li>(b) EIS titled <i>Environmental Impact Statement for the proposed Dunmore Quarry Production Increase</i>, Volumes 1 &amp; 2, dated November 2003, and prepared by R. W. Corkery &amp; Company Pty Limited;</li> <li>(c) The letter from Boral Quarries to the Department dated 20 October 2005 about the application to modify Dunmore Quarry development consent DA 470-11-2003, and accompanying plans 4034032_01 issue E, and 4034032_EL issue B;</li> <li>(d) <b>modification application MOD 59-4-2006 and letter from Boral Quarries to the Department dated 13 April 2006;</b></li> <li>(e) <b>Modification Application 470-11-2003 Mod 3, letter to the Department dated 28 March 2008, and accompanying plans GE-DU-2961-02 Rev D; GE-DU-2962-01 Rev B; GE-DU-2963-01 Rev O; and GE-DU-2964-02 Rev O; and</b></li> <li>(f) <b>Modification Application 470-11-2003 Mod 4 and accompanying SEE titled <i>Statement of Environmental Effects for the proposed Dunmore Hard Rock Quarry Extension</i>, dated May 2008, and letter from</b></li> </ul>	Consolidated Consent, EIS and EA's, strategies, plans and programs, and site inspection.	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>Boral Quarries &amp; Recycling to the Department dated 22 September 2008;</p>		
(g)	<p>Modification Application 470-11-2003 Mod 5 and accompanying letter from Boral Quarries &amp; Recycling to the Department dated 16 September 2008 (and accompanying plan GE-DU-2966-01 Rev E);</p>		
(h)	<p>Modification Application 470-11-2003 Mod 6 and accompanying document titled <i>Environmental Assessment Dunmore Hard Rock Quarry– Modification 6</i>, prepared by EMGA Mitchell McLennan and dated 19 November 2012;</p>		
(i)	<p>Modification Application 470-11-2003 Mod 7 and accompanying document titled <i>Proposed Blending Plant Dunmore Hardrock Quarry DA 470-11-2003 – Modification 7, Environmental Assessment</i>, dated December 2014; and</p>		
(j)	<p>Modification Application 470-11-2003 Mod 8 and accompanying document titled <i>Dunmore Quarry – Modification 8 Environmental Assessment</i> dated August 2016 and accompanying Response to Submissions, dated 22 September 2016.</p>		
(k)	<p>Modification Application 470-11-2003 Mod 10 and accompanying documents titled <i>Environmental Assessment: Dunmore Quarry Modification 10</i>, dated 23 May 2017, and supplementary <i>Environmental Assessment titled Environmental Assessment: Dunmore Quarry Modification 10</i>, dated 16 June 2017;</p>		
(l)	<p>Modification Application 470-11-2003 Mod 9 and accompanying documents titled <i>Dunmore Quarry – Modification 9 Environmental Assessment</i>, dated 17 February 2017, and <i>Response to Submissions titled Dunmore Quarry – Modification 9 Response to Submissions</i>, dated 17 August 2017;</p>		
(m)	<p>Modification Application 470-11-2003 Mod 11 and accompanying document titled <i>Dunmore Quarry – Modification 11 Environmental Assessment</i>, dated 28 September 2018, <i>Response to Submissions titled Dunmore Quarry – Mod 11 Response to Submissions</i>, dated 7</p>		

Number	Details	Evidence Sources/Questions	Audit Finding
	<p>November 2018, and additional information titled Traffic Impact Assessment Addendum, dated 24 January 2019.</p> <p>(n) Modification Application 470-11-2003 Mod 12 and accompanying document titled Statement of Environmental Effects - Laden truck dispatch restriction amendments, prepared by Boral Land and Property Group, dated June 2021, and letter from Boral Property Group dated 04 August 2021 with additional information.</p>		
2A	The Applicant must carry out the development in accordance with the conditions of this consent.	Consolidated Consent, strategies, plans and programs, and site inspection.	Compliant
3	The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and the document/s listed in condition 2. In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition 2, the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	N/A	N/A
4	<p>Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:</p> <p>(a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and</p> <p>(a) the implementation of any actions or measures contained in any such document referred to in condition 4(a).</p>	Boral advise no additional written instructions has been received.	Compliant
<b>Quarrying Operations</b>			
5	The Applicant may carry out quarrying operations on the site until 30 September 2034.	N/A	N/A





Number	Details	Evidence Sources/Questions	Audit Finding
<p><i>Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the <a href="#">Planning Secretary</a>. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.</i></p>			
6	<p>The Applicant <b>must</b> not produce or transport more than 2.5 million tonnes of quarry products a calendar year from the development.</p>	<p>Annual Review Reports: During site interview Boral confirmed production, sales and transport records for post 1 July 2023. Interview with Production Supervisor.</p>	<p><b>Compliant</b> <u>FY 19/20:</u> Produced = 1,256,844 Transported = 1,622,398 <u>FY 20/21:</u> Produced = 1,289,435t Transported = 1,120,408 <u>FY 21/22:</u> Produced = 1,107,990t Transported = 995,227t <u>FY 22/23:</u> Produced = 1,571,856 Transported = 1,474,782t  <u>2023 post 1 July 2023:</u> A review of the available data for 2023 confirmed the limits have not been exceeded.</p>
<p><b>Transportation</b></p>			
7	<p>A maximum of 2.5 million tonnes of quarry products may be transported from the site in any calendar year.</p>	<p>Annual Review Reports: Production, sales and transport records. Boral confirmed transport records for post 1 July 2023.</p>	<p><b>Compliant</b> <u>FY 19/20:</u> Transported = 1,622,398 <u>FY 20/21:</u> Transported = 1,120,408t <u>FY 21/22:</u></p>



Number	Details	Evidence Sources/Questions	Audit Finding
		Interview with Production Supervisor.	Transported = 995,227t <u>FY 22/23:</u> Transported = 1,474,782t  <u>2023 post 1 July 2023:</u> <u>A review of the available data for 2023 confirmed the limits have not been exceeded.</u>
7a	<p>The Applicant must not dispatch more than:</p> <p>a) 50 laden trucks per hour from the site between 6 am and 6 pm, with only 33 laden trucks per hour between 6 am and 9 am permitted to head northwest into Albion Park Rail from the intersection of New Lake Entrance Road / Princes Highway;</p> <p>b) 23 laden trucks from the site in any hour between 6 pm and 6 am; and</p> <p>c) a total of 400 laden trucks from the site per day.</p> <p>Note: In this condition, “day” means any 24-hour period.</p>	During the site interview Boral provided evidence of hourly movements and compliance with limits for 2020-2021 (post 2020 IEA non-compliance), 2021-2022, 2022-2023 (noting change in truck movements in Mod 11-Mod 12). Mod 11 limits - During the 7am to 8am window (hourly limit of 33 trucks) & During the 3pm to 4pm windows (hourly limit of 23 trucks) Mod 12 limits in Condition 7a. Production, sales and transport records. Interview with	<b>Compliant (post 2020 IEA)</b>



Number	Details	Evidence Sources/Questions	Audit Finding
<p>Environmental Co-ordinator. During the site interview Boral provided response letter re truck exceedance for hourly limits sent by Boral to the DP&amp;E on 29 September 2020. Inspect reporting tool that has been built for the Site's weighbridge and sales docketing system (APEX), which now allows the weighbridge operator to track docketing hourly. Interview with weigh bridge operator to confirm how truck hourly movements are monitored and controlled.</p>			
<b>Surrender of Consents</b>			
8	Deleted	N/A	N/A

Number	Details	Evidence Sources/Questions	Audit Finding
<b>Structural Adequacy</b>			
9	<p>The Applicant <b>must</b> ensure that any 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.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>• Under Part 4A of the EP&amp;A Act, the Applicant is required to obtain construction and occupation certificates for any building works.</li> <li>• Part 8 of the EP&amp;A Regulation sets out the detailed requirements for the certification of development</li> </ul>	Interview with Environmental Co-ordinator.	<b>N/A</b> No new buildings or structures created.
<b>Demolition</b>			
10	The Applicant <b>must</b> ensure that all demolition work is carried out in accordance with AS 2601-2001: <i>The Demolition of Structures</i> , or its latest version.	Interview with Environmental Co-ordinator and Quarry Manager.	<b>N/A</b> No demolition has occurred.
<b>Protection of Public Infrastructure</b>			
11	<p>The Applicant <b>must</b>:</p> <p>(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and</p> <p>(b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.</p>	Interview with Environmental Co-ordinator.	<b>N/A</b> No public infrastructure has been damaged or relocated.
<b>Operation of Plant and Equipment</b>			
12	<p>The Applicant <b>must</b> ensure that all plant and equipment at the site, or used in connection with the development, are:</p> <p>(a) maintained in a proper and efficient condition; and</p> <p>(b) operated in a proper and efficient manner.</p>	Interview with Environment Co-ordinator, Quarry Manager, and Maintenance Supervisor. During the site	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Finding
<b>Compliance</b>			
13	The Applicant must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.	interview reviewed the operation of the Boral maintenance management system called Maximo, which is used for scheduling and creation of work orders for maintenance, consultation with EPA.	<b>Compliant</b>
<b>Schedule 4</b>			
<b>Identification of Boundaries</b>			
1	Within 6 months of the date of this consent and any subsequent modification involving a change to the approved limits of extraction, the Applicant must: <ul style="list-style-type: none"> <li>(a) engage a registered surveyor to mark-out the boundaries of the approved limits of extraction;</li> <li>(b) submit a survey plan of these boundaries to the <a href="#">Planning Secretary</a>; and</li> <li>(c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.</li> </ul>	Review of modifications approved. During site interview Boral provided evidence of survey plan '171230 Approved DQ Mod 9 Extraction Boundary' (CEH Consulting Pty Ltd, 2017) sent to Planning Secretary	<b>Compliant</b> Site extraction boundary markers sighted (photographs included in Appendix 3).





Number	Details	Evidence Sources/Questions	Audit Finding										
<b>Acquisition Upon Request</b>													
2	<p>Upon receiving a written request for acquisition from the landowner of the land listed in Table 1, the Applicant <b>must</b> acquire the land in accordance with conditions 3 and 4 below.</p> <table border="1"> <thead> <tr> <th>Land Owner</th> <th>Land Identification</th> </tr> </thead> <tbody> <tr> <td>Creagan</td> <td>Lot 5 DP1001931</td> </tr> <tr> <td>Stocker</td> <td>Lot 1 DP745632</td> </tr> <tr> <td>McParland/ Fogarty</td> <td>Lot 10 DP977931</td> </tr> <tr> <td>Kimmorley Property</td> <td>Lot 1 DP998321</td> </tr> </tbody> </table> <p><i>Table 1: Land Subject to Acquisition on Request</i>  <i>Note: Land titled 'McParland/Fogarty' has been acquired and is now quarry owned.</i></p>	Land Owner	Land Identification	Creagan	Lot 5 DP1001931	Stocker	Lot 1 DP745632	McParland/ Fogarty	Lot 10 DP977931	Kimmorley Property	Lot 1 DP998321	<p>During site interview Boral confirmed no written requests had been received.</p>	<b>Compliant</b>
Land Owner	Land Identification												
Creagan	Lot 5 DP1001931												
Stocker	Lot 1 DP745632												
McParland/ Fogarty	Lot 10 DP977931												
Kimmorley Property	Lot 1 DP998321												
3	<p>Within 6 months of receiving a written request from the landowner, the Applicant <b>must</b> pay the landowner:</p> <p>(a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development the subject of this DA, having regard to the:</p> <ul style="list-style-type: none"> <li>existing and permissible use of the land, in accordance with the applicable environmental planning instruments at the date of the written request; and</li> <li>presence of improvements on the land 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; and</li> </ul> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> <li>relocating within the Shellharbour or Kiama local government areas, or to any other local government area determined by the <a href="#">Planning Secretary</a>; and</li> </ul>	<p>During site interview Boral confirmed no written requests had been received.</p>	<b>N/A</b>										



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>obtaining legal and expert advice for determining the acquisition price of the land and the terms upon which it is to be acquired; and</li> </ul> <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if within 6 months of receiving this written request, the Applicant 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 <a href="#">Planning Secretary</a> for resolution. Upon receiving such a request, the <a href="#">Planning Secretary</a> shall request the <a href="#">NSW President of the Australian Property Institute</a> to appoint a qualified independent valuer to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or the terms upon which the land is to be acquired. If either party disputes the independent valuer's determination, the independent valuer must refer the matter back to the <a href="#">Planning Secretary for resolution</a>. If the landowner refuses to accept this offer within 6 months of the date of the Applicant's offer, the Applicant's obligations to acquire the land cease, unless otherwise agreed by the <a href="#">Planning Secretary</a>.</p>		
4	The Applicant <b>must</b> bear the costs of any valuation or survey assessment requested by the independent valuer or the <a href="#">Planning Secretary</a> , and the costs of determination referred to in Condition 3 above.	No written requests received.	<b>N/A</b>
5	If the Applicant and landowner agree that only part of the land should be acquired, then the Applicant <b>must</b> pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General.	No written requests received.	<b>N/A</b>



Number	Details	Evidence Sources/Questions	Audit Finding
6	While the land listed in Table 1 is privately-owned land, the Applicant <b>must</b> comply with the requirements applying to this land in these conditions of consent.	Conditions of Consent	<b>Compliant</b> Collected where relevant throughout this table.

**Additional Mitigation Upon Request**

6A	<p>Upon receiving a written request from the landowner of any residence on the land listed in Table 1 or Table 1A, the Applicant must implement additional mitigation measures at or in the vicinity of the residence, in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2014), as may be updated or replaced from time to time. They must also be reasonable and feasible and proportionate to the level of predicted impact.</p> <p>If within 3 months of receiving this request from the landowner, the Applicant and the owner 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 <a href="#">Planning Secretary</a> for resolution.</p>	No written requests received.	<b>N/A</b>
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Receiver Locations	Mitigation Basis
Locations AA, D, F, G and Z	Noise

Table 1A: Land Subject to Mitigation on Request

**Noise**

**Noise Limits**

7	The Applicant <b>must</b> ensure that the noise generated by the development does not exceed the criteria specified in Table 2.	Annual Compliance Noise Monitoring reports 2019, 2020, 2021 and 2022, community complaints database, site	<b>Compliant</b> Annual reports (FY) for 2019, 2020, 2021 & 2022 Monitoring completed at the 5 monitoring locations
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Receiver Locations	Noise Limits dB(A)					
	L <sub>Aeq</sub> (15min)				L <sub>A1</sub> (1min)	
	Day	Evening	Night	Shoulder	Night	Shoulder



Number	Details						Evidence Sources/Questions	Audit Finding
	Location K – Stocker Residence	49	44	38	47	48	55	inspection of monitoring locations.  representative of the receiver locations and in accordance with the approved Noise Management Plan, and the correct meteorological conditions and the sound levels did not exceed criteria for all Annual Report years.
	Location O – Dunmore Lakes	49	44	38	47	48	55	
	Location J – Creagan Residence	Negotiated agreement in place.						
	Location AA	38	38	38	38	45	45	
	Locations AB and T	36	36	36	36			
	Locations D, F, G and Z	40	40	40	40			
	Location S	37	37	37	37			
	Other privately-owned residences	35	35	35	35			

Table 2: Noise Impact Assessment Criteria for the Development

Notes:

1. Receiver locations are shown in Appendix 2.
2. The above table may be varied if the Applicant enters into a negotiated agreement with any of the affected residents, or if existing agreements become void.



Number	Details	Evidence Sources/Questions	Audit Finding
3.	Noise from the development is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary, to determine compliance with the LAeq(15 minute) noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors presented in Section 4 of the NSW Industrial Noise Policy <b>must</b> also be applied to the measured noise levels where applicable.		
4.	Noise from the development is to be measured at 1m from the dwelling façade to determine compliance with the LA1(1minute) noise limits in above table.		
5.	The noise emission limits identified in Table 1 apply under meteorological conditions of: Wind speed up to 3m/s at 10 metres above ground level; or Temperature inversion conditions of up to 3°C/100m and wind speed up to 2m/s at 10 metres above the ground.		

**Noise Investigations**

8	Deleted	N/A	N/A
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**Operating Hours**

9	The Applicant <b>must</b> comply with the operating hours in Table 3:		Reviewed QRS system data, interview with Quarry Manager and Maintenance Supervisor and Production	<b>Compliant</b> Review of QRS data showed no non-compliances with approved operating hours.	
	<b>Activity</b>	<b>Days of the Week</b>			<b>Time</b>
	Extraction and processing	Monday - Saturday			6-00am to 10-00pm





Number	Details	Evidence Sources/Questions	Audit Finding
	Product Transfer to Stockpiles	Monday - Saturday 6-00am – Midnight	supervisor, consultation with CCC and Council.
	Distribution	Monday - Saturday 24 hrs	
		Sunday See Condition 10, Schedule 4	
	Maintenance	Monday – Sunday 24 hrs	
	Construction (including construction of the bund under Modification 8)	Monday - Saturday 7-00am to 6-00pm Monday to Friday 8-00am to 1-00pm Saturday	

Table 3: Operating Hours for the Development

10	Deleted.	N/A	N/A
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**Oversized Material**

11	The Applicant <b>must</b> not process any oversized raw feed material at the development during the shoulder period. <i>Note: For the purpose of this condition “oversized raw feed material” is defined as where more than 50% of the shot is over 900mm in diameter.</i>	Interview with Quarry Manager and Maintenance Supervisor and Production Supervisor.	<b>Compliant</b>
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**Noise Operating Conditions**

11A	The Applicant <b>must</b> : (a) take all reasonable steps to minimise the construction, operational and transport noise associated with the development;	Noise Management Plan 2017, Annual Compliance Noise Monitoring reports	<b>Compliant</b> No construction, operational and transport noise complaints associated with
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Number	Details	Evidence Sources/Questions	Audit Finding
	(b) take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions; when the noise criteria in this consent do not apply; and (c) regularly assess noise monitoring data, and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the <a href="#">Planning Secretary</a> .	2019, 2020,2021 and 2022, community complaints database, site inspection of monitoring locations	the development were recorded during the audit period April 2020-Nov 2023.

### Noise Monitoring

<b>12</b>	<b>Deleted</b>	N/A	<b>N/A</b>
<b>13</b>	<p>Within 3 months of the date of this consent, and annually thereafter, unless directed otherwise by the <a href="#">Planning Secretary</a>, the Applicant <b>must</b>:</p> <p>(a) commission a suitably qualified person to assess whether the development is complying with the noise impact assessment criteria in Table 2, in general accordance with the NSW Industrial Noise Policy and Australian Standard (AS) 1055-1997: “Description and Measurement of Environmental Noise”; and</p> <p>(b) provide the results of this assessment to the <a href="#">EPA</a> and <a href="#">Planning Secretary</a> within a month of commissioning the assessment.</p>	<p>Annual Compliance Noise Monitoring reports 2019, 2020, 2021 and 2022, name and details of assessor, date of submission to EPA &amp; Secretary.</p> <p>During site interview Boral confirmed submission of each Annual Compliance Noise Monitoring to EPA and Planning Secretary.</p>	<p><b>Compliant</b></p> <p>Annual Compliance Noise Monitoring completed in:</p> <ul style="list-style-type: none"> <li>• July 2020;</li> <li>• September 2021; and</li> <li>• July 2022.</li> </ul> <p>All Annual Compliance Noise Monitoring was completed by MAC. All assessments were completed in accordance with Table 2 and AS 1055 – 1997 (or the latest version). Submitted to EPA in the annual returns and Planning Secretary in Annual Review. Annual Review Lodgement Forms from Boral submitted:</p> <ul style="list-style-type: none"> <li>• September 2020</li> <li>• August 2021</li> <li>• August 2022</li> <li>• August 2023</li> </ul>



Number	Details	Evidence Sources/Questions	Audit Finding
<b>Noise Management Plan</b>			
14	<p>The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the <a href="#">Planning Secretary</a>. This plan must:</p> <ul style="list-style-type: none"><li>(a) be prepared in consultation with the EPA;</li><li>(b) be submitted to the <a href="#">Planning Secretary</a> for approval prior to commencing quarrying operations in the Croome West Pit, unless the <a href="#">Planning Secretary</a> agrees otherwise;</li><li>(c) describe the measures to be implemented to ensure:<ul style="list-style-type: none"><li>• compliance with the noise criteria and operating conditions of this consent;</li><li>• best practice management is being employed;</li><li>• noise impacts of the development are minimised during stage 3 extraction of the Croome West Pit, particularly during the shoulder period; and</li><li>• noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;</li></ul></li><li>(d) describe the proposed noise management system; and</li><li>(e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2.</li></ul>	Noise Management Plan (EMM, 2017)	<p><b>Opportunity for Improvement [DQ6/23]:</b> At next Modification have clause (b) of condition amended to provide the results with the annual returns/annual reviews, rather than one month of commissioning the assessment to avoid a time related non-compliance.</p> <p><b>Compliant</b> Noise Management Plan approved and addresses (a) – (e) of the condition.</p>



Number	Details	Evidence Sources/Questions	Audit Finding
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The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.

**Reporting**

15	Deleted	N/A	N/A
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**Blasting and Vibration**

**Airblast Overpressure Criteria**

16 The Applicant **must** ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 4 at any residence or sensitive receiver on privately-owned land.

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

Table 4: Airblast Overpressure Limits

Airblast monitoring results reported in Annual Returns, interview with Blast Supervisor and review of Boral’s BlastIQ record system.

**Compliant**  
FY 19/20  
 • No exceedances  
FY 20/21  
 • No exceedances  
FY 21/22  
 • No exceedances  
FY 22/23  
 • No exceedances

**Ground Vibration Criteria**

17 The Applicant **must** ensure that the peak particle velocity from blasting at the development does not exceed the criteria in Table 5 at any residence or sensitive receiver on privately - owned land.

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

Table 5: Ground Vibration Limits

Ground vibration monitoring reported in Annual Returns, Dunmore Quarry Environmental Monitoring Report for 2019-2023, interview with Blast Supervisor and review of Boral’s BlastIQ record system.

**Compliant**  
FY 19/20  
 • 15/06/2020 at 5.83mm/s ground vibration – reported in Annual Return.  
FY 20/21  
 • No exceedances  
FY 21/22  
 • No exceedances  
FY 22/23



Number	Details	Evidence Sources/Questions	Audit Finding
			<ul style="list-style-type: none"> <li>No exceedances</li> <li>23/06/2023 – Overblast of 117.8dB - compliant in 95<sup>th</sup> percentile limits.</li> </ul> <p>All exceedances under 10mm/s, and within the 5% allowable exceedance.</p>
<b>Blasting Restrictions</b>			
18	Blasting operations at the site may only take place: <ol style="list-style-type: none"> <li>between 9am and 5pm Monday to Saturday inclusive;</li> <li>are limited to 2 blasts each day; and</li> <li>at such other times as may be approved by EPA.</li> </ol>	Airblast monitoring records, interview with Quarry Manager and Blast Supervisor and review of Boral’s BlastIQ record system.	<b>Compliant</b> Monitoring reports were consistent with the times/frequencies nominated in the condition. No additional times have been approved by the EPA.
<b>Blast Operating Conditions</b>			
19	During blasting operations, the Applicant must: <ol style="list-style-type: none"> <li>take all reasonable steps to:               <ol style="list-style-type: none"> <li>protect the safety of people in the surrounding area;</li> <li>protect public or private infrastructure/property in the surrounding area from any damage; and</li> <li>minimise blast-related dust and fume emissions; and</li> </ol> </li> <li>operate a suitable system to enable members of the public to get up-to-date information on the proposed blasting schedule on the site, to the satisfaction of the <a href="#">Planning Secretary</a>.</li> </ol>	Interview with Quarry Manager and Blast Supervisor, Blast Management Plan (2019) and review of Boral’s BlastIQ record system, review of blast forms F03 & F05.	<b>Compliant</b>
<b>Blast Management Plan</b>			
20	The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the <a href="#">Planning Secretary</a> . This plan must:	Blast Management Plan (BMP) approved	<b>Compliant</b>





Number	Details	Evidence Sources/Questions	Audit Finding
	<p>(a) be submitted to the <b>Planning Secretary</b> for approval within 6 months of Modification 8, unless otherwise agreed by the <b>Planning Secretary</b>;</p> <p>(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;</p> <p>(c) include measures to manage and monitor the avoidance of impacts on the heritage values on the buildings on Lot 10 DP977931;</p> <p>(d) include measures to manage flyrock;</p> <p>(e) include a monitoring program for evaluating and reporting on compliance with blasting criteria in this consent;</p> <p>(f) included community notification procedures for the blasting schedule, in particular to nearby residences; and</p> <p>(g) include a protocol for investigating and responding to complaints.</p> <p>The Applicant must implement the Approved Blast Management Plan as approved from time to time by the <b>Planning Secretary</b>.</p> <p><i>Note: prior to the approval of the Blast Management Plan revised under Modification 8, the most recent approved version must continue to have full force and effect and must be implemented.</i></p>	<p>23/11/2016 (Mod 8 approved 17/11/2016), Updated/current Blast Management Plan (2019).</p>	<p>A BMP was approved by DP&amp;E in letter dated 23/11/16 in compliance with part (a) of this condition. The BMP was updated and approved in 2019.</p> <p><b>Opportunity for improvement [DQ7/23]:</b> Within the Plan Table 2.1 Authorised Personnel &amp; Service Providers should be updated as required and date approved and name of person approving needs to be included. Attachment C: Blast Notification List last updated 27/02/2019. This list should be reviewed for currency and confirmed in the document.</p>

**Blast Monitoring**

21	<p>The Applicant <b>must</b> monitor the airblast overpressure and peak particle velocity impacts of the development at the permanent monitoring station as approved by the <b>EPA</b>, to the satisfaction of the <b>EPA</b> and <b>Planning Secretary</b>, using the specified units of measure, frequency, sampling method, and location in Table 6.</p>	<p>Confirmed during interview with Blast Supervisor and reviewed Annual Returns. Real time monitors are used and record in Boral's data system called Saros.</p>	<p><b>Compliant</b></p> <p>No non-compliances with the EPL regarding blast monitoring have been recorded in the audit period.</p> <p>Monitoring is provided to the EPA via EPL returns, and the</p>
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Parameter	Unit of Measure	Frequency	Sampling Method	Measurement Location
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Number	Details				Evidence Sources/Questions	Audit Finding
	Airblast overpressure	dB(Lin Peak)	During every blast	AS2187.2-1993	Not less than 3.5m from a building or structure <i>(or otherwise agreed by EPA)</i>	Secretary via the Annual Review.
	Peak particle velocity	mm/s	During every blast	AS2187.2-1993	Not more than 30m from a building or structure <i>(or otherwise agreed by EPA)</i>	

Table 6: Airblast overpressure and peak particle velocity monitoring

Standards Australia, 1993, AS2187.2-1993: Explosives - Storage, Transport and Use of Explosives

**Air Quality**

**Impact Assessment Criteria**

**22** The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 7 at any residence on privately-owned land.

Pollutant	Averaging Period	Criterion
Particulate matter < 10 µm (PM10)	Annual	<sup>a,d</sup> 25 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM10)	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>

Air Quality Monitoring Plan, monitoring results, compliance reporting in Annual Reviews and mitigation measures, EPL Annual Returns

**Compliant**

The relevant criteria are included in the Air Quality Monitoring Plan. Two exceedances have been noted in the monitoring results within the FY 2022 Annual Reviews. It is noted that dust deposit sources other than the quarry may be



Number	Details	Evidence Sources/Questions	Audit Finding
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Particulate matter < 2.5 µm (PM10)	Annual	a,d 8 µg/m3	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m3	
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a,d</sup> 4 g/m <sup>2</sup> /month

Table 7: Air Quality Impact Assessment Criteria

Notes:

a Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).

b Incremental impact (ie increase in concentrations due to the development alone, with zero allowable exceedances of the criteria over the life of the development).

c Deposited dust is to be 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.

d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Planning Secretary.

contributing to the exceedances in some instances.  
 The intent of this condition is management of ambient air quality on privately owned land, as such a review of the complaints register was undertaken.  
 One complaint has been received since 2021 in relation to dust.  
 Mitigation measures are in place on-site including use of a water truck which was observed in operation on site – See Appendix 3.

#### Air Quality Operating Conditions

23

The Applicant must:  
 (a) take all reasonable steps to minimise dust, fume and greenhouse gas emissions of the development;  
 (b) regularly assess meteorological and air quality monitoring data and relocate, modify or stop operations on the site to ensure compliance with the relevant conditions of this consent;

Air Quality Management Plan, inspection of dust mitigation measures during site visit, complaints register.  
 On 16th August 2021 the EPA received a

**Compliant**  
 Boral is moving to real-time monitors which will enable proactive approach to management.



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>(c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d to Table 7 above); and</p> <p>(d) minimise any visible off-site air pollution, to the satisfaction of the Planning Secretary.</p>	<p>complaint that dust was blowing from the quarry towards Dunmore and Minnamurra. The Quarry confirmed dust suppression sprays at the transfer points in the plant were operational and the water cart was in use during the day.</p>	
<b>Air Quality Management Plan</b>			
24	<p>The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:</p> <p>(a) be submitted to the Planning Secretary for approval within 6 months of the determination of Modification 9, unless otherwise agree by the Planning Secretary;</p> <p>(b) describe the measures to be implemented to ensure:</p> <ul style="list-style-type: none"> <li>• compliance with the air quality criteria and operating conditions of this consent;</li> <li>• best practice management is being employed; and</li> <li>• the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li> </ul> <p>(c) describe the proposed air quality management system;</p> <p>(d) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> <li>• is capable of evaluating the performance of the development and informing day to day management decisions;</li> <li>• includes a protocol for determining any exceedances of the relevant conditions of consent; and</li> </ul>	<p>Air Quality Management Plan, inspection of dust mitigation measures during site visit, observation of water truck in action, review of complaints register.</p>	<p><b>Compliant</b> Approved Air Quality Management Plan (May 2019)</p>

Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>effectively supports the air quality management system.</li> </ul> <p>The Applicant must implement the approved Air Quality Management Plan as approved by the <a href="#">Planning Secretary</a>.</p>		
<b>Meteorology Monitoring</b>			
25	<p>For the duration of the development, the Applicant must ensure that there is a suitable meteorological station operating in close proximity to the site that:</p> <p>(a) complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007) (as may be updated or replaced from time to time); and</p> <p>(b) is capable of continuous real-time measurement of atmospheric stability category determined by the sigma theta method in accordance with the NSW Industrial Noise Policy (EPA, 2000), (as may be updated or replaced from time to time) unless a suitable alternative is approved by the <a href="#">Planning Secretary</a> following consultation with the EPA.</p>	Site inspection of permanent meteorological stations, review of meteorological monitoring results.	<b>Compliant</b>
26	Deleted	N/A	<b>N/A</b>
<b>Surface and Ground Water</b>			
<b>Pollution of Waters</b>			
27	<p>Except as may be expressly provided by an Environment Protection Licence, the Applicant <b>must</b> comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> during the carrying out of the development.</p>	Section 120 of the <i>Protection of the Environment Operations Act 1997</i> , L1.1 EPL and EPL Annual Returns.	<b>Compliant</b>
<b>Water Supply</b>			
28A	<p>The applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations to match its availability water supply.</p> <p><i>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.</i></p>	Water Management Plan (2016), water licences and permits, site inspection. Water Supply Works approval number	<b>Compliant</b> The current Water Management Plan (Arcadis, 2016) notes the project holds the following water licences and permits:





Number	Details	Evidence Sources/Questions	Audit Finding
		<p>10WA103611 Schedule 3 of the approval applies a number of statutory conditions including conditions relating to record keeping (via log books or meters fitted with data loggers) and notifications of breach of the conditions. During site interview Boral confirmed record keeping and no notifications of a breach.</p>	<ul style="list-style-type: none"><li>• Surface water extraction licence WAL25152 to extract 227ML pa from Rocklow Creek;</li><li>• Water Supply Works approval number 10WA103611; and</li><li>• DA 470-11-2003 permitting use of water from on-site dams.</li></ul> <p>The audit site inspection revealed water in site dams was available for processing and dust suppression.</p>
<b>Water Discharge Limit</b>			
28	<p>The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.</p>	<p>Inspection of discharge monitoring points, Annual Returns, interviews.</p>	<p><b>Compliant</b></p> <p>The following uncontrolled discharge events occurred in the reporting period that resulted in exceedances, or inability to sample but did not result in a breach of licence conditions:</p> <ul style="list-style-type: none"><li>• 7 - 10 Feb 2020</li><li>• 16 - 17 Feb 2020</li><li>• 26 - 28 July 2020</li><li>• 7 - 10 August 2020</li><li>• 19 - 23 March 2021</li><li>• 5 - 7 May 2021</li></ul>



Number	Details	Evidence Sources/Questions	Audit Finding
			<ul style="list-style-type: none"> <li>• 23 Feb 2022</li> <li>• 2 Mar 2022</li> <li>• 7 Mar 2022</li> <li>• 25 Mar 2022</li> <li>• 7 Apr 2022</li> <li>• 10 May 2022</li> <li>• 23 May 2022</li> <li>• 2-5 Jul 2022</li> <li>• 6 - 9 Oct 2022</li> <li>• 8 - 11 Feb 2023</li> <li>• 13 - 15 Mar 2023</li> </ul>
			<p><b>Opportunity for improvement [DQ8/23]:</b> Implement updated Water Management Plan when approved to reconfigure storage on site and better manage uncontrolled discharge events. As part of updated WMP also consider onsite storage capacity with regards to potential future climate change weather/storm intensity increases.</p>
<b>Site Water Balance</b>			
<b>29</b>	<p>In each Annual Review, the Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) recalculate the site water balance for the development; and</li> <li>(b) provide information on evaporative losses, dust suppression, dam storage levels and</li> </ul>	Annual Review.	<p><b>Compliant</b></p> <p><u>2020</u> Section 6.5 of Annual Review.</p>



Number	Details	Evidence Sources/Questions	Audit Finding
	(c) evaluate water take against licensing requirements.		<p>Doesn't clearly evaluate against licensing requirements.</p> <p><u>2021</u> Section 5.5 of Annual review. Doesn't clearly evaluate against licensing requirements.</p> <p><u>2022</u> Section 5.5 of Annual review. Evaluate against licensing requirements.</p> <p><u>2023</u> Section 5.5 of Annual review. Evaluate against licensing requirements.</p> <p><b>Opportunity for improvement [DQ9/23]:</b> Ensure all future Annual Reviews address the reporting requirements in Schedule 4, Condition 29.</p>
<b>Storm Water Management System</b>			
30	The Applicant must ensure that the storm water management system for the development is designed, constructed and operated to capture and treat polluted waters from storm event(s) of up to and including the 5-day, 95th percentile rainfall event.	Site inspection of stormwater management system, Water Management Plan prepared by Arcadis 2016.	<b>Compliant</b> Water Management Plan prepared and implemented in 2008 by Evans and Peck and updated in 2016 includes



Number	Details	Evidence Sources/Questions	Audit Finding
31	<p>The Applicant <b>must</b> ensure that the basins in the storm water management system are managed in accordance with the operating principles within the revised Water Management Plan prepared by Evans and Peck, dated April 2008, or any subsequent Water Management Plan approved by the Secretary, to maintain the required storm water storage volume.</p>	<p>Water Management Plan (Arcadis, 2016), Operating Principles (Section 3.2.4.5), monthly environmental inspection program, inspection logs, interview with Environmental Co-ordinator.</p>	<p>provision for a stormwater management system. Section 3.2.4.5 includes Operating Principles designed to address the applicable condition. Revised Water Management Plan is currently under review by Boral Management.</p> <p><b>Compliant</b> Procedures from Water Management Plan created by Evans and Peck in 2008 have been incorporated into the 2016 Water Management Plan prepared by Arcadis. Water Management Plan is currently under review by Boral Management.</p>
<b>Offline Dam</b>			
32	<p>By 18 May 2008, or as otherwise agreed to by the Planning Secretary, the Applicant <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) modify the existing dam at the site to create <b>increased capacity</b> offline from Rocklow Creek;</li> <li>(b) construct dams within the site of sufficient capacity to ensure that the water quality criteria in condition 29 can be met for all rainfall events up to and including the 5-day duration 95th percentile rainfall event;</li> <li>(c) ensure the discharge and overflow points of the dams do not cause erosion at the point of discharge/overflow;</li> </ul>	<p>Site inspection: dam, discharge points, dam bank, rehabilitation/ stabilisation, EPA interview, WMP.</p>	<p><b>Compliant</b> Water Management Plan is currently under review by Boral Management.</p>

Number	Details	Evidence Sources/Questions	Audit Finding
	<p>(d) rehabilitate and stabilise the banks of the dams; and            (e) ensure the integrity of the dams would not be compromised by flooding; to the satisfaction of the EPA and the Planning Secretary.</p>		
33	<p>Prior to carrying out any of these works, the Applicant <b>must</b> prepare, and subsequently implement, a Dam Upgrade Plan in consultation with the EPA, and to the satisfaction of the Planning Secretary.            This plan must include:</p> <ul style="list-style-type: none"> <li>(a) the detailed design and specifications of the proposed works, which have been certified by a practicing registered engineer;</li> <li>(b) an erosion and sediment control plan for the proposed works, that is consistent with the requirements in the Department of Housing’s <i>Managing Urban Stormwater: Soils and Construction</i> manual;</li> <li>(c) a vegetation and rehabilitation plan, setting out how the banks of the dam and other relevant pollution control features would be rehabilitated and stabilised, and the baffle and macrophyte zone would be constructed;</li> <li>(d) an acid sulfate soil management plan that is consistent with the <i>NSW Acid Sulfate Soil</i> manual;</li> <li>(e) a construction program for the proposed works; and</li> <li>(f) a program setting out how the modified dam and associated revegetation works would be maintained during the life of the development.</li> </ul> <p>The Applicant <b>must</b> implement the approved management plan as approved from time to time by the Planning Secretary.</p>	<p>During site interview Boral confirmed Draft WMP under review by Boral Management, which includes Dam Upgrade Plan, ESCP, VRMP and ASSMP. A Dam Upgrade Plan is included in the updated Water Management Plan under review by Boral Management.</p>	<p><b>Compliant</b>            As executed report for Dam Upgrade Plan certified by practicing engineer, Jon Thompson of Coffey Geotechnics Pty Ltd, was approved by the Secretary 20/02/17.</p>
34	<p>Within 1 month of completing the construction works in the Dam Upgrade Plan, the Applicant <b>must</b> submit an as-executed report, certified by a practicing registered engineer, to the satisfaction of the EPA and Planning Secretary.</p>	<p>As-executed Report for previous Dam Upgrade.</p>	<p><b>Compliant</b>            As executed report for Dam Upgrade Plan certified by practicing engineer, Jon Thompson of Coffey Geotechnics Pty Ltd, was</p>



Number	Details	Evidence Sources/Questions	Audit Finding
			approved by the Secretary 20/02/17.
<b>Lower Dam Transition Plan</b>			
35A	<p>Within 3 months of the determination of Modification 9, or as otherwise agreed by the <a href="#">Planning Secretary</a>, the Applicant must prepare a Lower Dam Transition Plan in consultation with the EPA and to the satisfaction of the <a href="#">Planning Secretary</a>. The plan must include a program to:</p> <p>(a) undertake a broader assessment of the site's water management system and potential water pollution impacts; and</p> <p>(b) investigate reasonable and feasible mitigation measures to improve water quality outcomes for the site, including altering the design of the Lower Dam or else transitioning away from its use, within two years.</p> <p>The Applicant must not alter the Lower Dam until this plan is approved by the <a href="#">Planning Secretary</a>. The Applicant must implement the approved plan as approved by the <a href="#">Planning Secretary</a>.</p>	N/A	<b>Compliant</b> The Lower Dam Transition Plan has been prepared as part of the updated Water Management Plan and is currently under review by Boral Management.
<b>Flocculent Management</b>			
35	The Applicant <b>must not use flocculants on the site.</b>	During site interview Boral confirmed no use of flocculants, no evidence of flocculent storage during site inspection, Water Management Plan.	<b>Compliant</b>
36	<b>Deleted.</b>	N/A	<b>N/A</b>
<b>Other Water Management Works</b>			
37	<p>Within 18 months of the date of this consent, the Applicant <b>must</b> carry out the following works:</p> <p>(a) <i>Workshop and Fuel Storage Area</i></p>	Site inspection of workshop/fuel storage area and magazine area.	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>desilt drains and culverts upstream of the workshop to limit flooding;</li> <li>construct a first flush collection basin to capture and store the first 13mm of run-off from the external service bays before it is treated by the oil/water separator; and</li> <li>bund and roof the drum storage area;</li> </ul> <p>(b) <i>Magazine Area</i></p> <ul style="list-style-type: none"> <li>reinstate drain through access road to magazines to direct stormwater flows to the main drain;</li> </ul> <p>(c) <i>deleted</i></p> <p>to the satisfaction of EPA and the <a href="#">Planning Secretary</a>.</p>		
<b>Bunding</b>			
38	<p>Impervious bunds must be constructed around all fuel, oil and chemical storage areas and the bund volume must be large enough to contain 110 per cent of the volume held in the largest container. The bund must be designed and installed in accordance with the requirements of the EPA Environment Protection Manual Technical Bulletin <i>Bunding and Spill Management</i>.</p>	<p>Site inspection of fuel, oil and chemical storage areas. Monthly inspection checklists, interview with Environmental Co-ordinator.</p>	<p><b>Compliant</b> Photographs included in Appendix 3.</p>
<b>Monitoring</b>			
39	<p>The Applicant <b>must</b>:</p> <p>(a) measure:</p> <ul style="list-style-type: none"> <li>the volume of water discharged from the site via licenced discharge points;</li> <li>water use on the site;</li> <li>water transfers across the site;</li> <li>dam and water structure storage levels;</li> </ul> <p>(b) monitor the quality of the surface water:</p> <ul style="list-style-type: none"> <li>discharged from the licence discharge point/s of the development;</li> <li>upstream and downstream of the development;</li> </ul>	<p>Annual Review and Annual Returns.</p>	<p><b>Compliant</b> Measuring and monitoring is occurring and being reported to EPA and DP&amp;E in the Annual Reviews and Annual Returns.</p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>(c) monitor flows in Rocklow Creek; and            (d) monitor regional groundwater levels and quality; to the satisfaction of the EPA and the Planning Secretary.  <b>Note: On the provision of two years of monitoring data that shows negligible impact on the regional groundwater network, the Planning Secretary may agree to suspend monitoring of regional groundwater levels and/or quality.</b></p>		
<b>Site Water Management Plan</b>			
40	<p>Within 12 months of the date of this consent, the Applicant, <b>must</b> prepare, and subsequently implement, a Site Water Management Plan for the development, in consultation with the DPIE Water, and to the satisfaction of the Planning Secretary. This plan must include:</p> <ul style="list-style-type: none"> <li>(a) the predicted site water balance;</li> <li>(b) an Erosion and Sediment Control Plan;</li> <li>(c) a Surface Water Monitoring Program</li> <li>(d) a Ground Water Monitoring Program; and</li> <li>(e) an Integrated Water Management Strategy.</li> </ul> <p><b>The Applicant must implement the approved management plan as approved from time to time by the Planning Secretary.</b></p>	Water Management Plan 2016	<p><b>Compliant</b>            The current WMP was prepared in November 2016 by Arcadis.            (a) Site Water Balance completed by Evans and Peck in 2008. Details are included in Section 5 of the WMP.            (b) Section 6.2 of the WMP provides the details of the ESCP.            (c) Section 6.3 of the WMP.            (d) Section 6.4 of the WMP.            (e) Section 4 of the WMP.            An updated Water Management Plan is currently under review by Boral Management.</p>
41	<p>The Erosion and Sediment Control Plan <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) be consistent with the requirements of the Department of Housing’s <i>Managing Urban Stormwater: Soils and Construction</i> manual;</li> <li>(b) identify activities that could cause soil erosion and generate sediment;</li> </ul>	Review of the Erosion and Sediment Control Plan (ESCP), Consistency with <i>Managing Urban Stormwater: Soils and</i>	<p><b>Compliant</b>            (a) The WMP (2016) has addressed the previous inconsistencies with the Blue Book, being: a site layout map</p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>(c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;</li> <li>(d) describe the location, function, and capacity of erosion and sediment control structures; and</li> <li>(e) describe what measures would be implemented to maintain the structures over time.</li> </ul>	<p><i>Construction</i> manual (Blue Book).</p>	<p>and information on timing, responsibilities etc. for maintenance programs.            (b) Section 6.2 of the WMP.            (c) Section 6.2 of the WMP.            (d) Figure 3.2 of the WMP.            (e) Section 6.2 of the WMP.            An updated Water Management Plan is currently under review by Boral Management.</p>
<p>42</p>	<p>The Surface Water Monitoring Program <b>must</b> include:</p> <ul style="list-style-type: none"> <li>(a) detailed baseline data on surface water flows and quality in Rocklow Creek;</li> <li>(b) surface water impact assessment criteria;</li> <li>(c) a program to monitor surface water flows and quality in Rocklow Creek;</li> <li>(c1) a program to monitor and minimise surface water and groundwater ingress into the Lower Dam and water egress into Rocklow Creek;</li> <li>(d) a program to monitor bank and bed stability in Rocklow Creek; and</li> <li>(e) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.</li> </ul>	<p>Review of the Surface Water Monitoring Program and monthly environmental checklist and interview with Environmental Co-ordinator.</p>	<p><b>Compliant</b>            Surface Water Quality Monitoring Program is included as Section 6.3 of the WMP.            (a) Included in Table 6-6.            (b) Surface water impact assessment criteria is included in Section 6.3.2.            (c) Table 6-6 includes monitoring of flow and quality at locations within Rocklow Creek (GS1, GS2, GS3).            (c1) Not addressed – must be addressed as part of updated Water Management Plan.            (d) Appendix A – Erosion and Sediment Control Checklist includes requirement for</p>



Number	Details	Evidence Sources/Questions	Audit Finding
			<p>inspection of stream bank stability. (e) Appendix A – Erosion and Sediment Control Checklist.</p> <p>An updated Water Management Plan is currently under review by Boral Management.</p>
43	<p>The Ground Water Monitoring Program <b>must</b> include:</p> <ul style="list-style-type: none"> <li>(a) detailed baseline data on ground water levels and quality, based on statistical analysis;</li> <li>(b) ground water impact assessment criteria; and</li> <li>(c) a program to monitor regional ground water levels and quality; and</li> <li>(d) a program to monitor groundwater inflows.</li> </ul> <p>Note: On the provision of two years of monitoring data that shows negligible impact on the regional groundwater network, the Planning Secretary may agree to suspend monitoring of regional groundwater levels and/or quality.</p>	<p>Review of the Ground Water Monitoring Program and monthly environmental checklist and interview with Environmental Co-ordinator.</p>	<p><b>Compliant</b></p> <p>A Groundwater Monitoring Program is included in Appendix H of the WMP. The Plan was assessed in the 2020 IEA.</p> <p>An updated Water Management Plan is currently under review by Boral Management.</p>
44	<p>The Integrated Water Management Strategy <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) explore a range of options for a sustainable resource alternative for water supply to the site;</li> <li>(b) identification of all possible and available sources of water;</li> <li>(c) consistency with Government Water Reform initiatives and policies;</li> <li>(d) quality of water to meet usage requirements including any possible effects on product;</li> <li>(e) costs of supply;</li> <li>(f) health and environmental impacts;</li> <li>(g) legislative requirements;</li> <li>(h) assessment of the feasibility, benefits and costs of options;</li> </ul>	<p>Water Management Plan</p>	<p><b>Compliant</b></p> <p>A summary of WMS is included in Section 4 of the WMP.</p> <p>Site Water Management Plan prepared by Matrix Consulting.</p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>(i) a process to identify and evaluate preferred options for implementation; and</li> <li>(j) the identification of a timetable for implementation of the selected options.</li> </ul>		
<b>Flora and Fauna</b>			
<b>Vegetation Offset Strategy</b>			
45	<p>The Applicant <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) establish, conserve, and maintain at least: <ul style="list-style-type: none"> <li>• <b>4.6 hectares</b> of <i>Melaleuca armillaris</i> Tall Shrubland; and</li> <li>• <b>8.2 hectares</b> of Blue Gum-White Box Woodland/Forest, on Boral-owned land adjacent to the development; and</li> </ul> </li> <li>(b) conserve, maintain, and enhance the vegetation in the area to the south of the development marked on the map in Appendix 3 as <b>Remnant Vegetation Conservation Area</b>;</li> <li>(c) <b>conserve, maintain, enhance and establish the vegetation in the area to the south of the development marked on the map in Appendix 3 as Offset Area, in accordance with the letter from Boral to the Department dated 22 September 2008 titled Dunmore Quarry – Revised Offset for Quarry Extension; and</b></li> <li>(d) <b>within 12 months of the date of Modification 8, the Applicant must provide a biodiversity offset strategy outlining the measures to offset 48 Illawarra Zieria individuals and 1.94 ha of native vegetation clearing (including 0.05ha of Illawarra Subtropical Rainforest (EEC)) to the satisfaction of BCS and the Planning Secretary. The offset must demonstrate that the biodiversity values in the general vicinity of the site have been maintained or improved; and</b></li> <li>(e) <b>within 12 months of the date of approval of Modification 9, the Applicant must provide a biodiversity offset strategy outlining measures to offset 162 Illawarra Zieria individuals by no less than 2,268 Illawarra Zieria credits, to the satisfaction of BCS and the Planning Secretary. The offset</b></li> </ul>	Site Inspection, Flora and Fauna Management Plan (2019), Annual Reviews 2020 - 2023	<b>Compliant</b> Flora and Fauna Management Plan has been updated in 2019 to reflect the current requirements, and progress is being reported in the Annual Reviews.

Number	Details	Evidence Sources/Questions	Audit Finding
	<p>must demonstrate that the biodiversity values in the general vicinity of the site have been maintained or improved.</p> <p>Note: The Compensatory Habit Area established to address paragraph (a) is marked on the map in Appendix 3.</p>		
46A	<p>Within 12 months of the date of Modification Application 470-11-2003 Mod 4, the Applicant <b>must</b> make suitable arrangements in consultation with the BCS to provide appropriate long term security for the biodiversity offset referred to in condition 46 (c), to the satisfaction of the Planning Secretary.</p>	Conservation Agreement, FFMP	<b>Compliant</b> Conservation Agreement signed in 2011. Item E on Page 2 of the Conservation Agreement notes that the Minister considers this condition to be satisfied by the Conservation Agreement.
46B	<p>Within 12 months of the date of providing the biodiversity offset strategy required under the condition 46(d), the Applicant must make suitable arrangements to provide long term security for this strategy, to the satisfaction of the Planning Secretary.</p>	N/A	<b>N/A</b> As detailed in Appendix A of Flora and Fauna Management Plan (2019).
46C	<p>Within 12 months of the date of providing the biodiversity offset strategy required under condition 46(e), the Applicant must make suitable arrangements to provide long term security for this strategy, to the satisfaction of the Planning Secretary.</p> <p>Note: Mechanisms to provide appropriate long term security to the land within a biodiversity offset strategy in accordance with the NSW Biodiversity Offset Policy for Major Projects 2014, include a BioBanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome.</p>	N/A	<b>N/A</b> As detailed in Appendix A of Flora and Fauna Management Plan (2019).
<b>Flora and Fauna Management Plan</b>			
46	<p>Within 12 months of the date of this consent, the Applicant <b>must</b> prepare, and subsequently implement, a Flora and Fauna Management Plan for the development to the satisfaction of the Planning Secretary. This plan must include:</p>	Flora and Fauna Management Plan, EMM (2019), Independent Environmental Audit of	<b>Compliant</b> (a) FFMP Appendix B. (b) FFMP Section 4.1.1 (c) FFMP Section 4.1.2

Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>(a) a Vegetation Clearing Protocol;</li> <li>(b) a Compensatory Habitat Management Plan;</li> <li>(c) a Remnant Vegetation Conservation Plan; and</li> <li>(d) a Biodiversity Offset Management Plan.</li> </ul> <p>The Applicant must implement the approved management plan as approved from time to time by the Planning Secretary.</p>	Flora and Fauna Management Plan (EPS, 2017)	(d) Not required, addressed in FFMP Appendix A.
47	<p>The Vegetation Clearing Protocol <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) delineate the areas of remnant vegetation to be cleared; and</li> <li>(b) describe the procedures that would be implemented for: <ul style="list-style-type: none"> <li>i. pre-clearance surveys;</li> <li>ii. progressive clearing;</li> <li>iii fauna management;</li> <li>iv conserving and reusing topsoil;</li> <li>v. collecting seed from the site;</li> <li>vi salvaging and reusing material from the site; and</li> <li>vii. controlling weeds.</li> </ul> </li> </ul>	Flora and Fauna Management Plan, EMM (2019)	<p><b>Compliant</b></p> <p>Vegetation Clearing Protocol in place, however it does not cover collecting seed from site, or conserving and reusing topsoil.</p> <p><b>Opportunity for improvement [DQ10/23]:</b></p> <p>Vegetation Clearing Protocol to be updated to address collecting seed from site and conserving and reusing topsoil.</p>
48	<p>The Compensatory Habit Management Plan <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) describe the compensatory habitat proposal <b>to satisfy condition 46(a)</b>;</li> <li>(b) justify why this area(s) is suitable for the compensatory habitat proposal;</li> <li>(c) establish baseline data for the existing habitat in the proposed compensatory habitat area(s);</li> <li>(d) describe how the compensatory habitat proposal would be implemented;</li> <li>(e) set completion criteria for the compensatory habitat proposal; and</li> <li>(f) describe how the performance of the compensatory habitat management proposal would be monitored over time.</li> </ul>	Flora and Fauna Management Plan, EMM (2019)	<p><b>Compliant</b></p> <p>Addressed in Section 4 of the Flora and Fauna Management Plan (2019)</p>

Number	Details	Evidence Sources/Questions	Audit Finding
49	The Remnant Vegetation Conservation Plan <b>must</b> : (a) describe what measures would be implemented <b>to satisfy condition 46(b)</b> ; (b) establish baseline data for the existing vegetation in the area; (c) <b>set completion criteria for the Remnant Vegetation Conservation Area</b> ; and (d) describe how the performance of the Remnant Vegetation Conservation Area would be monitored over time.	Flora and Fauna Management Plan, EMM (2019)	<b>Compliant</b> Addressed in Section 4.1.2 of the Flora and Fauna Management Plan (2019)
50a	The Biodiversity Offset Management Plan <b>must</b> : (a) describe what measures would be implemented to satisfy condition 46(c); (b) describe the biodiversity offset strategies in conditions 46(d)-(e); (c) include a timetable for providing long term security of the offset areas; (d) set performance and completion criteria for the offset areas; and (e) include a program to monitor and report on the effectiveness of the implementation measures, and progress against the performance and completion criteria.	Flora and Fauna Management Plan, EMM (2019)	<b>Compliant</b> Biodiversity Offset Strategy prepared (FFMP Appendix A).
<b>Reporting</b>			
50	The Applicant <b>must</b> include a progress report on the implementation of the Flora and Fauna Management Plan in the <b>Annual Review</b> .	Annual Review 2020 – 2023	<b>Compliant</b> 2020: Section 6.7 of Annual Review. 2021: Section 5.7 of Annual Review. 2022: Section 5.7 of Annual Review. 2023: Section 5.7 of Annual Review.
51	Within 3 years of the date of this consent, and every 5 years thereafter unless the <b>Planning Secretary</b> directs otherwise, the Applicant <b>must</b> commission, and pay the full cost of an Independent Audit of the Flora and Fauna Management Plan. This audit must:	Independent audit of Flora and Fauna Management Plan (EPS, 2017).	<b>Compliant</b> Next independent audit of the Flora and Fauna Management Plan due June 2024.



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>(a) be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the <a href="#">Planning Secretary</a>;</li> <li>(b) assess the performance of the Flora and Fauna Management Plan;</li> <li>(c) review the adequacy of the Flora and Fauna Management Plan; and, if necessary,</li> <li>(d) recommend actions or measures to improve the performance and/ or adequacy of the Flora and Fauna Management Plan.</li> </ul>	<p>To reflect the progression in Dunmore Quarry’s consent modifications and operations, Boral has updated the Flora and Fauna Management Plan (2016). A new Flora and Fauna Management Plan was prepared by EMM in June 2019.</p>	
<b>Rehabilitation</b>			
<b>Rehabilitation</b>			
52	<p>The Applicant <b>must</b> progressively rehabilitate the site to the satisfaction of the <a href="#">Planning Secretary</a>.</p>	<p>Flora and Fauna Management Plan (EMM, 2019)            An RMP has been prepared for the site but no evidence of progressive rehabilitation has occurred. The RMP notes as majority of the site is operational, opportunities for rehabilitation are not currently feasible. During site interview Boral confirmed the site</p>	<b>Compliant</b>





Number	Details	Evidence Sources/Questions	Audit Finding
		is still operational and therefore no rehabilitation of the site has been undertaken.	
<b>Rehabilitation Management Plan</b>			
53	<p>Within 6 months of the date of this consent, the Applicant <b>must</b> prepare, a Rehabilitation Management Plan for the site to the satisfaction of the <b>Planning Secretary</b>. This plan must:</p> <ul style="list-style-type: none"> <li>(a) identify the disturbed area at the site;</li> <li>(b) describe in general the short, medium, and long-term measures that would be implemented to rehabilitate the site;</li> <li>(c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate the site; and</li> <li>(d) describe how the performance of these measures would be monitored over time.</li> </ul> <p>The Applicant must implement the approved management plan as approved from time to time by the <b>Planning Secretary</b>.</p>	Flora and Fauna Management Plan (EMM, 2019)	<p><b>Compliant</b></p> <p>The following sections of the current RMP (EMM, 2019) address the consent condition:</p> <ul style="list-style-type: none"> <li>(a) Section 3</li> <li>(b) Section 4</li> <li>(c) Section 4 and 5</li> <li>(d) Section 7</li> </ul>
<b>Rehabilitation and Conservation Bond</b>			
54	<p>Within 6 months of the date of this consent, the Applicant must lodge a Rehabilitation and Conservation Bond with the Department to ensure that the conservation commitments and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the relevant plans and the relevant conditions of this consent. The sum of the bond must be an amount agreed by the <b>Planning Secretary</b> and determined by:</p> <ul style="list-style-type: none"> <li>a. calculating the full cost of implementing the compensatory habitat area (see condition 49) and the offset areas (see condition 50A);</li> <li>b. calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations (see condition 54); and</li> </ul>	Bank guarantee, Statement confirming payment into the Biodiversity Conservation Fund for an offset obligation.	<p><b>Compliant</b></p> <p>Bank guarantee and associated documentation sighted in 2020 IEA.</p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>c. employing a suitably qualified quantity surveyor or other expert to verify the calculated costs.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"><li>• <i>Alternative funding arrangements for long term management of the offset areas, such as provision of capital and management funding as agreed by BCS as part of a BioBanking Agreement, or transfer to conservation reserve estate can be used to reduce the liability of the bond.</i></li><li>• <i>If capital and other expenditure required by the Flora and Fauna Management Plan or the Rehabilitation Management Plan is largely complete, the Planning Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.</i></li><li>• <i>If the conservation commitments/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the Planning Secretary, then the Planning Secretary will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy and rehabilitation of the site are not completed to the satisfaction of the Planning Secretary, then the Planning Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.</i></li></ul>		
55	<p>The Rehabilitation and Conservation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following an update or revision to the Flora and Fauna Management Plan or the Rehabilitation Management Plan, or following the completion of an Independent Environmental Audit. This review must consider the:</p> <p>(a) effects of inflation;</p> <p>(b) likely cost of implementing the compensatory habitat area and offset areas and rehabilitating all disturbed areas of the site (taking into account the likely surface disturbance over the next 3 years of the development); and</p> <p>(c) performance of the implementation of the compensatory habitat area and offset areas and rehabilitation of the site to date.</p>	N/A	N/A
56	Deleted.	N/A	N/A

Number	Details	Evidence Sources/Questions	Audit Finding
<b>Reporting</b>			
57	The Applicant <b>must</b> include a progress report on the Rehabilitation Management Plan in the <a href="#">Annual Review</a> .	Annual Review 2020 - 2023	<b>Compliant</b>
<b>Traffic and Transport</b>			
<b>North Kiama Bypass</b>			
58	The Applicant <b>must</b> facilitate access to the North Kiama Bypass along Tabbita Road in accordance with the terms set out in the Deed of Agreement between the Applicant and Dunmore Sand and Soil Pty Ltd, dated 29 July 2004.	N/A	<b>N/A</b> Boral now owns Dunmore Sand and Soil Pty Ltd.
<b>Transport Management Plan</b>			
59	<p>The Applicant <b>must</b> prepare and implement a Transport Management Plan for the development to the satisfaction of the <a href="#">Planning Secretary</a>. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified traffic consultant, in consultation with <a href="#">TfNSW</a> and Council, and submitted to the <a href="#">Planning Secretary</a> for approval by 31 May 2014;</li> <li>(b) include a drivers' code of conduct for the development;</li> <li>(c) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> <li>• all drivers of development-related vehicles comply with the drivers' code of conduct; and</li> <li>• compliance with the relevant conditions of this consent; and</li> </ul> </li> <li>(d) include a program to monitor the effectiveness of the implementation of these measures.</li> </ul> <p>The Applicant <b>must</b> implement the approved management plan as approved from time to time by the <a href="#">Planning Secretary</a>.</p>	Transport Management Plan (TMP) (Transport Planning Partnership Pty Ltd, 2016), review complaints and compliments register and incident register/reports.	<p><b>Compliant</b></p> <p>(a) Prepared by The Traffic Transport Planning Partnership Pty Ltd. Section 2 notes details consultation with RMS and Council. Letter approving plan from Secretary dated 23/11/16.</p> <p>(b) Appendix A of the TMP is the Driver's Code of Conduct.</p> <p>(c) Items addressed in TMP.</p> <p>(d) Section 3.4 of the TMP sets out the Monitoring Program.</p>
<b>Cumulative Traffic Impact Study</b>			
60A	<p>The Applicant <b>must</b>, in conjunction with the operators of the Bass Point Quarry and the Albion Park Quarry, cause to be prepared an independent Cumulative Traffic Impact Study. The study must:</p> <ul style="list-style-type: none"> <li>(a) be undertaken by a suitably qualified traffic consultant, whose appointment has been approved by the <a href="#">Planning Secretary</a>;</li> </ul>	Cumulative Traffic Impact Study	<p><b>Compliant</b></p> <p>(a) Prepared by The Traffic Transport Planning Partnership Pty Ltd.</p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>(b) be commissioned by 30 June 2014, and completed by 31 October 2014, or as otherwise agreed in writing by the <a href="#">Planning Secretary</a>;</li> <li>(c) be co-funded by the operators of the Dunmore, Bass Point and Albion Park quarries, proportionate to the quarries' respective quarry product road transport limits, as approved at 30 June 2014;</li> <li>(d) include a comprehensive assessment of current and future projected cumulative traffic impacts of the three quarries on the classified road network, undertaken in consultation with the <a href="#">TfNSW</a>; and</li> <li>(e) identify any reasonable and feasible measures that can be implemented to minimise the traffic and road safety impacts of quarry trucks on Mount Ousley Road, and the likely cost of implementing these measures.</li> </ul>		<ul style="list-style-type: none"> <li>(b) Evidence of extension until submission provided.</li> <li>(c) Noted in Section 1 of the document.</li> <li>(d) Items addressed in Cumulative Impact Assessment.</li> <li>(e) Section 4.4 identifies that the assessment and consultation with RMS concluded "<i>improvements are not at this stage considered practical, feasible or warranted</i>" for Mount Ousley Road.</li> </ul>
60B	<p>The Applicant <b>must</b>, in conjunction with the operators of the Bass Point Quarry and the Albion Park Quarry, prepare and implement a program to implement any reasonable and feasible measures identified in the Cumulative Traffic Impact Study not already undertaken by the Applicant, in an equitable manner with the two other quarry operators, to the satisfaction of the <a href="#">Planning Secretary</a>. The program must be submitted to the <a href="#">Planning Secretary</a> for approval by 28 February 2015, or as otherwise agreed in writing by the <a href="#">Planning Secretary</a>.</p>	Cumulative Traffic Impact Study	<p><b>Compliant</b> A Driver Code of Conduct has been prepared as per the Traffic Management Plan.</p>
<b>Transport Options Review</b>			
60C	<p>Within three years of the determination of Modification 11, and every five years thereafter (if directed to do so by the <a href="#">Planning Secretary</a>), the Applicant must commission and pay the full costs of a Transport Options Review for the development. This review must:</p> <ul style="list-style-type: none"> <li>a) be conducted by a suitably qualified, experienced and independent expert/s whose appointment has been endorsed by the <a href="#">Planning Secretary</a>;</li> </ul>	Annual Review 2023 A transport options review is required within three years of determination of Modification 11	<p><b>Non-compliant</b> <b>Low Risk</b> Transport Options Review not completed within consent condition timeframe.</p>

Number	Details	Evidence Sources/Questions	Audit Finding
	<p>b) be prepared in consultation with TfNSW, RMS and Council;</p> <p>c) review the economic, social and environmental costs and benefits of all reasonable and feasible options for the transport of quarry products from the site (including by rail and road);</p> <p>d) review and report on available rail terminal capacity;</p> <p>e) recommend any appropriate measures or actions to: i. reduce the economic, social and environmental costs associated with transport of quarry products by road from the site; and</p> <p>ii. maximise the use of rail deliveries from the site; and</p> <p>f) be conducted and reported to the satisfaction of the <a href="#">Planning Secretary</a>.</p> <p>Within three months of commencing this review, or within another timeframe agreed by the <a href="#">Planning Secretary</a>, the Applicant must submit a copy of the review report to the <a href="#">Planning Secretary</a> and any other NSW agency that requests it, together with its response to any recommendations contained in the review report.</p>	<p>and every five years after as per SC4.C60. This would correspond to March 2022. During site interview Boral confirmed EMM has prepared a Transport Management Plan to incorporate findings of the review. This plan will be updated post the IEA as part of the site wide environmental management plan review.</p>	<p><b>Opportunity for improvement [DQ11/23]:</b> Boral to coordinate Transport Option Review 6 months prior to renewal period.</p>
<b>Parking</b>			
60	The Applicant <b>must</b> provide sufficient parking on-site for all quarry-related traffic to the satisfaction of the <a href="#">Planning Secretary</a> .	Site inspection and interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b> Photographs in Appendix 3. Parking facilities have been upgraded.
<b>Road Haulage</b>			
61	The Applicant <b>must</b> ensure that all loaded vehicles entering or leaving the site are covered.	Site inspection and interviews with operators/staff.	<b>Compliant</b> Photographs in Appendix 3.
62	The Applicant <b>must</b> ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.	Site inspection of vehicles leaving site and	<b>Compliant</b>





Number	Details	Evidence Sources/Questions	Audit Finding
<b>Aboriginal Heritage</b>			
<b>Aboriginal Cultural Heritage Management Plan</b>			
63	<p>The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the <a href="#">Planning Secretary</a>. The plan must:</p> <ul style="list-style-type: none"><li>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the <a href="#">Planning Secretary</a>;</li><li>(b) be prepared in consultation with <a href="#">BCS</a> and the Registered Aboriginal Parties;</li><li>(c) be submitted to the <a href="#">Planning Secretary</a> for approval prior to commencing quarrying operations in the Croome West Pit, unless the <a href="#">Planning Secretary</a> agrees otherwise; and</li><li>(d) include a description of the measures that would be implemented to:<ul style="list-style-type: none"><li>• protect, monitor and manage known sites or potential areas of archaeological significance (including any proposed archaeological investigations or salvage measures);</li><li>• manage unanticipated finds including new Aboriginal objects and Aboriginal skeletal remains that are discovered during the development;</li><li>• store and display salvaged Aboriginal heritage items; and</li></ul></li></ul>	Aboriginal Heritage Management Plan (September 2017)	<b>Compliant</b> Aboriginal Heritage Management Plan prepared by Kelleher Nightingale Consulting Pty Ltd in consultation with RAPS in accordance with condition.

Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>ensure ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.</li> </ul> <p>The Applicant must implement the approved Aboriginal Heritage Management Plan as approved by the <a href="#">Planning Secretary</a>.</p>		
64	Deleted.	N/A	N/A
<b>Visual Impact</b>			
<b>Visual Amenity</b>			
65	The Applicant <b>must</b> minimise the visual impacts of the development to the satisfaction of the <a href="#">Planning Secretary</a> .	Site inspection considered visibility from the highway and presence of screening (e.g. vegetation screens).	<b>Compliant</b> Roadside vegetation offering screening along highway in good repair.
66	Prior to carrying out any development that would be visible from the areas to the south west of the quarry, the Applicant <b>must</b> construct, and subsequently maintain, the proposed visual/noise bund between the Croome Farm extraction area and the Jamberoo Valley to the satisfaction of the <a href="#">Planning Secretary</a> .	Site inspection confirmed effectiveness and maintenance of the visual/noise bund between the Croome Farm extraction area and the Jamberoo Valley.	<b>Compliant</b> Bund constructed and being maintained.
67A	The Applicant <b>must</b> : (a) construct the blending plant in the location shown on the figure in Appendix 4; and (b) ensure the maximum height of the blending plant is no greater than 15.2m.	Aerial photographs, site inspection.	<b>Compliant</b>

Number	Details	Evidence Sources/Questions	Audit Finding
<b>Lighting Emissions</b>			
67	The Applicant <b>must</b> take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development.	Site inspection at night, review of complaints register.	<b>Compliant</b> No lighting impacts complaints have been received in relation to the development. Lighting visible off-site at night from highway but not considered to be impacting the areas surrounding the development.
68	All external lighting associated with the development <b>must</b> comply with <i>Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i> .	Site inspection.	<b>Not able to determine</b> Lighting information was not known/collected by Boral. Lighting visible off-site at night from highway but not considered to be impacting the areas surrounding the development.
<b>Waste Management</b>			
<b>Waste Minimisation</b>			
69	The Applicant <b>must</b> minimise the amount of waste generated by the development to the satisfaction of the <a href="#">Planning Secretary</a> .	Site inspection, waste monitoring data (classification, volumes, frequency, management), interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>

Number	Details	Evidence Sources/Questions	Audit Finding
<b>Waste Classification</b>			
70	All liquid and non-liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: <i>Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999)</i> , or any other EPA document superseding this guideline.	Annual Reviews, site inspection and interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b> Waste management and classification reported on Annual Reviews. In general, waste on site was being classified and managed appropriately.
<b>Reporting</b>			
71	The Applicant <b>must</b> describe what measures have been implemented to minimise the amount of waste generated by the development in the <b>Annual Review</b> .	Annual Reviews 2020 – 2023.	<b>Compliant</b> 2020: Section 6.9 of Annual Review 2021: Section 5.9 of Annual Review 2022: Section 5.9 of Annual Review 2023: Section 5.9 of Annual Review
<b>Emergency and Hazards Management</b>			
<b>Dangerous Goods</b>			
72	The Applicant <b>must</b> ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	Site inspection, review of documentation regarding dangerous goods and site interviews with Environmental and Stakeholder Advisor &	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Finding
Environmental Business Partner and Environmental Manager.			
<b>Safety</b>			
73	The Applicant <b>must</b> secure the development to ensure public safety to the satisfaction of the <a href="#">Planning Secretary</a> .	Incident reporting, site inspection of security fences/gates.	<b>Compliant</b> Site fencing and signage in good repair. See examples in Appendix 3.
<b>Emergency Management</b>			
74	<p>Within 6 months of the date of this consent, the Applicant <b>must</b> document, and subsequently implement measures to minimise the environmental impacts of any emergency situations that could arise as a result of the operation of the Dunmore Quarry to the satisfaction of the <a href="#">EPA</a>. This documentation must:</p> <ul style="list-style-type: none"> <li>(a) identify any significant threats to the environment and/ or public health that could arise from activities associated with the operation of the quarry or construction works associated with the production increase. These threats may include excessive rainfall, problems during construction and operation, pump failures, excess flocculation, power or other utility failure, natural disaster, landslip, accidental spills and discharges, train derailment, spillage from trucks, fire etc.;</li> <li>(b) identify any subsequent direct or indirect environmental effects as a result of the threats;</li> <li>(c) identify the pollution that would result due to these threats and impacts on operations and what impact the pollution would have on the health of the community and the environment;</li> <li>(d) develop actions to effectively respond to the disruption of operations so the risk of pollution is minimised;</li> </ul>	Emergency response documentation, evidence of implementation and awareness via signage and Environmental and Stakeholder Advisor & Environmental Business Partner interview. The PIRMP requires annual review and a PIRMP drill. Boral confirmed PIRMP Annual Drill completed during audit period for 2023.	<b>Compliant</b>





Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>(e) develop a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution;</li> <li>(f) ensure that all relevant employees are familiar with the documentation; and</li> <li>(g) when developing this documentation identify any opportunities to integrate with Boral Emergency Plans.</li> </ul>		
<b>Bushfire Management</b>			
75	<p>The Applicant <b>must</b>:</p> <ul style="list-style-type: none"> <li>(a) ensure that the development is suitably equipped to respond to any fires on-site; and</li> <li>(b) assist the Rural Fire Service and Emergency Services as much as possible if there is a fire on-site.</li> </ul>	Bushfire Management Plan, site inspection.	<p><b>Compliant</b></p> <p>Evidence of fire response equipment present throughout site. See examples in Appendix 3.</p>
76	<p>Within 6 months of the date of this consent, the Applicant <b>must</b> prepare a Bushfire Management Plan for the development, to the satisfaction of Council and the Rural Fire Service.</p>	<p>Bushfire Management Plan, interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner. BMP implemented since 2005. Document last updated August 2016. Evidence of consultation with Shellharbour Council and RMS contained within document. Environmental and Stakeholder Advisor &amp; Environmental Business</p>	<p><b>Compliant</b></p>

Number	Details	Evidence Sources/Questions	Audit Finding
		Partner noted that an updated Bushfire Management Plan will be undertaken post IEA.	
<b>Production Data</b>			
77	The Applicant <b>must</b> : (a) provide annual production data to the MEG using the standard form for that purpose; and (b) include a copy of this data in the Annual Review.	Annual Review 2020-2023	<b>Compliant</b> Confirmed in Annual Reviews.
<b>Schedule 4A</b>			
<b>Additional Procedures</b>			
<b>Notification of Exceedances</b>			
1	As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise or air quality criterion in Schedule 4 of this consent, the Applicant must provide the details of the exceedance to any affected landowners and/or tenants.	Incident Register, interview with Environmental and Stakeholder Advisor & Environmental Business Partner and Annual Reviews	<b>Compliant</b>
2	For any exceedance of the air quality criteria in Schedule 4 of this consent, the Applicant must also provide to any affected landowners and/or tenants a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017).	N/A	N/A
<b>Independent Review</b>			
3	If a landowner considers the development to be exceeding any relevant noise or air quality criterion in Schedule 4 of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.	Consultation with DP&E, complaints register, interview with Environmental and Stakeholder Advisor &	<b>Compliant</b> No requests from landowners received.



Number	Details	Evidence Sources/Questions	Audit Finding
		Environmental Business Partner	
4	If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review	N/A	N/A
5	If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to: (i) consult with the landowner to determine their concerns; (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in Schedule 4 of this consent; and (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; (b) provide the Planning Secretary and landowner a copy of the independent review; and (c) comply with any written requests made by the Planning Secretary to implement any findings of the review.	N/A	N/A
<b>Schedule 5</b>			
<b>Environmental Management</b>			
<b>Environmental Management Strategy</b>			
1	If the Planning Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	Environmental Management Strategy prepared by Dunmore Quarry (2023)	<b>Compliant</b>  <b>Opportunity for improvement [DQ12/23]:</b> Legislation section



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>(a) be submitted to the <a href="#">Planning Secretary</a> for approval within 6 months of the <a href="#">Planning Secretary</a> requiring preparation of the strategy by notice to the Applicant;</p> <p>(b) provide the strategic framework for the environmental management of the development;</p> <p>(c) identify the statutory approvals that apply to the development;</p> <p>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</p> <p>(e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the development;</li> <li>• respond to any non-compliance; and</li> <li>• respond to emergencies; and</li> </ul> <p>(f) include:</p> <ul style="list-style-type: none"> <li>• copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>• a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> </ul> <p>The Applicant must implement any Environmental Management Strategy as approved from time to time by the <a href="#">Planning Secretary</a>.</p>		<p>needs to be updated with relevant legislation for <i>Biodiversity Conservation Act 2016</i>.</p>
<b>Evidence of Consultation</b>			
1A	<p>Where consultation with any State or local agency is required by the conditions of this consent, the Applicant must:</p> <p>(a) consult with the relevant agency prior to submitting the required document;</p> <p>(b) submit evidence of this consultation as part of the relevant document;</p>	<p>Management plans, correspondence with DP&amp;E and site interview with Environmental and Stakeholder Advisor &amp;</p>	<p><b>Compliant</b></p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>(c) describe how matters raised by the agency have been addressed and any matters not resolved; and</p> <p>(d) include details of any outstanding issues raised by the agency and an explanation of disagreement between any agency and the Applicant.</p>	Environmental Business Partner.	
<b>Management Plan Requirements</b>			
2	<p>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <li>• the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>• any relevant limits or performance measures/criteria; and</li> <li>• the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>• impacts and environmental performance of the development; and</li> <li>• effectiveness of any management measures (see (c) above);</li> </ul> <p>(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>• incidents;</li> <li>• complaints;</li> <li>• non-compliances with statutory requirements; and</li> </ul>	<p>Management plans.</p> <p>Site interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed the revised EMS (March 2023) has been submitted to DP&amp;E and is with DP&amp;E for review and approval.</p>	<b>Compliant</b>





Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"> <li>• exceedances of the impact assessment criteria and/or performance criteria;</li> <li>(h) a protocol for periodic review of the plan; and</li> <li>(i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of people who prepared and reviewed the management plan, a description of any revisions made and the date of the <a href="#">Planning Secretary's</a> approval.</li> </ul> <p><i>Note: The <a href="#">Planning Secretary</a> may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>		
<b>Application of Existing Strategies, Plans or Programs</b>			
3a	<p>The Applicant must continue to apply existing approved strategies, management plans, or monitoring programs that have most recently been approved under this consent, until the approval of a similar strategy, plan or program under this consent.</p>	<p>Management plans, interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner</p>	<b>Compliant</b>
<b>Updating &amp; Staging Submission of Strategies, Plans or Programs</b>			
3	<p>To ensure the strategies, plans or programs under this consent are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs to the <a href="#">Planning Secretary</a> for approval. With the agreement of the <a href="#">Planning Secretary</a>, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the <a href="#">Planning Secretary</a>, the Applicant may revise any strategy, plan or program approved under this consent without consulting with all the parties nominated under the applicable conditions of consent.</p> <p><i>Notes:</i></p>	<p>Management plans. Site interview with Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed the revised EMS (March 2023) has been submitted to DP&amp;E and is with DP&amp;E for review and approval.</p>	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Finding
<ul style="list-style-type: none"> <li>• While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the existing operations associated with the development are covered by suitable strategies, plans or programs at all times.</li> <li>• If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.</li> </ul>			
<b>Revision of Strategies, Plans and Programs</b>			
4	<p>Within 3 months of the submission of an:</p> <ul style="list-style-type: none"> <li>(a) incident report under condition 7 below;</li> <li>(b) Annual Review under condition 9 below;</li> <li>(c) audit report under condition 10 below; and</li> <li>(d) any modifications to this consent,</li> </ul> <p>the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the <a href="#">Planning Secretary</a>.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i></p>	<p>Management plans, programs and strategies required under the consent, interview Environmental and Stakeholder Advisor &amp; Environmental Business Partner.</p> <p>Environmental and Stakeholder Advisor &amp; Environmental Business Partner confirmed that a review of documents is completed in accordance with this condition.</p>	<p><b>Compliant</b></p> <p><b>Opportunity for improvement [DQ13/23]:</b> The document control tables within the all the plans, strategies and programs required under this consent do not reflect the reviews have occurred. Ensure all documents are reviewed in accordance with this condition of consent. Update the relevant management plans to contain information on timing of review. A register of reviews may assist.</p>
<b>Adaptive Management</b>			
5	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 4. Any exceedance of these criteria and/or performance measures</p>	<p>Interview with Environmental and Stakeholder Advisor &amp;</p>	<p><b>Compliant</b></p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<p>constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <ul style="list-style-type: none"><li>(a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;</li><li>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li><li>(c) implement remediation measures as directed by the <a href="#">Planning Secretary</a>, to the satisfaction of the <a href="#">Planning Secretary</a>.</li></ul>	Environmental Business Partner and application of monthly checklist, Boral's internal management systems such as Sequence.	
<b>Community Consultative Committee</b>			
6	<p>The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the <a href="#">Planning Secretary</a>. This CCC must be operated in general accordance with the <a href="#">Department's Community Consultative Committee Guidelines: State Significant Projects (2016)</a> (as may be updated or replaced from time to time).</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"><li>• <i>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</i></li><li>• <i>In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community.</i></li><li>• <i>The requirement for this CCC may be fulfilled by a regional CCC for any two or more of Boral's quarrying operations in the South Coast area.</i></li></ul>	CCC meeting minutes and guidelines, consultation with CCC chairperson.	<b>Compliant</b>



Number	Details	Evidence Sources/Questions	Audit Finding
<b>Reporting and Auditing</b>			
<b>Incident Reporting</b>			
7	The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Incident Register, interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>
<b>Non-Compliance Notification</b>			
7A	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the noncompliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. <i>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</i>	Interview with Environmental and Stakeholder Advisor & Environmental Business Partner.	<b>Compliant</b>
<b>Regular Reporting</b>			
8	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Project website.	<b>Non-Compliant</b> <b>Low Risk</b> The website includes copies of the latest Independent Audit, the AEMR/Annual Reviews 2011 – 2023 except for AR 2020-2021. No AR for 2020-2021 on website.



Number	Details	Evidence Sources/Questions	Audit Finding
<b>Annual Review</b>			
9	<p>By the end of September each year, or other timing as may be agreed by the <a href="#">Planning Secretary</a>, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the <a href="#">Planning Secretary</a>. This review must:</p> <p>(a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• requirements of any plan or program required under this consent;</li> <li>• monitoring results of previous years; and</li> <li>• relevant predictions in the documents listed in condition 2 of Schedule 3;</li> </ul> <p>(c) identify any non-compliance over the last financial year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.</p> <p>The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request.</p>	<p>Annual Reviews 2020-2023</p> <p>AR 2019-2020 – signed by authorising officer 7 Oct 2020 and Document Control Table had no date of issue for distribution to DP&amp;E.</p> <p>AR 2020-2021 not signed by authorised officer. Also same AR does not have all appendices attached or listed on website, including Noise, Groundwater and Bushland Annual Reports.</p>	<p><b>Non-Compliant</b></p> <p><b>Low Risk</b></p> <p>AR issued late in Oct 2020 without evidence of agreement by Planning Secretary.</p>





Number	Details	Evidence Sources/Questions	Audit Finding
<b>Independent Environmental Audit</b>			
10	<p>Prior to 1 April 2017, and every three years thereafter, unless the <b>Planning Secretary</b> directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <ul style="list-style-type: none"> <li>(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the <b>Planning Secretary</b>;</li> <li>(b) include consultation with the relevant agencies and the CCC;</li> <li>(c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licences (including any assessment, plan or program required under these approvals);</li> <li>(d) review the adequacy of any approved strategies, plans or programs required under the abovementioned approvals;</li> <li>(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals; and</li> <li>(f) be conducted and reported to the satisfaction of the <b>Planning Secretary</b>.</li> </ul> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the <b>Planning Secretary</b>.</i></p>	<p>Independent Environmental Audit 2020 (EPS), Independent Environmental Audit 2017 (EPS).</p>	<p><b>Non-Compliant</b> <b>Low Risk</b> Current IEA in Nov 2023 – Feb 2024 submission – for compliance the IEA 2023 was required to be undertaken in April 2023.</p>
11	<p>Within 12 weeks of commencing this audit, or as otherwise agreed by the <b>Planning Secretary</b>, the Applicant must submit a copy of the audit report to the <b>Planning Secretary</b> and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report.</p>	<p>Response to recommendations of previous audit, correspondence with DP&amp;E.</p>	<p><b>Compliant</b></p>
<b>Access to Information</b>			
12	<p>By 31 December 2016, unless otherwise agreed by the <b>Planning Secretary</b>, the Applicant must:</p> <ul style="list-style-type: none"> <li>(a) make the following information publicly available on its website:</li> </ul>	<p>Boral Dunmore website accessed at: <a href="https://www.boral.com">https://www.boral.com</a>.</p>	<p><b>Non-Compliant</b> <b>Low Risk</b></p>



Number	Details	Evidence Sources/Questions	Audit Finding
	<ul style="list-style-type: none"><li>• the documents listed in condition 2 of Schedule 3;</li><li>• current statutory approvals for the development;</li><li>• approved strategies, plans or programs required under the conditions of this consent;</li><li>• a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li><li>• a complaints register, updated quarterly;</li><li>• the Annual Reviews (over the last 5 years);</li><li>• any independent environmental audit, and the Applicant’s response to the recommendations in any audit;</li><li>• any other matter required by the <a href="#">Planning Secretary</a>; and</li></ul> <p>(b) keep this information up-to-date, to the satisfaction of the <a href="#">Planning Secretary</a>.</p>	<a href="#">au/locations/boral-dunmore-operations</a>	2020-2021FY AR is not on website.

## 5. COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION LICENCE

This section assesses compliance against the relevant requirements of the Environmental Protection Licence (EPL) 77. Information about the EPL was sourced from the NSW Environmental Protection Authority (EPA) website located at the following link: <http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=77&id=77&option=licence&searchrange=licence&range=POEOaccessed28June2014>. The site was accessed 08 November 2023.

On 20 August 2022, Boral submitted a Licence Variation Application (Application) to the EPA for the Licence. The Application sought to remove Lot 1 DP 213575 (Lot 1) and Lot 4 DP 1030504 (Lot 4) from the Licence. The DSS premises adjoins the Premises and Boral have advised the EPA that Lot 1 and Lot 4 should be included as part of the DSS Licensed Premises. DSS have submitted a Licence Variation Application to the EPA for the DSS Licence which, in part, seeks to add Lot 1 and Lot 4.

The current licence is attached at Appendix 2.

For the purpose of the EPL audit, a review was conducted of three (3) annual return periods: August 2019/2020 – August 2022/2023. The 2020 IEA reviewed the prior EPL returns.

### 5.1. SUMMARY OF FINDINGS

Non-compliances in the periods August 2019/2020 – August 2022/2023 are presented in Table 5-1. Four non-compliances were recorded, all related to licence condition M2.2. The non-compliance resulted in the issue of an EPA Formal Warning but did not result in the issue of a Penalty Notice.

Boral has taken appropriate action to mitigate non-compliance issues, as requested by the EPA. Consultation with the EPA occurred as part of the audit and no further issues or non-compliances were raised.

Table 5-1: Non-compliances associated with EPL annual returns.

Annual Return Start Date	Annual Return End Date	Licence Condition #	Type of non-compliance	EPA Actions	Number of times occurred
July 2022	Jun 2023	M2.2	There is a requirement to analyse 12 samples per year for	EPA action determined as	1

Annual Return Start Date	Annual Return End Date	Licence Condition #	Type of non-compliance	EPA Actions	Number of times occurred
			dust deposition gauge EPL 2. Only 11 samples were collected.	part of scheduled inspection program.	
July 2022	Jun 2023	M2.2	There is a requirement to analyse 12 samples per year for dust deposition gauge EPL1. Only 11 samples were collected.	EPA action determined as part of scheduled inspection program.	1
July 2021	Jun 2022	M2.2	On two separate occasions, September 2021 and January 2022, no deposited dust sample was obtained for EPL1 due to a broken bottle.	EPA action determined as part of scheduled inspection program.	2

**Opportunity for improvement [DQ14/23]:** Upload current PIRMP (Feb 2023) for Dunmore Quarry to website. PIRMP on Dunmore Website is dated 2019 (V13). This document requires updating to include details of annual review and PIRMP drills.



## 6. ADEQUACY OF STRATEGIES, PLANS AND PROGRAMS

This section reviews the adequacy of the project's strategies, plans and programs and provides recommendations for measures or actions to improve the documents, where applicable.

### 6.1. CRITERIA FOR ASSESSING ADEQUACY

Consistent with the previous audit, the adequacy of strategies, plans and programs have been assessed in accordance with the following criteria:

- **Compliance with review/revision requirements:** understand if documents are maintained as current and effective.
- **Compliance with conditions of consent:** ensure documents are consistent with the conditions of consent.
- **Clear objectives, defined actions and performance criteria:** determine whether the document is structured in a manner that clearly communicates the objectives, actions and performance criteria.
- **Align with best practice and/or relevant guidelines.**
- **Implementation and monitoring:** determine if the document outlays implementation processes and monitoring requirements.
- **Assigned responsibilities:** identify whether clear responsibilities and accountabilities have been assigned.
- **Integration:** as many environmental aspects and impacts are interrelated, it is crucial documents are linked to enable holistic environmental site management.

### 6.2. DOCUMENT REVIEW AND REVISION

The consent condition regarding review and revision of plans in Modification 12 (Schedule 5, Condition 4) reads:

*4. Within 3 months of the submission of an:*

- (a) incident report under condition 7 below;*
- (b) Annual review under condition 9 below;*
- (c) audit report under condition 10 below; and*
- (d) any modifications to this consent,*

*the Applicant must review, and if necessary, revise the strategies, plans and programs required under this consent, to the satisfaction of the Planning Secretary.*

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis and incorporate and recommended measures to improve the environmental performance of the development.*



**Non-compliance:** The Bushfire Management Plan has not been reviewed, and where applicable updated, in accordance with Schedule 5, Condition 4 requirements and the previous audit recommendation. At the site interview Boral advised all management plans, including the Bushfire Management Plan will be reviewed for adequacy and updated post the finalisation of the IEA 2023.

## 6.3. ADEQUACY REVIEW

### Assessment Against Consent Requirements

#### 6.3.1. Environmental Management Strategy

Table 6-1: Assessment of Environmental Management Strategy Against Consent Requirements

Condition	Assessment
<b>Schedule 5, Condition 1</b>	
If the Planning Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary. This strategy must:	<p><b>Compliant</b> No evidence that the Planning Secretary requested an Environmental Management Strategy (EMS) be prepared, but EMS for the project has been prepared (March 2023).</p> <p><b>Opportunity for improvement [DQ15/23]:</b> Undertake an administrative update of the EMS to align with updated condition of consent.</p>
(a) be submitted to the Planning Secretary for approval within 6 months of the Planning Secretary requiring preparation of the strategy by notice to the Applicant;	<p><b>Compliant</b> At the site interview Boral advised that the Secretary has not requested an Environmental Management Strategy (EMS) be prepared.</p>
(b) provide the strategic framework for the environmental management of the development;	<p><b>Compliant</b> Document as whole.</p> <p><b>Opportunity for improvement [DQ16/23]:</b> Update relevant legislation in Section 3.2.7 - the new <i>Biodiversity Conservation Act 2016</i>. The Act supersedes the following:</p> <ul style="list-style-type: none"> <li>• <i>Threatened Species Conservation Act 1995</i></li> <li>• <i>Native Vegetation Act 2003</i></li> <li>• <i>Nature Conservation Trust Act 2001</i></li> <li>• <i>Parts of the National Parks and Wildlife Act 1974</i></li> </ul> <p>Amend references to clearing of native vegetation under the NV Act as this is incorrect.</p>
(c) identify the statutory approvals that apply to the development;	<p><b>Compliant</b> Section 3. This section should be updated to reflect legislation changes.</p>

Condition	Assessment
(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	<b>Compliant</b> Section 4
(e) describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>receive, handle, respond to, and record complaints;</li> <li>resolve any disputes that may arise during the course of the development;</li> <li>respond to any non-compliance; and</li> <li>respond to emergencies; and</li> </ul>	<b>Compliant</b> Section 4 & 5
f) include: <ul style="list-style-type: none"> <li>copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> </ul>	

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives, actions and performance criteria are defined in the EMS, plus they are also contained with the associated management plans.
- **Align with best practice and/or relevant guidelines:** relevant guidelines and best practice in Section 3 requires update.
- **Implementation and monitoring:** Implementation and monitoring actions are contained with the associated management plans.
- **Assigned responsibilities:** responsibilities are defined in general and specified in the underlying management plans.
- **Integration:** Integration with other plans is referenced.

### Assessment of Adequacy

This plan is adequate for its purpose, although it requires updating with relevant legislation and references to the 'Planning Secretary'. The addition of a glossary of acronyms would be beneficial.

## 6.3.2. Blast Management Plan

### Assessment Against Consent Requirements

Table 6-2: Assessment of Blast Management Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 20</b>	
The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	<p><b>Compliant</b> Blast Management Plan (Boral, 2019)</p> <p><b>Opportunity for improvement [DQ17/23]:</b> Undertake an administrative update of the Blast Management Plan to align with updated condition of consent that refers to 'Planning Secretary' instead of 'Secretary'.</p>
(a) be submitted to the Planning Secretary for approval within 6 months of Modification 8, unless otherwise agreed by the Planning Secretary;	<p><b>Compliant</b> 23/11/16 letter from DP&amp;E (then DP&amp;E). Updated in 2019.</p>
(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;	<p><b>Compliant</b> Document as a whole.</p>
(c) include measures to manage and monitor the avoidance of impacts on the heritage values on the buildings on Lot 10 DP977931;	<p><b>Compliant</b> Section 1.5</p>
(d) include measures to manage flyrock;	<p><b>Compliant</b> Section 5.1</p>
(e) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;	<p><b>Compliant</b> Section 7</p>
(f) include community notification procedures for the blasting schedule, in particular to nearby residences; and	<p><b>Compliant</b> Section 6</p>
(g) include a protocol for investigating and responding to complaints.	<p><b>Compliant</b> Section 8</p>

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Whilst the objectives are generally stated in Section 1.1, actions and performance criteria are defined.
- **Align with best practice and/or relevant guidelines:** relevant Australian Standards and Codes considered. Additionally, plan is aligned to Boral internal standards.
- **Implementation and monitoring:** Implementation and monitoring actions are clearly defined.
- **Assigned responsibilities:** Responsibilities are clearly defined in the document.
- **Integration:** Integration with other plans and approvals is referenced where relevant throughout the document.

**Opportunity for improvement [DQ18/23]:** Within the Plan Table 2.1 - Authorised Personnel & Service Providers should be updated, and date approved and name of person approving needs to be included. Attachment C: Blast Notification List last updated 27/02/2019. This list should be reviewed for currency and confirmed in the document.

### Assessment of Adequacy

This plan is adequate for its purpose.

### 6.3.3. Water Management

At the site interview, Boral noted a revised Water Management Plan has been prepared by EMM and is under review by Boral Management. The Water Management Plan from 2016 is still the active plan. This section includes a review of the following 2016 strategies, plans and programs relevant to water management:

- Dam Upgrade Plan;
- Site Water Management Plan;
- Lower Dam Transition Plan;
- Erosion and Sediment Control Plan;
- Surface Water Monitoring Program;
- Ground Water Monitoring Program;
- Integrated Water Management Strategy.

### Dam Upgrade Plan

#### Assessment Against Consent Requirements

Table 6-3: Assessment of Dam Upgrade Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 33</b>	
Prior to carrying out any of these works, the Applicant must prepare a Dam Upgrade Plan in consultation with the EPA, and to the satisfaction of the Secretary. This plan must include:	<b>Compliant</b> Dam Upgrade Plan (Coffey, 2008)
(a) the detailed design and specifications of the proposed works, which have been certified by a practicing registered engineer;	<b>Compliant</b>
(b) an erosion and sediment control plan for the proposed works, that is consistent with the requirements in the Department of Housing's Managing Urban Stormwater: Soils and Construction manual;	<b>Compliant</b> ESCP was developed in accordance with the condition and included in the Dam Upgrade Plan.

(c) a vegetation and rehabilitation plan, setting out how the banks of the dam and other relevant pollution control features would be rehabilitated and stabilised, and the baffle and macrophyte zone would be constructed;	<b>Compliant</b> A Vegetation Management Plan (VMP) was prepared by Jamberoo Native Nursery (2008). The plan requires review and update following 2017 modification which inserted 'other pollution control features'.
(d) an acid sulfate soil management plan that is consistent with the <i>NSW Acid Sulfate Soil</i> manual;	<b>Non-compliant</b> EPS considers likelihood of the presence of potential or actual acid sulphate soils on the site to be low and refers to the current OEH mapping which shows its predicted presence to be limited to the alluviums to the east and south of the site.
(e) a construction program for the proposed works; and	<b>Compliant</b> Section 3.3
(f) a program setting out how the modified dam and associated revegetation works would be maintained during the life of the development.	<b>Compliant</b> VMP (Jamberoo Native Nursery, 2008)

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** N/A
- **Align with best practice and/or relevant guidelines:** No reference to the *NSW Acid Sulfate Soil* manual.
- **Implementation and monitoring:** N/A
- **Assigned responsibilities:** N/A
- **Integration:** N/A

### Assessment of Adequacy

Boral advised at the site interview that the Dam Upgrade Plan is incorporated into the updated Water Management Plan. The updated Water Management Plan has been prepared and is with Boral Management for review. EPS recommend that the revised WMP should be implemented once approved to address unregulated discharge events and should also consider any amendments for future potential of climate change related intensity increases in rainfall events.

### Site Water Management Plan

#### Assessment Against Consent Requirements

Table 6-4: Assessment of Site Water Management Plan Against Consent Requirements



Condition	Assessment
<b>Schedule 4, Condition 40</b>	
Within 12 months of the date of this consent, the Applicant must prepare a Site Water Management Plan for the development, in consultation with the DoI – L&W, and to the satisfaction of the Secretary. This plan must include:	<b>Compliant</b> Water Management Plan (WMP) (Arcadis, 2016)
(a) the predicted site water balance plan;	<b>Compliant</b> Site Water Balance (Evans and Peck, 2008)
(b) an Erosion and Sediment Control Plan;	<b>Compliant</b> Section 6.2
(c) a Surface Water Monitoring Program;	<b>Compliant</b> Section 6.3
(d) a Ground Water Monitoring Program; and	<b>Compliant</b> Section 6.4
(e) an Integrated Water Management Strategy.	<b>Compliant</b> Section 4

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives, defined actions and performance criteria are clearly defined.
- **Align with best practice and/or relevant guidelines:** Alignment with relevant guidelines clearly demonstrated.
- **Implementation and monitoring:** Clearly outlines plan of management and actions in Section 6, and monitoring, reporting and review requirements in Section 7.
- **Assigned responsibilities:** Responsibilities are assigned against the management actions.
- **Integration:** Section 2.5 describes the integration with other plans.

### Assessment of Adequacy

This plan is adequate for its purpose. However, EPS recommend that the revised WMP should be implemented once approved to address unregulated discharge events and should also consider any amendments for future potential of climate change related intensity increases in rainfall events.

## Lower Dam Transition Plan

Table 6-5: Assessment of Lower Dam Transition Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 35A</b>	
Within 3 months of the determination of Modification 9, or as otherwise agreed by the Secretary, the Applicant must prepare a Lower Dam Transition Plan in consultation with the EPA and to the satisfaction of the Secretary. The plan must include a program to:	<b>Not able to determine</b> The plan has been prepared and is under review by Boral Management at time of audit.
(a) undertake a broader assessment of the site's water management system and potential water pollution impacts; and	<b>Not able to determine</b> The plan has been prepared and is under review by Boral Management at time of audit.
(b) investigate reasonable and feasible mitigation measures to improve water quality outcomes for the site, including altering the design of the Lower Dam or else transitioning away from its use, within two years.	<b>Not able to determine</b> The plan has been prepared and is under review by Boral Management at time of audit.
The Applicant must not alter the Lower Dam until this plan is approved by the Secretary. The Applicant must implement the approved plan as approved by the Secretary.	<b>Not able to determine</b> The plan has been prepared and is under review by Boral Management at time of audit.

### Assessment Against Other Criteria

Not able to determine. The plan has been prepared and is under review by Boral Management at time of audit.

### Assessment of Adequacy

Not able to determine. The plan has been prepared and is under review by Boral Management at time of audit.

## Erosion and Sediment Control Plan

### Assessment Against Consent Requirements

Table 6-6: Assessment of Erosion and Sediment Control Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 41</b>	
The Erosion and Sediment Control Plan must:	<b>Compliant</b> WMP (Arcadis, 2016)

(a) be consistent with the requirements of the Department of Housing's <i>Managing Urban Stormwater: Soils and Construction</i> manual;	<b>Compliant</b>
(b) identify activities that could cause soil erosion and generate sediment;	<b>Compliant</b> Section 6.2
(c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;	<b>Compliant</b> Section 6.2
(d) describe the location, function, and capacity of erosion and sediment control structures; and	<b>Compliant</b> Figure 3.2
(e) describe what measures would be implemented to maintain the structures over time.	<b>Compliant</b> Section 6.2

### Assessment Against Other Criteria

Assessment against other criteria is provided above under Site Water Management Plan.

### Assessment of Adequacy

This plan is adequate for its purpose.

### Surface Water Monitoring Program

### Assessment Against Consent Requirements

Table 6-7: Assessment of Surface Water Monitoring Program Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 42</b>	
The Surface Water Monitoring Program must include:	<b>Compliant</b> Section 6.3 of the WMP (Arcadis, 2016)
(a) detailed baseline data on surface water flows and quality in Rocklow Creek;	<b>Compliant</b> Table 6.6
(b) surface water impact assessment criteria;	<b>Compliant</b> Section 6.3.2
(c) a program to monitor surface water flows and quality in Rocklow Creek;	<b>Compliant</b> Table 6.6
(c1) a program to monitor and minimise surface water and groundwater ingress into the Lower Dam and water egress into Rockflow Creek;	<b>Not able to be determined</b> The updated Water Management Plan has been prepared and is under review by Boral Management at time of audit.
(d) a program to monitor bank and bed stability in Rocklow Creek; and	<b>Compliant</b> Appendix A

Condition	Assessment
(e) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.	<b>Compliant</b> Appendix A

### Assessment Against Other Criteria

Assessment against other criteria is provided above under Site Water Management Plan.

### Assessment of Adequacy

The program requires updating to align with the conditions of consent. It is noted this is occurring as part of the updated Water Management Plan under review with Boral Management at time of 2023 audit and is still not complete. This plan should be implemented asap.

## Ground Water Monitoring Program

### Assessment Against Consent Requirements

Table 6-8: Assessment of Ground Water Monitoring Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 43</b>	
The Ground Water Monitoring Program must include:	<b>Compliant</b> Appendix H of the WMP (Arcadis, 2016)
(a) detailed baseline data on ground water levels and quality, based on statistical analysis;	<b>Non-compliant</b> Section 2.2 provides detail on baseline groundwater quality. Information on baseline groundwater levels is not provided
(b) ground water impact assessment criteria; and	<b>Non-compliant</b> Includes parameters but does not include criteria.
(c) a program to monitor regional ground water levels and quality;	<b>Non-compliant</b> A program to monitor regional groundwater levels and quality is not included.
(d) a program to monitor groundwater inflows.	<b>Not able to be determined</b> The updated Water Management Plan has been prepared and is under review by Boral Management at time of audit.

### Assessment Against Other Criteria

Assessment against other criteria is provided above under Site Water Management Plan.



## Assessment of Adequacy

The plan requires updating to align with the conditions of consent. It is noted this is occurring as part of the updated Water Management Plan under review with Boral Management at time of audit.

## Integrated Water Management Strategy

### Assessment Against Consent Requirements

Table 6-9: Assessment of Integrated Water Management Strategy Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 44</b>	
The Integrated Water Management Strategy must:	<b>Compliant</b> Section 4 of the WMP (Arcadis, 2016) and Site Water Management Plan (Matrix Consulting, 2005).
(a) explore a range of options for a sustainable resource alternative for water supply to the site;	<b>Compliant</b>
(b) identification of all possible and available sources of water;	<b>Compliant</b>
(c) consistency with Government Water Reform initiatives and policies;	<b>Compliant</b>
(d) quality of water to meet usage requirements including any possible effects on product;	<b>Compliant</b>
(e) costs of supply;	<b>Compliant</b>
(f) health and environmental impacts;	<b>Compliant</b>
(g) legislative requirements;	<b>Compliant</b>
(h) assessment of the feasibility, benefits and costs of options;	<b>Compliant</b>
(i) a process to identify and evaluate preferred options for implementation; and	<b>Compliant</b>
(j) the identification of a timetable for implementation of the selected options.	<b>Compliant</b>

### Assessment Against Other Criteria

Assessment against other criteria is provided above under Site Water Management Plan.

### Assessment of Adequacy

This strategy is adequate for its purpose.



### 6.3.4. Flora and Fauna Management

This section includes a review of the following plans, strategies and programs related for flora and fauna management:

- Flora and Fauna Management Plan;
- Compensatory Habitat Management Plan;
- Remnant Vegetation Conservation Plan;
- Biodiversity Offset Management Plan; and
- Rehabilitation Management Plan.

#### Flora and Fauna Management Plan

#### Assessment Against Consent Requirements

Table 6-10: Assessment of Flora and Fauna Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 46</b>	
Within 12 months of the date of this consent, the Applicant must prepare a Flora and Fauna Management Plan for the development to the satisfaction of the Secretary. This plan must include:	<b>Compliant</b>
(a) a Vegetation Clearing Protocol;	<b>Compliant</b> Appendix B
(b) a Compensatory Habitat Management Plan;	<b>Compliant</b> Section 4.1.1
(c) a Remnant Vegetation Conservation Plan; and	<b>Compliant</b> Section 4.1.2
(d) a Biodiversity Management Plan.	<b>Compliant</b> Not required, addressed in Appendix A.

#### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives clearly stated in Section 1.3. Section 4 defines actions. Section 5 sets out the review requirements.
- **Align with best practice and/or relevant guidelines:** Section 2.2 documents the guidelines relevant to the plan.
- **Implementation and monitoring:** Includes management actions in Section 4 and monitoring requirements in Section 5.
- **Assigned responsibilities:** Responsibilities are assigned against the management actions.
- **Integration:** Section 2.5 summarises the alignment with other project plans.



## Assessment of Adequacy

This plan is adequate for its purpose.

## Compensatory Habitat Management Plan

### Assessment Against Consent Requirements

Table 6-11: Assessment of Compensatory Habitat Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 48</b>	
The Compensatory Habit Management Plan must:	<b>N/A</b>
(a) describe the compensatory habitat proposal to satisfy condition 46(a);	<b>Compliant</b> Section 4.1.1 of the FFMP
(b) justify why this area(s) is suitable for the compensatory habitat proposal;	<b>Compliant</b> Section 4.1.1 of the FFMP
(c) establish baseline data for the existing habitat in the proposed compensatory habitat area(s);	<b>Compliant</b> Section 4.1.1 of the FFMP
(d) describe how the compensatory habitat proposal would be implemented;	<b>Compliant</b> Section 4.1.1 of the FFMP
(e) set completion criteria for the compensatory habitat proposal;	<b>Compliant</b> Section 4.1.1 of the FFMP
(f) describe how the performance of the compensatory habitat management proposal would be monitored over time.	<b>Compliant</b> Section 4.1.1 of the FFMP

### Assessment Against Other Criteria

Assessment against other criteria is provided above under the Flora and Fauna Management Plan.

## Assessment of Adequacy

Assessment of adequacy is provided above under the Flora and Fauna Management Plan.

## Remnant Vegetation Conservation Plan

### Assessment Against Consent Requirements

Table 6-12: Assessment of Remnant Vegetation Conservation Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 49</b>	
The Remnant Vegetation Conservation Plan must:	<b>N/A</b>
(a) describe what measures would be implemented to satisfy condition 46(b);	<b>Compliant</b> 4.1.2 of the FFMP
(b) set completion criteria for the Remnant Vegetation Conservation Area; and	<b>Compliant</b> 4.1.2 of the FFMP
(c) describe how the performance of the Remnant Vegetation Conservation area would be monitored over time.	<b>Compliant</b> 4.1.2 of the FFMP

### Assessment Against Other Criteria

Assessment against other criteria is provided above under the Flora and Fauna Management Plan.

### Assessment of Adequacy

Assessment of adequacy is provided above under the Flora and Fauna Management Plan.

## Biodiversity Offset Management Plan

### Assessment Against Consent Requirements

Table 6-13: Assessment of Biodiversity Offset Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 50A</b>	
The Biodiversity Offset Management Plan must:	<b>N/A</b>
(a) describe what measures would be implemented to satisfy condition 46(c);	<b>N/A</b>
(b) describe the biodiversity offset strategies in conditions 46(d)-(e);	<b>N/A</b>
(c) include a timetable for providing long term security of the offset areas;	<b>N/A</b>
(d) set performance and completion criteria for the offset areas; and	<b>N/A</b>
(e) include a program to monitor and report on the effectiveness of the implementation measures, and progress against the performance and completion criteria.	<b>N/A</b>

This plan is not required, addressed in Appendix A of the FFMP.

## Rehabilitation Management Plan.

### Assessment Against Consent Requirements

Table 6-14: Assessment of Rehabilitation Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 53</b>	
Within 6 months of the date of this consent, the Applicant must prepare a Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must:	<b>Compliant</b>
(a) identify the disturbed area at the site;	<b>Compliant</b> Section 3
(b) describe in general the short, medium, and long-term measures that would be implemented to rehabilitate the site;	<b>Compliant</b> Section 4
(c) describe in detail the measures that would be implemented over the next 3 years to rehabilitate the site; and	<b>Compliant</b> Section 4 & 5
(d) describe how the performance of these measures would be monitored over time.	<b>Compliant</b> Section 7

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Objectives clearly stated in Section 1.3. Section 4 defines actions. Section 7 sets out the review requirements.
- **Align with best practice and/or relevant guidelines:** Section 2 documents the guidelines relevant to the plan.
- **Implementation and monitoring:** Includes management actions in Section 4 and monitoring requirements in Section 7.
- **Assigned responsibilities:** Responsibilities are assigned against the management actions.
- **Integration:** Section 1.4 summarises the alignment with other project plans.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 6.3.5. Transport Management Plan

### Assessment Against Consent Requirements

Table 6-15: Assessment of Transport Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 59</b>	
The Applicant must prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:	<b>Compliant</b> Transport Management Plan (TMP) (Traffic Transport Planning Partnership, 2016).
(a) be prepared by a suitably qualified traffic consultant, in consultation with RMS and Council, and submitted to the Secretary for approval by 31 May 2014;	<b>Compliant</b>
(b) include a drivers' code of conduct for the development;	<b>Compliant</b>
(c) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> <li>• all drivers of development-related vehicles comply with the drivers' code of conduct; and</li> <li>• compliance with the relevant conditions of this consent; and</li> </ul>	<b>Compliant</b>
(d) include a program to monitor the effectiveness of the implementation of these measures.	<b>Compliant</b>

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- Clear objectives, defined actions and performance criteria: Objectives included in Section 1.2.
- Align with best practice and/or relevant guidelines: No reference is made to relevant guidelines or alignment with best practice.
- Implementation and monitoring: Implementation measures included in Section 3. Monitoring information included in Section 3.4.
- Assigned responsibilities: Responsibilities are not assigned.
- Integration: Integration with other plans is not described.

### Assessment of Adequacy

Section 3.4.6 should be updated to be consistent with the revised requirements under Schedule 5, Condition 4. The plan should also be updated to reference guidelines, assign responsibilities and describe integration with other relevant management plans (e.g. air quality).



## 6.3.6. Bushfire Management Plan

### Assessment Against Consent Requirements

Table 6-16: Assessment of Bushfire Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 75</b>	
Within 6 months of the date of this consent, the Applicant must prepare a Bushfire Management Plan for the development, to the satisfaction of Council and the Rural Fire Service.	<b>Compliant</b>

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Section 2 covers objectives, Section 4 covers control measures, and Section 5.3.
- **Align with best practice and/or relevant guideline:** alignment with best practice and relevant guidelines is not noted.
- **Implementation and monitoring:** Section 5 outlines monitoring requirements.
- **Assigned responsibilities:** Section 6 clearly assigns responsibilities, but the personnel names are no longer current. Responsibilities are clearly assigned to management actions in Table 1.
- **Integration:** Integration with other plans is not noted.

### Assessment of Adequacy

This plan is generally adequate; however, it is required to be reviewed and updated as per the recommendation in the 2020 IEA Audit.

**Opportunity for Improvement [DQ19/23]:** Boral should update plan in accordance with BMP Section 5.

## 6.3.7. Noise Management Plan

### Assessment Against Consent Requirements

Table 6-17: Assessment of Noise Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 14</b>	

The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:	<b>Compliant</b>
(a) be prepared in consultation with the EPA;	<b>Compliant</b> Table E.1.1
(b) be submitted to the Secretary for approval prior to commencing quarrying operations in the Croome West Pit, unless the Secretary agrees otherwise;	<b>Compliant</b> Table E.1.1
(c) describe the measures to be implemented to ensure: <ul style="list-style-type: none"> <li>• compliance with the noise criteria and operating conditions of this consent;</li> <li>• best practice management is being employed;</li> <li>• noise impacts of the development are minimised during stage 3 extraction of the Croome West Pit, particularly during the shoulder period; and</li> <li>• noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;</li> </ul>	<b>Compliant</b> Section 2 - 5
(d) describe the proposed noise management system; and	<b>Compliant</b> Section 2.5
(e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2.	<b>Compliant</b> Section 4

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Generally covered in Section 1, and performance criteria and actions contained throughout document.
- **Align with best practice and/or relevant guideline:** relevant guidelines and standards referenced in Section 4.1 and incorporated throughout. Best practice considered in section 5.6.
- **Implementation and monitoring:** Section 4 describes monitoring requirements.
- **Assigned responsibilities:** Responsibilities clearly assigned in Table E.1.1 and Chapter 3.
- **Integration:** No clear integration with other management plans.

### Assessment of Adequacy

This plan is adequate for its purpose.

## 6.3.8. Air Quality Management Plan

### Assessment Against Consent Requirements

Table 6-18: Assessment of Air Quality Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 24</b>	
The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:	<b>Compliant</b>
(a) be submitted to the Secretary for approval within 6 months of the determination of Modification 9, unless otherwise agree by the Secretary;	<b>Compliant</b>
(b) describe the measures to be implemented to ensure: <ul style="list-style-type: none"> <li>• compliance with the air quality criteria and operating conditions of this consent;</li> <li>• best practice management is being employed; and</li> <li>• the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li> </ul>	<b>Compliant</b> Section 4
(c) describe the proposed air quality management system;	<b>Compliant</b> Section 3 and 4
(d) include an air quality monitoring program that: <ul style="list-style-type: none"> <li>• is capable of evaluating the performance of the development and informing day to day management decisions;</li> <li>• includes a protocol for determining any exceedances of the relevant conditions of consent; and</li> <li>• effectively supports the air quality management system.</li> </ul>	<b>Compliant</b> Section 3 and 4

### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- **Clear objectives, defined actions and performance criteria:** Whilst objectives are not defined, actions and performance criteria are included in Section 3 and 4.
- **Align with best practice and/or relevant guideline:** References best practice in Section 4 and incorporates relevant Australian Standards throughout.
- **Implementation and monitoring:** Monitoring covered in Section 3.
- **Assigned responsibilities:** Included in Section 4.7.
- **Integration:** No clear integration with other management plans.

## Assessment of Adequacy

The program is adequate for its purposes.

### 6.3.9. Aboriginal Cultural Heritage Management Plan

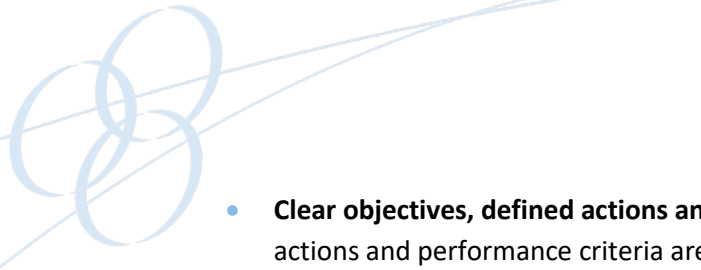
#### Assessment Against Consent Requirements

Table 6-19: Assessment of Aboriginal Cultural Heritage Management Plan Against Consent Requirements

Condition	Assessment
<b>Schedule 4, Condition 63</b>	
The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:	<b>Compliant</b>
(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;	<b>Compliant</b>
(b) be prepared in consultation with BCS and the Registered Aboriginal Parties;	<b>Compliant</b> Section 2
(c) be submitted to the Planning Secretary for approval prior to commencing quarrying operations in the Croome West Pit, unless the Planning Secretary agrees otherwise; and	<b>Compliant</b> Section 1
(d) include a description of the measures that would be implemented to: <ul style="list-style-type: none"><li>• protect, monitor and manage known sites or potential areas of archaeological significance (including any proposed archaeological investigations or salvage measures);</li><li>• manage unanticipated finds including new Aboriginal objects and Aboriginal skeletal remains that are discovered during the development;</li><li>• store and display salvaged Aboriginal heritage items; and</li><li>• ensure ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.</li></ul>	<b>Compliant</b> Section 3,4,5,7,8,9

#### Assessment Against Other Criteria

The findings of assessment against other adequacy review criteria are discussed below:

- 
- **Clear objectives, defined actions and performance criteria:** Objectives are defined, actions and performance criteria are included in Section 1 and throughout the plan.
  - **Align with best practice and/or relevant guideline:** References best practice in Section 8 and incorporates statutory requirements throughout the plan.
  - **Implementation and monitoring:** Implementation covered in Section 1.2 and monitoring covered in Section 4.1.
  - **Assigned responsibilities:** responsibilities to form part of the project induction program
  - **Integration:** No clear integration with other management plans.

#### **Assessment of Adequacy**

The program is adequate for its purposes.



## 7. AUDIT CONCLUSIONS

### 7.1. COMPLIANCE ASSESSMENT

#### 7.1.1. Conditions of Consent

The findings of assessment against the conditions in Schedule 3 – 5 of the Development Consent are presented below. Of the 124 conditions, 93 were assessed as compliant, 5 non-compliant, 25 N/A and 1 not able to be determined.

Schedule	Audit Findings				Total
	Compliant	Non-compliant	N/A	Not Able to Determine	
3	9	0	6	0	15
4	71	1	16	1	89
4a	2	0	3	0	5
5	11	4	0	0	15
<b>Total</b>	<b>93</b>	<b>5</b>	<b>25</b>	<b>1</b>	<b>124</b>

#### 7.1.2. Environment Protection Licence

Four non-compliances were recorded during the audit period, all related to licence condition M2.2. The non-compliance resulted in the issue of an EPA Formal Warning but did not result in the issue of a Penalty Notice.

### 7.2. ADEQUACY OF STRATEGIES, PLANS AND PROGRAMS

A number of project strategies, plans and programs have been reviewed and updated since the 2020 audit in line with the revised consent conditions. Overall, documents are considered adequate for the purposes as they meet the conditioned requirements, follow a relatively consistent structure and are operational documents.

In summary, some of the plans have not been reviewed and revised in accordance with the conditions of consent, the 2020 Audit recommendations and require update/finalisation/approval (e.g. the Bushfire Management Plan and Water Management Plan). A number of recommendations are made to improve the project documents and to help ensure they remain current, including updating the document control table for each plan following each review and any change.

### 7.3. ENVIRONMENTAL PERFORMANCE

Noting there are a number of matters that require improvement, the overall environmental performance based on the observed condition of the site, the low number of non-compliances and incidents, and low number of complaints, is considered **'satisfactory'**.

The interviews with DP&E, EPA, CCC and Shoalhaven Council all confirmed that Boral operate the quarry well, with no major concerns raised and commendation for the responsiveness of the Boral staff. Some of the minor non-compliance actions appear to have occurred as a result of change in staff over the audit period. The re-occurrence of similar non-compliance actions have been addressed by Boral through improved environmental management systems.

The site inspection and interviews undertaken as part of this audit also confirmed that Boral have good environmental management systems in operation, with a high level of confidence in implementation of the environmental management systems, that extends to accountability and follow up from staff on the ground to senior management within Boral.

## 7.4. OPPORTUNITIES FOR IMPROVEMENT

The following table summarises the opportunities for improvement identified in this audit.

Table 7-1: Summary of Opportunities for Improvement

Reference	Consent Condition/Issue	Recommendation
DQ1/23	Finalise Revised WMP. Continue updated WMP and gain approval from Boral Management.	Boral to confirm budget for lower dam and implement WMP once approved by Boral Management.
DQ2/23	Review and update the Bushfire Management Plan and sure that the plan covers the safe storage of tyres.	The Bushfire Management Plan is to be updated to include information listed in 2020 Audit. Including the safe storage of tyres Tyre Stewardship Australia <i>Best Practice Guidelines for Tyre Storage and Emergency Preparedness</i> (March 2019) guidelines and Fire & Rescue NSW <i>Fire Safety Guideline – Guideline for bulk storage of rubber tyres</i> (December 2014).
DQ3/23	Ensure all management plans are prepared and reviewed in accordance with the requirements of the conditions of consent.	The document control table in each management plan should include a record of the annual review of the plan and whether any amendments were made.
DQ4/23	Implement updated Water Management Plan when approved to reconfigure storage on site and prevent uncontrolled discharge events.	Implement updated Water Management Plan when approved to reconfigure storage on site and prevent uncontrolled discharge events.
DQ5/23	Schedule 5, Condition 4 – Revision of Strategies, Plans and Programs. Ensure all plans, strategies and programs required under this consent have detailed document control tables.	The document control table in each management plan should include a record of the annual review of the plan and whether any amendments were made.

Reference	Consent Condition/Issue	Recommendation
DQ6/23	To have a suitable qualified person to assess whether the development is complying with the noise impact assessment criteria and (b) provide the results of this assessment to the EPA and Planning Secretary within a month of commissioning the assessment.	At next Modification have this clause (b) of condition amended to provide the results with the annual returns/annual reviews, rather than one month of commissioning the assessment to avoid a time related non-compliance.
DQ7/23	Applicant must prepare and update a Blast Management Plan to the satisfaction of the Planning Secretary.	Within the Plan Table 2.1 Authorised Personnel & Service Providers should be updated as required and date approved and name of person approving needs to be included. Attachment C: Blast Notification List last updated 27/02/2019. This list should be reviewed for currency and confirmed in the document.
DQ8/23	The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.	Implement updated Water Management Plan when approved to reconfigure storage on site and better manage uncontrolled discharge events. As part of updated WMP also consider onsite storage capacity with regards to potential future climate change weather/storm intensity increases.
DQ9/23	In each Annual Review, the Applicant shall: a) recalculate the site water balance for the development; and b) provide information on evaporative losses, dust suppression, dam storage levels and c) evaluate water take against licensing requirements.	Ensure all future Annual Reviews address the reporting requirements in Schedule 4, Condition 29.
DQ10/23	Create a vegetation clearing protocol which addresses vegetation clearing actions.	Vegetation Clearing Protocol to be updated to address collecting seed from site and conserving and reusing topsoil.
DQ11/23	Applicant must provide transport options review, continuously update and share with the Planning Secretary for review.	Boral to coordinate Transport Option Review 6 months prior to renewal period.
DQ12/23	Applicant must prepare an Environmental Management Strategy to the satisfaction of the Planning Secretary.	Legislation section needs to be updated with relevant legislation for <i>Biodiversity Conservation Act 2016</i> .

Reference	Consent Condition/Issue	Recommendation
DQ13/23	The Applicant must continuously review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the Planning Secretary.	The document control tables within the all the plans, strategies and programs required under this consent do not reflect the reviews have occurred. Ensure all documents are reviewed in accordance with this condition of consent. Update the relevant management plans to contain information on timing of review. A register of reviews may assist.
DQ14/23	Must have updated PIRMP within public access.	Upload current PIRMP for Dunmore Quarry to website. PIRMP on Dunmore Website is dated 2019 (V13). This document requires updating to include details of annual review and PIRMP drills.
DQ15/23	Applicant must prepare an Environmental Management Strategy to the satisfaction of the Planning Secretary.	Undertake an administrative update of the EMS to align with updated condition of consent that refers to 'Planning Secretary' instead of 'Secretary'.
DQ16/23	Provide strategic framework for the environmental management of the development.	Update relevant legislation in Section 3.2.7 - the new <i>Biodiversity Conservation Act 2016</i> . The Act supersedes the following: <ul style="list-style-type: none"> <li>• <i>Threatened Species Conservation Act 1995</i></li> <li>• <i>Native Vegetation Act 2003</i></li> <li>• <i>Nature Conservation Trust Act 2001</i></li> <li>• <i>Parts of the National Parks and Wildlife Act 1974</i></li> </ul> Amend references to clearing of native vegetation under the NV Act as this is incorrect.
DQ17/23	Applicant must prepare a Blast Management Plan to the satisfaction of the Planning Secretary.	Undertake an administrative update of the Blast Management Plan to align with updated condition of consent that refers to 'Planning Secretary' instead of 'Secretary'.
DQ18/23	Assigned responsibilities are clearly defined in the Blast Management Plan.	Within the Plan Table 2.1 - Authorised Personnel & Service Providers should be updated, and date approved and name of person approving needs to be included. Attachment C: Blast Notification List last updated 27/02/2019. This list should be reviewed for currency and confirmed in the document.
DQ19/23	Bushfire Management Plan is required to be reviewed and updated as per the recommendation from the 2020 audit.	Boral should update plan in accordance with BMP Section 5.



**APPENDIX 1**  
Development Consent



## Development Consent

### Section 80 of the *Environmental Planning & Assessment Act 1979*

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), approve the Development Application referred to in Schedule 1, subject to the conditions in Schedules 3 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 on-going environmental management of the development.

Diane Beamer, MP  
**Minister Assisting the Minister for  
Infrastructure and Planning  
(Planning Administration)**

Sydney

2004

File No. S03/01960

#### SCHEDULE 1

<b>Development Application:</b>	DA 470-11-2003.
<b>Applicant:</b>	Boral Resources (NSW) Pty Limited (ABN: 51 000 756 507).
<b>Consent Authority:</b>	Minister Assisting the Minister for Infrastructure and Planning (Planning Administration).
<b>Land:</b>	See Appendix 1.
<b>Proposed Development:</b>	Increase production at the Dunmore Quarry from 1.2 million tonnes per annum (Mtpa) to 2.5 Mtpa, by: <ul style="list-style-type: none"><li>• increasing operating hours;</li><li>• making minor changes to equipment types and configuration, mainly within the crushing and conveying circuit; and</li><li>• increasing rail and road transportation of product.</li></ul>
<b>State Significant Development:</b>	The proposal is classified as State significant development, under section 76A(7) of the <i>Environmental Planning and Assessment Act 1979</i> , because it is an extractive industry where the proposed rate of production exceeds the threshold limits specified in the Ministerial declaration, dated 3 August 1999.
<b>Integrated Development:</b>	The proposal is classified as integrated development, under section 91 of the <i>Environmental Planning and Assessment Act 1979</i> , because it requires additional approvals under the: <ul style="list-style-type: none"><li>• <i>Protection of the Environment Operations Act 1997</i>;</li><li>• <i>National Parks &amp; Wildlife Act 1974</i>;</li><li>• <i>Rivers and Foreshores Improvement Act 1948</i>.</li></ul>
<b>Designated Development:</b>	The proposal is classified as designated development, under section 77A of the <i>Environmental Planning &amp; Assessment Act 1979</i> , because it is for an extractive industry that would "obtain or process for sale, or reuse, more than 30,000 cubic metres of extractive material per year...". Consequently, it meets the criteria for designated development in schedule 3 of the <i>Environmental Planning &amp; Assessment Regulation 2000</i> .

# CONSOLIDATED CONSENT

*Note:*

- *To find out when this development consent becomes effective, see Section 83 of the Environmental Planning and Assessment Act 1979 (EP&A Act);*
- *To find out when this development consent is liable to lapse, see Section 95 of the EP&A Act; and*
- *To find out about appeal rights, see Section 97 of the EP&A Act.*

This instrument includes changes made by Modification 1 in December 2005 (marked in blue)

This instrument includes changes made by Modification 2 in June 2006 (marked in red)

This instrument includes changes made by Modification 3 in May 2008 (marked in green)

This instrument includes changes made by Modifications 4 and 5 in November 2008 (marked in pink)

Modification 6 (January 2014) marked in purple

Modification 7 (October 2015) marked in maroon

Modification 8 (November 2016) marked in orange

Modification 10 (June 2017) marked in aqua

Modification 9 (September 2017) marked in light green

Modification 11 (March 2019) marked in yellow highlight

Modification 12 (September 2021) marked in cornflower blue

FOR INFORMATION

# CONSOLIDATED CONSENT

## SCHEDULE 2 DEFINITIONS

Annual Review	Annual Review, as required under <a href="#">condition 9</a> of schedule 5
Applicant	Boral Resources (NSW) Pty Limited
BCA	Building Code of Australia
BCS	Biodiversity, Conservation and Science Directorate, within the Department
Calendar year	A period of 12 months from 1 January to 31 December
CCC	Community Consultative Committee
Council	Shellharbour City Council
Croome West Pit	Western extension of the extraction area approved in <a href="#">Modification 9</a>
DA	Development Application
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning, Industry and Environment
DPIE Water	Water Group within the Department
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPL	Environment Protection Licence issued under the <a href="#">POEO Act</a>
Evening	Evening is defined as the period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
GTA	General Term of Approval
Incident	A set of circumstances that: <ul style="list-style-type: none"><li>• causes or threatens to cause material harm to the environment; and/or</li><li>• breaches or exceeds the limits or performance measures/criteria in this consent</li></ul>
Land	As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 4, 4A and 5 of this consent, where it is defined as a 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 consent.
Laden trucks	Trucks transporting quarry products from the site
Material harm	Is harm to the environment that: <ul style="list-style-type: none"><li>• involves actual or potential harm to the health or safety involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or</li><li>• results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)</li></ul>
MEG	Regional NSW – Mining, Exploration and Geosciences
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Minister	Minister for Planning and Public Spaces, or delegate
Night	Night is defined as the period from 10pm to 6am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Privately-owned land	Land not owned by the Applicant or its related companies or where a private agreement does not exist between the Applicant and the landowner
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Quarrying operations	Includes the removal of overburden and extraction, processing, handling, storage and transportation of extractive material on the site
Quarry products	Includes all saleable quarry products, but excludes tailings, other wastes and rehabilitation material
Reasonable	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
Planning Secretary	Planning Secretary of the Department, or nominee
SEE	Statement of Environmental Effects
Shoulder	Time interval from 6am to 7am, Monday to Saturday
Site	Land to which the DA applies
TfNSW	Transport for NSW
Waste	Has the same meaning as the definition of the term in the Dictionary to the <a href="#">POEO Act</a>

# CONSOLIDATED CONSENT

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# CONSOLIDATED CONSENT

## SCHEDULE 3 ADMINISTRATIVE CONDITIONS

### Obligation to Minimise Harm to the Environment

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

### Terms of Approval

2. The Applicant must carry out the development generally in accordance with the:
  - (a) DA 470-11-2003;
  - (b) EIS titled *Environmental Impact Statement for the proposed Dunmore Quarry Production Increase*, Volumes 1 & 2, dated November 2003, and prepared by R. W. Corkery & Company Pty Limited;
  - (c) The letter from Boral Quarries to the Department dated 20 October 2005 about the application to modify Dunmore Quarry development consent DA 470-11-2003, and accompanying plans 4034032\_01 issue E, and 4034032\_EL issue B;
  - (d) modification application MOD 59-4-2006 and letter from Boral Quarries to the Department dated 13 April 2006;
  - (e) Modification Application 470-11-2003 Mod 3, letter to the Department dated 28 March 2008, and accompanying plans GE-DU-2961-02 Rev D; GE-DU-2962-01 Rev B; GE-DU-2963-01 Rev 0; and GE-DU-2964-02 Rev 0;
  - (f) Modification Application 470-11-2003 Mod 4 and accompanying SEE titled *Statement of Environmental Effects for the proposed Dunmore Hard Rock Quarry Extension*, dated May 2008, and letter from Boral Quarries & Recycling to the Department dated 22 September 2008;
  - (g) Modification Application 470-11-2003 Mod 5 and accompanying letter from Boral Quarries & Recycling to the Department dated 16 September 2008 (and accompanying plan GE-DU-2966-01 Rev E);
  - (h) Modification Application 470-11-2003 Mod 6 and accompanying document titled *Environmental Assessment Dunmore Hard Rock Quarry – Modification 6*, prepared by EMGA Mitchell McLennan and dated 19 November 2012;
  - (i) Modification Application 470-11-2003 Mod 7 and accompanying document titled *Proposed Blending Plant Dunmore Hardrock Quarry DA 470-11-2003 – Modification 7, Environmental Assessment*, dated December 2014;
  - (j) Modification 470-11-2003 Mod 8 and accompanying document titled *Dunmore Quarry – Modification 8 Environmental Assessment*, dated August 2016 and accompanying Response to Submissions, dated 22 September 2016;
  - (k) Modification Application 470-11-2003 Mod 10 and accompanying documents titled *Environmental Assessment: Dunmore Quarry Modification 10*, dated 23 May 2017, and supplementary Environmental Assessment titled *Environmental Assessment: Dunmore Quarry Modification 10*, dated 16 June 2017;
  - (l) Modification Application 470-11-2003 Mod 9 and accompanying documents titled *Dunmore Quarry – Modification 9 Environmental Assessment*, dated 17 February 2017, and Response to Submissions titled *Dunmore Quarry – Modification 9 Response to Submissions*, dated 17 August 2017;
  - (m) Modification Application 470-11-2003 Mod 11 and accompanying document titled *Dunmore Quarry – Modification 11 Environmental Assessment*, dated 28 September 2018, Response to Submissions titled *Dunmore Quarry – Mod 11 Response to Submissions*, dated 7 November 2018, and additional information titled *Traffic Impact Assessment Addendum*, dated 24 January 2019; and
  - (n) Modification Application 470-11-2003 Mod 12 and accompanying document titled *Statement of Environmental Effects - Laden truck dispatch restriction amendments*, prepared by Boral Land and Property Group, dated June 2021, and letter from Boral Property Group dated 04 August 2021 with additional information.
- 2A The Applicant must carry out the development in accordance with the conditions of this consent.
3. The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and the document/s listed in condition 2. In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition 2, the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.
4. Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to:
  - (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and
  - (a) the implementation of any actions or measures contained in any such document referred to in condition 4(a).



# CONSOLIDATED CONSENT

## Quarrying Operations

5. The Applicant may carry out quarrying operations on the site until 30 September 2034.

*Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Planning Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.*

6. The Applicant **must** not produce or transport more than 2.5 million tonnes of quarry products a calendar year from the development.

## Transportation

7. A maximum of 2.5 million tonnes of quarry products may be transported from the site in any calendar year.

- 7A. The Applicant **must** not dispatch more than:

- (a) 50 laden trucks per hour from the site between 6 am and 6 pm, with only 33 laden trucks per hour between 6 am and 9 am permitted to head northwest into Albion Park Rail from the intersection of New Lake Entrance Road / Princes Highway;
- (b) 23 laden trucks from the site in any hour between 6 pm and 6 am; and
- (c) a total of 400 laden trucks from the site on per day.

*Note: In this condition, "day" means any 24-hour period.*

## Surrender of Consents

8. *Deleted*

## Structural Adequacy

9. The Applicant **must** ensure that any 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 Applicant is required to obtain construction and occupation certificates for any building works.
- Part 8 of the EP&A Regulation sets out the detailed requirements for the certification of development

## Demolition

10. The Applicant **must** ensure that all demolition work is carried out in accordance with AS 2601-2001: *The Demolition of Structures*, or its latest version.

## Protection of Public Infrastructure

11. The Applicant **must**:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
  - (b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.

## Operation of Plant and Equipment

12. The Applicant **must** ensure that all plant and equipment at the site, or used in connection with the development, are:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

## Compliance

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

# CONSOLIDATED CONSENT

## SCHEDULE 4 SPECIFIC ENVIRONMENTAL CONDITIONS

### IDENTIFICATION OF BOUNDARIES

1. Within 6 months of the date of this consent **and any subsequent modification involving a change to the approved limits of extraction**, the Applicant **must**:
  - (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction;
  - (b) submit a survey plan of these boundaries to the **Planning Secretary**; and
  - (c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

### ACQUISITION UPON REQUEST

2. Upon receiving a written request for acquisition from the landowner of the land listed in Table 1, the Applicant **must** acquire the land in accordance with conditions 3 and 4 below.

Land Owner(s)	Land Identification
Creagan	Lot 5 DP1001931
Stocker	Lot 1 DP745632
McParland/ Fogarty	Lot 10 DP977931
Kimmorley Property	Lot 1 DP998321

Table 1: Land Subject to Acquisition on Request

*Note: Land titled 'McParland/Fogarty' has been acquired and is now quarry-owned.*

3. Within 6 months of receiving a written request from the landowner, the Applicant **must** pay the landowner:
  - (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development the subject of this DA, having regard to the:
    - existing and permissible use of the land, in accordance with the applicable environmental planning instruments at the date of the written request; and
    - presence of improvements on the land 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; and
  - (b) the reasonable costs associated with:
    - relocating within the Shellharbour or Kiama local government areas, or to any other local government area determined by the **Planning Secretary**; and
    - obtaining legal and expert advice for determining the acquisition price of the land and the terms upon which it is to be acquired; and
  - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if within 6 months of receiving this written request, the Applicant 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 **Planning Secretary** for resolution.

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

If either party disputes the independent valuer's determination, the independent valuer must refer the matter back to the **Planning Secretary for resolution**.

If the landowner refuses to accept this offer within 6 months of the date of the Applicant's offer, the Applicant's obligations to acquire the land cease, unless otherwise agreed by the **Planning Secretary**.

4. The Applicant **must** bear the costs of any valuation or survey assessment requested by the independent valuer or the **Planning Secretary**, and the costs of determination referred to in Condition 3 above.
5. If the Applicant and landowner agree that only part of the land should be acquired, then the Applicant **must** pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General.
6. While the land listed in Table 1 is privately-owned land, the Applicant **must** comply with the requirements applying to this land in these conditions of consent.

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## ADDITIONAL MITIGATION UPON REQUEST

- 6A. Upon receiving a written request from the landowner of any residence on the land listed in Table 1 or Table 1A, the Applicant must implement additional mitigation measures at or in the vicinity of the residence, in consultation with the landowner. These measures must be consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development* (NSW Government, 2014), as may be updated or replaced from time to time. They must also be reasonable and feasible and proportionate to the level of predicted impact.

If within 3 months of receiving this request from the landowner, the Applicant and the owner 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 [Planning Secretary](#) for resolution.

Receiver Locations	Mitigation Basis
Locations AA, D, F, G and Z	Noise

Table 1A: Land Subject to Mitigation on Request

## NOISE

### Noise Limits

7. <sup>1</sup>The Applicant **must** ensure that the noise generated by the development does not exceed the criteria specified in Table 2.

Receiver Locations	Noise Limits dB(A)					
	L <sub>Aeq</sub> (15minute)				L <sub>A1</sub> (1minute)	
	Day	Evening	Night	Shoulder	Night	Shoulder
Location K Stocker Residence	49	44	38	47	48	55
Location O Dunmore Lakes	49	44	38	47	48	55
Location J Creagan Residence	Negotiated Agreement in Place					
Location AA	38	38	38	38	45	45
Locations AB and T	36	36	36	36		
Locations D, F, G and Z	40	40	40	40		
Location S	37	37	37	37		
Other privately-owned residences	35	35	35	35		

Table 2: Noise Impact Assessment Criteria for the Development

#### Notes:

- Receiver locations are shown in Appendix 2.
- The above table may be varied if the Applicant enters into a negotiated agreement with any of the affected residents, or if existing agreements become void.
- Noise from the development is to be measured at the most affected point on or within the residential boundary or at the most affected point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary, to determine compliance with the L<sub>Aeq(15 minute)</sub> noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors presented in Section 4 of the NSW Industrial Noise Policy **must** also be applied to the measured noise levels where applicable.
- Noise from the development is to be measured at 1m from the dwelling façade to determine compliance with the L<sub>A1(1minute)</sub> noise limits in above table.
- The noise emission limits identified in Table 1 apply under meteorological conditions of:
  - Wind speed up to 3m/s at 10 metres above ground level; or

<sup>1</sup> Incorporates EPA GTA

# CONSOLIDATED CONSENT

- Temperature inversion conditions of up to 3°C/100m and wind speed up to 2m/s at 10 metres above the ground.

## Noise Investigations

8. Deleted

## Operating Hours

9. The Applicant **must** comply with the operating hours in Table 3:

Activity	Days of the Week	Time
Extraction and Processing	Monday – Saturday	6-00am to 10-00pm
Product Transfer to Stockpiles	Monday - Saturday	6-00am – Midnight
Maintenance	Monday – Sunday	24 hrs
Construction (including construction of the bund under Modification 8)	Monday – Saturday	7-00am to 6-00pm Monday to Friday 8-00am to 1-00pm Saturday

Table 3: Operating Hours for the Development

10. Deleted

## Oversized Material

11. <sup>2</sup>The Applicant **must** not process any oversized raw feed material at the development during the shoulder period.

Note: For the purpose of this condition “oversized raw feed material” is defined as where more than 50% of the shot is over 900mm in diameter.

## Noise Operating Conditions

11A. The Applicant must:

- take all reasonable steps to minimise the construction, operational and transport noise associated with the development;
- take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions; when the noise criteria in this consent do not apply; and
- regularly assess noise monitoring data, and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the [Planning Secretary](#).

## Noise Monitoring

12. Deleted

13. <sup>3</sup>Within 3 months of the date of this consent, and annually thereafter, unless directed otherwise by the [Planning Secretary](#), the Applicant **must**:

- commission a suitably qualified person to assess whether the development is complying with the noise impact assessment criteria in Table 2, in general accordance with the NSW Industrial Noise Policy and Australian Standard (AS) 1055-1997: “Description and Measurement of Environmental Noise”; and
- provide the results of this assessment to the EPA and [Planning Secretary](#) within a month of commissioning the assessment.

## Noise Management Plan

14. The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the [Planning Secretary](#). This plan must:

- be prepared in consultation with the EPA;
- be submitted to the [Planning Secretary](#) for approval prior to commencing quarrying operations in the Croome West Pit, unless the [Planning Secretary](#) agrees otherwise;
- describe the measures to be implemented to ensure:
  - compliance with the noise criteria and operating conditions of this consent;

<sup>2</sup> Incorporates EPA GTA

<sup>3</sup> Incorporates EPA GTA

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- best practice management is being employed;
  - noise impacts of the development are minimised during stage 3 extraction of the Croome West Pit, particularly during the shoulder period; and
  - noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;
- (d) describe the proposed noise management system; and
- (e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2.

The Applicant must implement the Noise Management Plan as approved by the [Planning Secretary](#).

## Reporting

15. Deleted

## BLASTING AND VIBRATION

### Airblast Overpressure Criteria

16. The Applicant **must** ensure that the airblast overpressure level from blasting at the development does not exceed the criteria in Table 4 at any residence or sensitive receiver on privately-owned land.

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

Table 4: Airblast Overpressure Limits

### Ground Vibration Criteria

17. The Applicant **must** ensure that the peak particle velocity from blasting at the development does not exceed the criteria in Table 5 at any residence or sensitive receiver on privately - owned land.

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

Table 5: Ground Vibration Limits

### Blasting Restrictions

18. <sup>4</sup>Blasting operations at the site may only take place:
- between 9am and 5pm Monday to Saturday inclusive;
  - are limited to 2 blasts each day; and
  - at such other times as may be approved by [EPA](#).

### Blast Operating Conditions

19. During blasting operations, the Applicant must:
- take all reasonable steps to:
    - protect the safety of people in the surrounding area;
    - protect public or private infrastructure/property in the surrounding area from any damage; and
    - minimise blast-related dust and fume emissions; and
  - operate a suitable system to enable members of the public to get up-to-date information on the proposed blasting schedule on the site, to the satisfaction of the [Planning Secretary](#).

<sup>4</sup> Incorporates [EPA](#) GTA



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## Blast Management Plan

20. The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the **Planning Secretary**. This plan must:
- be submitted to the **Planning Secretary** for approval within 6 months of Modification 8, or as otherwise agreed by the **Planning Secretary**;
  - describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;
  - include measures to manage and monitor the avoidance of impacts on the heritage values on the buildings on Lot 10 DP977931;
  - include measures to manage flyrock;
  - include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;
  - include community notification procedures for the blasting schedule, in particular to nearby residences; and
  - include a protocol for investigating and responding to complaints.

The Applicant must implement the approved Blast Management Plan as approved from time to time by the **Planning Secretary**.

*Note: Prior to the approval of the Blast Management Plan revised under Modification 8, the most recent approved version must continue to have full force and effect and must be implemented.*

## Blast Monitoring

21. <sup>5</sup>The Applicant **must** monitor the airblast overpressure and peak particle velocity impacts of the development at the permanent monitoring station **as** approved by the **EPA**, to the satisfaction of the **EPA** and **Planning Secretary**, using the specified units of measure, frequency, sampling method, and location in Table 6.

Parameter	Units of Measure	Frequency	Sampling Method	Measurement Location
Airblast overpressure	dB(Lin Peak)	During every blast	AS2187.2-1993 <sup>1</sup>	Not less than 3.5m from a building or structure (or as otherwise agreed by <b>EPA</b> )
Peak particle velocity	mm/s	During every blast	AS2187.2-1993	Not more than 30m from a building or structure (or as otherwise agreed by <b>EPA</b> )

Table 6: Airblast overpressure and peak particle velocity monitoring

<sup>1</sup> Standards Australia, 1993, AS2187.2-1993: Explosives - Storage, Transport and Use of Explosives

## AIR QUALITY

### Impact Assessment Criteria

22. The Applicant must ensure that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 7 at any residence on privately-owned land.

Pollutant	Averaging period	Criterion	
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	a,d 25 µg/m <sup>3</sup>	
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	b 50 µg/m <sup>3</sup>	
Particulate matter < 2.5 µm (PM <sub>10</sub> )	Annual	a,d 8 µg/m <sup>3</sup>	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m <sup>3</sup>	
<sup>c</sup> Deposited dust	Annual	b 2 g/m <sup>2</sup> /month	a,d 4 g/m <sup>2</sup> /month

Table 7: Air Quality Impact Assessment Criteria

<sup>5</sup> Incorporates **EPA** GTA

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## Notes:

a Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).

b Incremental impact (ie increase in concentrations due to the development alone, with zero allowable exceedances of the criteria over the life of the development).

c Deposited dust is to be 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.

d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the [Planning Secretary](#).

## Air Quality Operating Conditions

### 23. The Applicant must:

- (a) take all reasonable steps to minimise dust, fume and greenhouse gas emissions of the development;
  - (b) regularly assess meteorological and air quality monitoring data and relocate, modify or stop operations on the site to ensure compliance with the relevant conditions of this consent;
  - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d to Table 7 above); and
  - (d) minimise any visible off-site air pollution,
- to the satisfaction of the [Planning Secretary](#).

## Air Quality Management Plan

### 24. The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the [Planning Secretary](#). This plan must:

- (a) be submitted to the [Planning Secretary](#) for approval within 6 months of the determination of Modification 9, unless otherwise agree by the [Planning Secretary](#);
- (b) describe the measures to be implemented to ensure:
  - compliance with the air quality criteria and operating conditions of this consent;
  - best practice management is being employed; and
  - the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;
- (c) describe the proposed air quality management system;
- (d) include an air quality monitoring program that:
  - is capable of evaluating the performance of the development and informing day to day management decisions;
  - includes a protocol for determining any exceedances of the relevant conditions of consent; and
  - effectively supports the air quality management system.

The Applicant must implement the approved Air Quality Management Plan as approved by the [Planning Secretary](#).

## METEOROLOGICAL MONITORING

### 25. For the duration of the development, the Applicant must ensure that there is a suitable meteorological station operating in close proximity to the site that:

- (a) complies with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007) (as may be updated or replaced from time to time); and
- (b) is capable of continuous real-time measurement of atmospheric stability category determined by the sigma theta method in accordance with the NSW Industrial Noise Policy (EPA, 2000), (as may be updated or replaced from time to time) unless a suitable alternative is approved by the [Planning Secretary](#) following consultation with the EPA.

### 26. Deleted

## SURFACE AND GROUND WATER

### Pollution of Waters

### 27. Except as may be expressly provided by an Environment Protection Licence, the Applicant **must** comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the development.

## Water Supply

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- 28A. The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of quarrying operations to match its available water supply.

*Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development.*

## Water Discharge Limit

28. The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.

## Site Water Balance

29. In each Annual Review, the Applicant must:
- recalculate the site water balance for the development; and
  - provide information on evaporative losses, dust suppression, dam storage levels and implications of obtaining any water supplies from off-site; and
  - evaluate water take against licensing requirements.

## Storm Water Management System

30. The Applicant must ensure that the storm water management system for the development is designed, constructed and operated to capture and treat polluted waters from storm event(s) of up to and including the 5-day, 95th percentile rainfall event.
31. The Applicant must ensure that the basins in the storm water management system are managed in accordance with the operating principles within the revised Water Management Plan prepared by Evans and Peck, dated April 2008, or any subsequent Water Management Plan approved by the Planning Secretary, to maintain the required storm water storage volume.

## Offline Dam

32. By 18 May 2008, or as otherwise agreed to by the Planning Secretary, the Applicant must:
- modify the existing dam at the site to create increased capacity offline from Rocklow Creek;
  - construct dams within the site of sufficient capacity to ensure that the water quality criteria in condition 29 can be met for all rainfall events up to and including the 5-day duration 95<sup>th</sup> percentile rainfall event;
  - ensure the discharge and overflow points of the dams do not cause erosion at the point of discharge/overflow;
  - rehabilitate and stabilise the banks of the dams; and
  - ensure the integrity of the dams would not be compromised by flooding; to the satisfaction of the EPA and the Planning Secretary.
33. Prior to carrying out any of these works, the Applicant must prepare a Dam Upgrade Plan in consultation with the EPA, and to the satisfaction of the Planning Secretary. This plan must include:
- the detailed design and specifications of the proposed works, which have been certified by a practicing registered engineer;
  - an erosion and sediment control plan for the proposed works, that is consistent with the requirements in the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
  - a vegetation and rehabilitation plan, setting out how the banks of the dams and other relevant pollution control features would be rehabilitated and stabilized;
  - an acid sulfate soil management plan that is consistent with the *NSW Acid Sulfate Soil* manual;
  - a construction program for the proposed works; and
  - a program setting out how the modified dam and associated revegetation works would be maintained during the life of the development.

The Applicant must implement the approved management plan as approved from time to time by the Planning Secretary.

34. Within 1 month of completing the construction works in the Dam Upgrade Plan, the Applicant must submit an as-executed report, certified by a practicing registered engineer, to the satisfaction of the EPA and Planning Secretary.

## Lower Dam Transition Plan

- 35A. Within 3 months of the determination of Modification 9, or as otherwise agreed by the Planning Secretary, the Applicant must prepare a Lower Dam Transition Plan in consultation with the EPA and to the satisfaction of the Planning Secretary. The plan must include a program to:
- undertake a broader assessment of the site's water management system and potential water pollution impacts; and

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- (b) investigate reasonable and feasible mitigation measures to improve water quality outcomes for the site, including altering the design of the Lower Dam or else transitioning away from its use, within two years.

The Applicant must not alter the Lower Dam until this plan is approved by the Planning Secretary. The Applicant must implement the approved plan as approved by the Planning Secretary.

## Flocculant Management

35. The Applicant must not use flocculants on the site.
36. Deleted

## Other Water Management Works

37. <sup>6</sup>Within 18 months of the date of this consent, the Applicant must carry out the following works:
- (a) *Workshop and Fuel Storage Area*
- desilt drains and culverts upstream of the workshop to limit flooding;
  - construct a first flush collection basin to capture and store the first 13mm of run-off from the external service bays before it is treated by the oil/water separator; and
  - bund and roof the drum storage area;
- (b) *Magazine Area*
- reinstate drain through access road to magazines to direct stormwater flows to the main drain;
- (c) *deleted*
- to the satisfaction of EPA and the Planning Secretary.

## Bunding

38. <sup>7</sup>Impervious bunds must be constructed around all fuel, oil and chemical storage areas and the bund volume must be large enough to contain 110 per cent of the volume held in the largest container. The bund must be designed and installed in accordance with the requirements of the EPA Environment Protection Manual Technical Bulletin *Bunding and Spill Management*.

## Monitoring

39. The Applicant must:
- (a) measure:
- the volume of water discharged from the site via licenced discharge points;
  - water use on the site;
  - water transfers across the site;
  - dam and water structure storage levels;
- (b) monitor the quality of the surface water:
- discharged from the licence discharge point/s of the development;
  - upstream and downstream of the development;
- (c) monitor flows in Rocklow Creek; and
- (d) monitor regional groundwater levels and quality;
- to the satisfaction of the EPA and the Planning Secretary.

*Note: On the provision of two years of monitoring data that shows negligible impact on the regional groundwater network, the Planning Secretary may agree to suspend monitoring of regional groundwater levels and/or quality.*

## Site Water Management Plan

40. Within 12 months of the date of this consent, the Applicant must prepare a Site Water Management Plan for the development, in consultation with the DPIE Water, and to the satisfaction of the Planning Secretary. This plan must include:
- (a) the predicted site water balance;
- (b) an Erosion and Sediment Control Plan;
- (c) a Surface Water Monitoring Program
- (d) a Ground Water Monitoring Program; and
- (e) an Integrated Water Management Strategy.

The Applicant must implement the approved management plan as approved from time to time by the Planning Secretary.

<sup>6</sup> Incorporates EPA GTA

<sup>7</sup> Incorporates EPA GTA

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41. The Erosion and Sediment Control Plan **must**:
- be consistent with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
  - identify activities that could cause soil erosion and generate sediment;
  - describe measures to minimize soil erosion and the potential for the transport of sediment to downstream waters;
  - describe the location, function, and capacity of erosion and sediment control structures; and
  - describe what measures would be implemented to maintain the structures over time.
42. The Surface Water Monitoring Program **must** include:
- detailed baseline data on surface water flows and quality in Rocklow Creek;
  - surface water impact assessment criteria;
  - a program to monitor surface water flows and quality in Rocklow Creek;
  - a program to monitor and minimise surface water and groundwater ingress into the Lower Dam and water egress into Rocklow Creek;
  - a program to monitor bank and bed stability in Rocklow Creek; and
  - a program to monitor the effectiveness of the Erosion and Sediment Control Plan.
43. The Ground Water Monitoring Program **must** include:
- detailed baseline data on ground water levels and quality, based on statistical analysis;
  - ground water impact assessment criteria;
  - a program to monitor regional ground water levels and quality; and
  - a program to monitor groundwater inflows.
- Note: On the provision of two years of monitoring data that shows negligible impact on the regional groundwater network, the Planning Secretary may agree to suspend monitoring of regional groundwater levels and/or quality.*
44. <sup>8</sup>The Integrated Water Management Strategy **must**:
- explore a range of options for a sustainable resource alternative for water supply to the site;
  - identification of all possible and available sources of water;
  - consistency with Government Water Reform initiatives and policies;
  - quality of water to meet usage requirements including any possible effects on product;
  - costs of supply;
  - health and environmental impacts;
  - legislative requirements;
  - assessment of the feasibility, benefits and costs of options;
  - a process to identify and evaluate preferred options for implementation; and
  - the identification of a timetable for implementation of the selected options.

## FLORA AND FAUNA

### Vegetation Offset Strategy

45. The Applicant **must**:
- establish, conserve, and maintain at least:
    - 4.6 hectares of *Melaleuca armillaris* Tall Shrubland; and
    - 8.2 hectares of Blue Gum-White Box Woodland/Forest, on Boral-owned land adjacent to the development;
  - conserve, maintain, and enhance the vegetation in the area to the south of the development marked on the map in Appendix 3 as Remnant Vegetation Conservation Area;
  - conserve, maintain, enhance and establish the vegetation in the area to the south of the development marked on the map in Appendix 3 as Offset Area, in accordance with the letter from Boral to the Department dated 22 September 2008 titled *Dunmore Quarry – Revised Offset for Quarry Extension*; within 12 months of the date of Modification 8, the Applicant must provide a biodiversity offset strategy outlining the measures to offset 48 Illawarra Zieria individuals and 1.94 ha of native vegetation clearing (including 0.05 ha of Illawarra Subtropical Rainforest EEC), to the satisfaction of BCS and the Planning Secretary. The offset must demonstrate that the biodiversity values in the general vicinity of the site have been maintained or improved; and
  - within 12 months of the date of approval of Modification 9, the Applicant must provide a biodiversity offset strategy outlining measures to offset 162 Illawarra Zieria individuals by no less than 2,268 Illawarra Zieria credits, to the satisfaction of BCS and the Planning Secretary. The offset must demonstrate that the biodiversity values in the general vicinity of the site have been maintained or improved.

*Note: The Compensatory Habit Area established to address paragraph (a) is marked on the map in Appendix 3.*

- 46A. Within 12 months of the date of Modification Application 470-11-2003 Mod 4, the Applicant **must** make suitable arrangements in consultation with the BCS to provide appropriate long term security for the biodiversity offset referred to in condition 46 (c), to the satisfaction of the Planning Secretary.

<sup>8</sup> Incorporates EPA GTA



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46B. Within 12 months of the date of providing the biodiversity offset strategy required under condition 46(d), the Applicant must make suitable arrangements to provide long term security for this strategy, to the satisfaction of the Planning Secretary.

46C. Within 12 months of the date of providing the biodiversity offset strategy required under condition 46(e), the Applicant must make suitable arrangements to provide long term security for this strategy, to the satisfaction of the Planning Secretary.

*Note: Mechanisms to provide appropriate long term security to the land within a biodiversity offset strategy in accordance with the NSW Biodiversity Offset Policy for Major Projects 2014, include a BioBanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome.*

## Flora and Fauna Management Plan

46. Within 12 months of the date of this consent, the Applicant **must** prepare a Flora and Fauna Management Plan for the development to the satisfaction of the Planning Secretary. This plan must include:

- a Vegetation Clearing Protocol;
- a Compensatory Habitat Management Plan;
- a Remnant Vegetation Conservation Plan; and
- a Biodiversity Offset Management Plan.

The Applicant must implement the approved management plan as approved from time to time by the Planning Secretary.

47. The Vegetation Clearing Protocol **must**:

- delineate the areas of remnant vegetation to be cleared; and
- describe the procedures that would be implemented for:
  - pre-clearance surveys;
  - progressive clearing;
  - fauna management;
  - conserving and reusing topsoil;
  - collecting seed from the site;
  - salvaging and reusing material from the site; and
  - controlling weeds.

48. The Compensatory Habit Management Plan **must**:

- describe the compensatory habitat proposal to satisfy condition 46(a);
- justify why this area(s) is suitable for the compensatory habitat proposal;
- establish baseline data for the existing habitat in the proposed compensatory habitat area(s);
- describe how the compensatory habitat proposal would be implemented;
- set completion criteria for the compensatory habitat proposal; and
- describe how the performance of the compensatory habitat management proposal would be monitored over time.

49. The Remnant Vegetation Conservation Plan **must**:

- describe what measures would be implemented to satisfy condition 46(b);
- establish baseline data for the existing vegetation in the area;
- set completion criteria for the Remnant Vegetation Conservation Area; and
- describe how the performance of the Remnant Vegetation Conservation Area would be monitored over time.

50A. The Biodiversity Offset Management Plan **must**:

- describe what measures would be implemented to satisfy condition 46(c);
- describe the biodiversity offset strategies in conditions 46(d)-(e);
- include a timetable for providing long term security of the offset areas;
- set performance and completion criteria for the offset areas; and
- include a program to monitor and report on the effectiveness of the implementation measures, and progress against the performance and completion criteria.

## Reporting

50. The Applicant **must** include a progress report on the implementation of the Flora and Fauna Management Plan in the Annual Review.

## Independent Audit

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51. Within 3 years of the date of this consent, and every 5 years thereafter unless the **Planning Secretary** directs otherwise, the Applicant **must** commission, and pay the full cost of an Independent Audit of the Flora and Fauna Management Plan. This audit must:
- be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the **Planning Secretary**;
  - assess the performance of the Flora and Fauna Management Plan;
  - review the adequacy of the Flora and Fauna Management Plan; and, if necessary,
  - recommend actions or measures to improve the performance and/ or adequacy of the Flora and Fauna Management Plan.

## REHABILITATION

### Rehabilitation

52. The Applicant **must** progressively rehabilitate the site to the satisfaction of the **Planning Secretary**.

### Rehabilitation Management Plan

53. Within 6 months of the date of this consent, the Applicant **must** prepare a Rehabilitation Management Plan for the site to the satisfaction of the **Planning Secretary**. This plan must:
- identify the disturbed area at the site;
  - describe in general the short, medium, and long-term measures that would be implemented to rehabilitate the site;
  - describe in detail the measures that would be implemented over the next 3 years to rehabilitate the site; and
  - describe how the performance of these measures would be monitored over time.

The Applicant **must** implement the approved management plan as approved from time to time by the **Planning Secretary**.

### Rehabilitation and Conservation Bond

54. Within 6 months of the date of this consent, the Applicant **must** lodge a Rehabilitation and Conservation Bond with the Department to ensure that the conservation commitments and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the relevant plans and the relevant conditions of this consent. The sum of the bond must be an amount agreed by the **Planning Secretary** and determined by:
- calculating the full cost of implementing the compensatory habitat area (see condition 49) and the offset areas (see condition 50A);
  - calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations (see condition 54); and
  - employing a suitably qualified quantity surveyor or other expert to verify the calculated costs.

#### Notes:

- Alternative funding arrangements for long term management of the offset areas, such as provision of capital and management funding as agreed by BCS as part of a BioBanking Agreement, or transfer to conservation reserve estate can be used to reduce the liability of the bond.*
- If capital and other expenditure required by the Flora and Fauna Management Plan or the Rehabilitation Management Plan is largely complete, the **Planning Secretary** may waive the requirement for lodgement of a bond in respect of the remaining expenditure.*
- If the conservation commitments/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the **Planning Secretary** then the **Planning Secretary** will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy and rehabilitation of the site are not completed to the satisfaction of the **Planning Secretary**, then the **Planning Secretary** will call in all or part of the bond, and arrange for the completion of the relevant works.*

55. The Rehabilitation and Conservation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following an update or revision to the Flora and Fauna Management Plan or the Rehabilitation Management Plan, or following the completion of an Independent Environmental Audit. This review must consider the:
- effects of inflation;
  - likely cost of implementing the compensatory habitat area and offset areas and rehabilitating all disturbed areas of the site (taking into account the likely surface disturbance over the next 3 years of the development); and
  - performance of the implementation of the compensatory habitat area and offset areas and rehabilitation of the site to date.

56. Deleted

## Reporting

# CONSOLIDATED CONSENT

57. The Applicant **must** include a progress report on the Rehabilitation Management Plan in the **Annual Review**.

## TRAFFIC AND TRANSPORT

### North Kiama Bypass

58. The Applicant **must** facilitate access to the North Kiama Bypass along Tabbita Road in accordance with the terms set out in the Deed of Agreement between the Applicant and Dunmore Sand and Soil Pty Ltd, dated 29 July 2004.

### Transport Management Plan

59. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the **Planning Secretary**. This plan must:

- (a) be prepared by a suitably qualified traffic consultant, in consultation with **TfNSW** and Council, and submitted to the **Planning Secretary** for approval by 31 May 2014;
- (b) include a Drivers' Code of Conduct that includes procedures to ensure that drivers:
  - (i) adhere to posted speed limits or other required travelling speeds;
  - (ii) minimise trucking into Albion Park Rail during the morning peak hour period;
  - (iii) avoid grouping or convoys, in particular at intersections; and
  - (iv) implement safe and quiet driving practices;
- (c) describe the measures that would be implemented to ensure:
  - all drivers of development-related vehicles comply with the Drivers' Code of Conduct; and
  - compliance with the relevant conditions of this consent; and
- (d) include a program to monitor the effectiveness of the implementation of these measures.

The Applicant **must** implement the approved management plan as approved from time to time by the **Planning Secretary**.

### Cumulative Traffic Impact Study

60A. The Applicant **must**, in conjunction with the operators of the Bass Point Quarry and the Albion Park Quarry, cause to be prepared an independent Cumulative Traffic Impact Study. The study must:

- (a) be undertaken by a suitably qualified traffic consultant, whose appointment has been approved by the **Planning Secretary**;
- (b) be commissioned by 30 June 2014, and completed by 31 October 2014, or as otherwise agreed in writing by the **Planning Secretary**;
- (c) be co-funded by the operators of the Dunmore, Bass Point and Albion Park quarries, proportionate to the quarries' respective quarry product road transport limits, as approved at 30 June 2014;
- (d) include a comprehensive assessment of current and future projected cumulative traffic impacts of the three quarries on the classified road network, undertaken in consultation with the **TfNSW**; and
- (e) identify any reasonable and feasible measures that can be implemented to minimise the traffic and road safety impacts of quarry trucks on Mount Ousley Road, and the likely cost of implementing these measures.

60B. The Applicant **must**, in conjunction with the operators of the Bass Point Quarry and the Albion Park Quarry, prepare and implement a program to implement any reasonable and feasible measures identified in the Cumulative Traffic Impact Study not already undertaken by the Applicant, in an equitable manner with the two other quarry operators, to the satisfaction of the **Planning Secretary**. The program must be submitted to the **Planning Secretary** for approval by 28 February 2015, or as otherwise agreed in writing by the **Planning Secretary**.

### Transport Options Review

60C. Within three years of the determination of Modification 11, and every five years thereafter (if directed to do so by the **Planning Secretary**), the Applicant **must** commission and pay the full costs of a Transport Options Review for the development. This review must:

- a) be conducted by a suitably qualified, experienced and independent expert/s whose appointment has been endorsed by the **Planning Secretary**;
- b) be prepared in consultation with **TfNSW** and Council;
- c) review the economic, social and environmental costs and benefits of all reasonable and feasible options for the transport of quarry products from the site (including by rail and road);
- d) review and report on available rail terminal capacity;
- e) recommend any appropriate measures or actions to:
  - i. reduce the economic, social and environmental costs associated with transport of quarry products by road from the site; and
  - ii. maximise the use of rail deliveries from the site; and
- f) be conducted and reported to the satisfaction of the **Planning Secretary**.

# CONSOLIDATED CONSENT

Within three months of commencing this review, or within another timeframe agreed by the [Planning Secretary](#), the Applicant must submit a copy of the review report to the [Planning Secretary](#) and any other NSW agency that requests it, together with its response to any recommendations contained in the review report.

## Parking

60. The Applicant **must** provide sufficient parking on-site for all quarry-related traffic to the satisfaction of the [Planning Secretary](#).

## Road Haulage

61. The Applicant **must** ensure that all loaded vehicles entering or leaving the site are covered.
62. The Applicant **must** ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.

## ABORIGINAL HERITAGE

### Aboriginal Cultural Heritage Management Plan

63. The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the [Planning Secretary](#). The plan must:
- be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the [Planning Secretary](#);
  - be prepared in consultation with BCS and the Registered Aboriginal Parties;
  - be submitted to the [Planning Secretary](#) for approval prior to commencing quarrying operations in the Croome West Pit, unless the [Planning Secretary](#) agrees otherwise; and
  - include a description of the measures that would be implemented to:
    - protect, monitor and manage known sites or potential areas of archaeological significance (including any proposed archaeological investigations or salvage measures);
    - manage unanticipated finds including new Aboriginal objects and Aboriginal skeletal remains that are discovered during the development;
    - store and display salvaged Aboriginal heritage items; and
    - ensure ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.

The Applicant must implement the approved Aboriginal Heritage Management Plan as approved by the [Planning Secretary](#).

64. *Deleted*

## VISUAL IMPACT

### Visual Amenity

65. The Applicant **must** minimise the visual impacts of the development to the satisfaction of the [Planning Secretary](#).
66. Prior to carrying out any development that would be visible from the areas to the south west of the quarry, the Applicant **must** construct, and subsequently maintain, the proposed visual/ noise bund between the Croome Farm extraction area and the Jamberoo Valley to the satisfaction of the [Planning Secretary](#).
- 67A. The Applicant **must**:
- construct the blending plant in the location shown on the figure in Appendix 4; and
  - ensure the maximum height of the blending plant is no greater than 15.2 m.

### Lighting Emissions

67. The Applicant **must** take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development.
68. All external lighting associated with the development **must** comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

## WASTE MANAGEMENT

# CONSOLIDATED CONSENT

## Waste Minimisation

69. The Applicant **must** minimise the amount of waste generated by the development to the satisfaction of the [Planning Secretary](#).

## Waste Classification

70. <sup>9</sup>All liquid and non liquid wastes resulting from activities and processes at the site must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: *Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999)*, or any other EPA document superceding this guideline.

## Reporting

71. The Applicant **must** describe what measures have been implemented to minimise the amount of waste generated by the development in the [Annual Review](#).

## EMERGENCY AND HAZARDS MANAGEMENT

### Dangerous Goods

72. The Applicant **must** ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.

### Safety

73. The Applicant **must** secure the development to ensure public safety to the satisfaction of the [Planning Secretary](#).

### Emergency Management

74. <sup>10</sup>Within 6 months of the date of this consent, the Applicant **must** document, and subsequently implement measures to minimise the environmental impacts of any emergency situations that could arise as a result of the operation of the Dunmore Quarry to the satisfaction of the EPA. This documentation must:
- identify any significant threats to the environment and/ or public health that could arise from activities associated with the operation of the quarry or construction works associated with the production increase. These threats may include excessive rainfall, problems during construction and operation, pump failures, excess flocculation, power or other utility failure, natural disaster, landslip, accidental spills and discharges, train derailment, spillage from trucks, fire etc;
  - identify any subsequent direct or indirect environmental effects as a result of the threats;
  - identify the pollution that would result due to these threats and impacts on operations and what impact the pollution would have on the health of the community and the environment;
  - develop actions to effectively respond to the disruption of operations so the risk of pollution is minimised;
  - develop a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution;
  - ensure that all relevant employees are familiar with the documentation; and
  - when developing this documentation identify any opportunities to integrate with Boral Emergency plans.

## BUSHFIRE MANAGEMENT

75. The Applicant **must**:
- ensure that the development is suitably equipped to respond to any fires on-site; and
  - assist the Rural Fire Service and Emergency Services as much as possible if there is a fire on-site.
76. Within 6 months of the date of this consent, the Applicant **must** prepare a Bushfire Management Plan for the development, to the satisfaction of Council and the Rural Fire Service.

## PRODUCTION DATA

77. The Applicant **must**:
- provide annual production data to the MEG using the standard form for that purpose; and
  - include a copy of this data in the [Annual Review](#).

---

<sup>9</sup> Incorporates EPA GTA

<sup>10</sup> Incorporates EPA GTA



# CONSOLIDATED CONSENT

## SCHEDULE 4A ADDITIONAL PROCEDURES

### NOTIFICATION OF EXCEEDANCES

1. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise or air quality criterion in Schedule 4 of this consent, the Applicant must provide the details of the exceedance to any affected landowners and/or tenants.
2. For any exceedance of the air quality criteria in Schedule 4 of this consent, the Applicant must also provide to any affected landowners and/or tenants a copy of the fact sheet entitled "Mine Dust and You" (NSW Health, 2017).

### INDEPENDENT REVIEW

3. If a landowner considers the development to be exceeding any relevant noise or air quality criterion in Schedule 4 of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.
4. If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.
5. If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must:
  - (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
    - (i) consult with the landowner to determine their concerns;
    - (ii) conduct monitoring to determine whether the development is complying with the relevant criterion in Schedule 4 of this consent; and
    - (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion;
  - (b) provide the Planning Secretary and landowner a copy of the independent review; and
  - (c) comply with any written requests made by the Planning Secretary to implement any findings of the review.

# CONSOLIDATED CONSENT

## SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

### ENVIRONMENTAL MANAGEMENT

#### Environmental Management Strategy

1. If the **Planning Secretary** requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the **Planning Secretary**. This strategy must:
  - (a) be submitted to the **Planning Secretary** for approval within 6 months of the **Planning Secretary** requiring preparation of the strategy by notice to the Applicant;
  - (b) provide the strategic framework for the environmental management of the development;
  - (c) identify the statutory approvals that apply to the development;
  - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
  - (e) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the development;
    - respond to any non-compliance; and
    - respond to emergencies; and
  - (f) include:
    - copies of any strategies, plans and programs approved under the conditions of this consent; and
    - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved from time to time by the **Planning Secretary**.

#### Evidence of Consultation

- 1A. Where consultation with any State or local agency is required by the conditions of this consent, the Applicant must:
  - (a) consult with the relevant agency prior to submitting the required document;
  - (b) submit evidence of this consultation as part of the relevant document;
  - (c) describe how matters raised by the agency have been addressed and any matters not resolved; and
  - (d) include details of any outstanding issues raised by the agency and an explanation of disagreement between any agency and the Applicant.

#### Management Plan Requirements

2. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
  - (a) detailed baseline data;
  - (b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria; and
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
  - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - (d) a program to monitor and report on the:
    - impacts and environmental performance of the development; and
    - effectiveness of any management measures (see (c) above);
  - (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
  - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
  - (g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and
    - exceedances of the impact assessment criteria and/or performance criteria;
  - (h) a protocol for periodic review of the plan; and

# CONSOLIDATED CONSENT

- (i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of people who prepared and reviewed the management plan, a description of any revisions made and the date of the [Planning Secretary's](#) approval.

*Note: The [Planning Secretary](#) may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

## Application of Existing Strategies, Plans or Programs

- 3A. The Applicant must continue to apply existing approved strategies, management plans, or monitoring programs that have most recently been approved under this consent, until the approval of a similar strategy, plan or program under this consent.

## Updating & Staging Submission of Strategies, Plans or Programs

3. To ensure the strategies, plans or programs under this consent are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs to the [Planning Secretary](#) for approval. With the agreement of the [Planning Secretary](#), the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.

With the agreement of the [Planning Secretary](#), the Applicant may revise any strategy, plan or program approved under this consent without consulting with all the parties nominated under the applicable conditions of consent.

*Notes:*

- *While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the existing operations associated with the development are covered by suitable strategies, plans or programs at all times.*
- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.*

## Revision of Strategies, Plans & Programs

4. Within 3 months of the submission of an:
  - (a) incident report under condition 7 below;
  - (b) Annual Review under condition 9 below;
  - (c) audit report under condition 10 below; and
  - (d) any modifications to this consent,the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the [Planning Secretary](#).

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.*

## Adaptive Management

5. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the [Planning Secretary](#), to the satisfaction of the [Planning Secretary](#).

## COMMUNITY CONSULTATIVE COMMITTEE

6. The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the [Planning Secretary](#). This CCC must be operated in general accordance with the Department's *Community Consultative Committee Guidelines: State Significant Projects (2016)* (as may be updated or replaced from time to time).

# CONSOLIDATED CONSENT

## Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.
- In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community.
- The requirement for this CCC may be fulfilled by a regional CCC for any two or more of Boral's quarrying operations in the South Coast area.

## REPORTING AND AUDITING

### Incident Reporting

7. The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.

### Non-Compliance Notification

- 7A Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

**Note:** A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

### Regular Reporting

8. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

### Annual Review

9. By the end of September each year, or other timing as may be agreed by the **Planning Secretary**, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the **Planning Secretary**. This review must:
  - (a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - requirements of any plan or program required under this consent;
    - monitoring results of previous years; and
    - relevant predictions in the documents listed in condition 2 of Schedule 3;
  - (c) identify any non-compliance over the last financial year, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the development;
  - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
  - (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.

The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request.

### INDEPENDENT ENVIRONMENTAL AUDIT

10. Prior to 1 April 2017, and every three years thereafter, unless the **Planning Secretary** directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the **Planning Secretary**;
  - (b) include consultation with the relevant agencies and the CCC;
  - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licences (including any assessment, plan or program required under these approvals);

## CONSOLIDATED CONSENT

- (d) review the adequacy of any approved strategies, plans or programs required under the abovementioned approvals;
- (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals; and
- (f) be conducted and reported to the satisfaction of the [Planning Secretary](#).

*Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the [Planning Secretary](#).*

- 11. Within 12 weeks of commencing this audit, or as otherwise agreed by the [Planning Secretary](#), the Applicant must submit a copy of the audit report to the [Planning Secretary](#) and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report.

### ACCESS TO INFORMATION

- 12. By 31 December 2016, unless otherwise agreed by the [Planning Secretary](#), the Applicant must:
  - (a) make the following information publicly available on its website:
    - the documents listed in condition 2 of Schedule 3;
    - current statutory approvals for the development;
    - approved strategies, plans or programs required under the conditions of this consent;
    - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
    - a complaints register, updated quarterly;
    - the Annual Reviews (over the last 5 years);
    - any independent environmental audit, and the Applicant's response to the recommendations in any audit;
    - any other matter required by the [Planning Secretary](#); and
  - (b) keep this information up-to-date, to the satisfaction of the [Planning Secretary](#).



# CONSOLIDATED CONSENT

## APPENDIX 1 SCHEDULE OF LAND

Land to which the Development Application refers:

**Local Government Area:**

Shellharbour

**Suburb, town or locality:**

Dunmore

**Land:**

Lot No.	DP No.
Lot 1	DP 213575
Lot 3	DP 1030504
Lot 4	DP 1030504
Lot 4	DP 227046
Lot 1	DP 1002951
Lot 1	DP 224597
Lot 2	DP 224597
Lot 4	DP 571406
Lot 6	DP 1001931

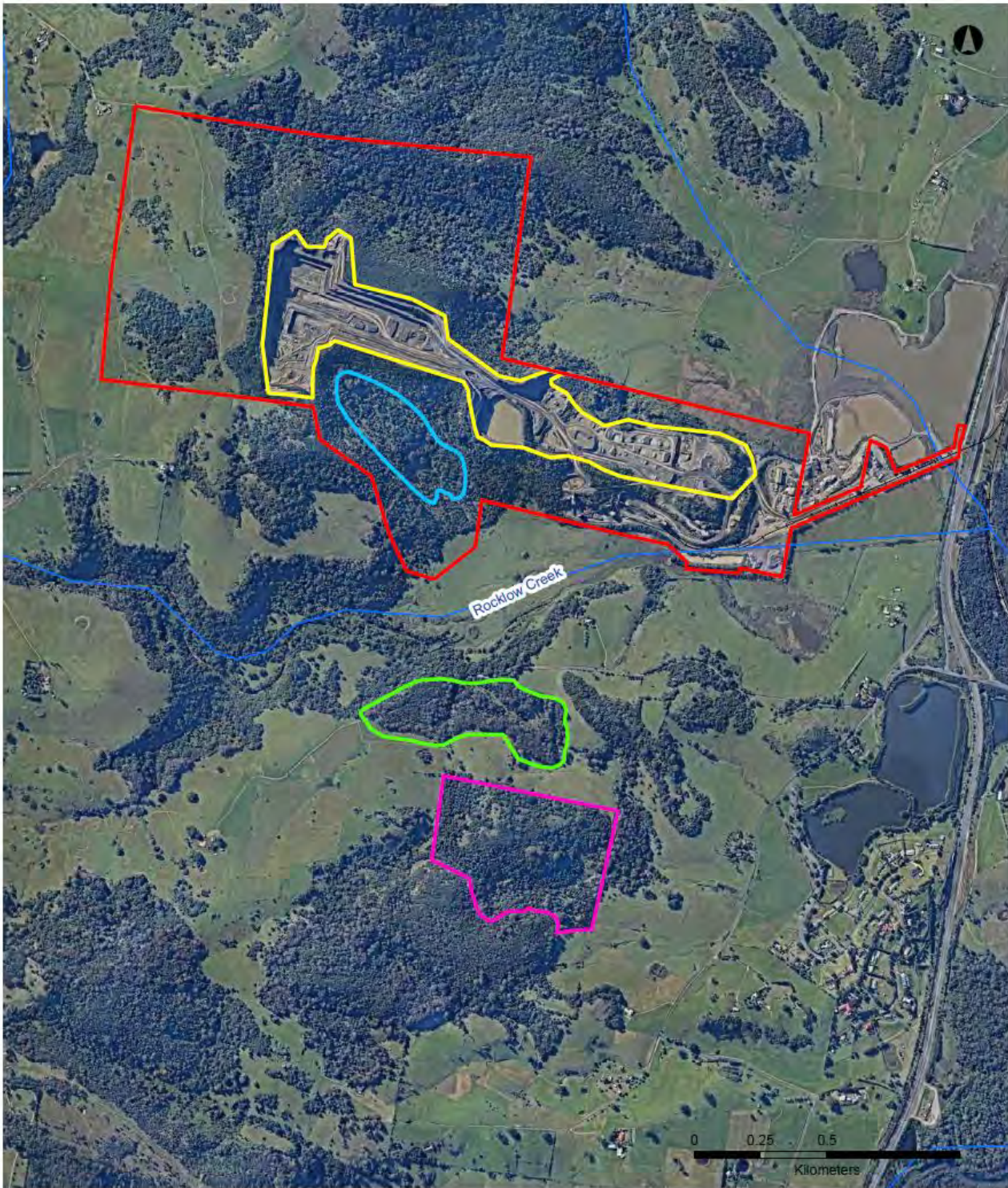
APPENDIX 2  
SENSITIVE RECEIVERS





# CONSOLIDATED CONSENT

## APPENDIX 3 CONSERVATION AREAS



### LEGEND

- |  |  |
|--|--|
|  Site Boundary    | <b>Conservation Areas</b>  |
|  Hard Rock Quarry |  Compensatory Habitat Area            |
|  Watercourse      |  Offset Area                          |
|  |  Remnant Vegetation Conservation Area |

ARCADIS AUSTRALIA PACIFIC PTY LTD  
ABN 76 134 485 289  
Level 5, 141 Market St | North Sydney NSW 2060  
P: +61 (0)2 8507 9000 | F: +61 (0)2 8507 9001



Conservation Areas (April 2016)



APPENDIX 4  
LOCATION OF BLENDING PLANT

FIGURE 3  
Blending plant location

DUNMORE HARD ROCK QUARRY - PROPOSED BLENDING PLANT



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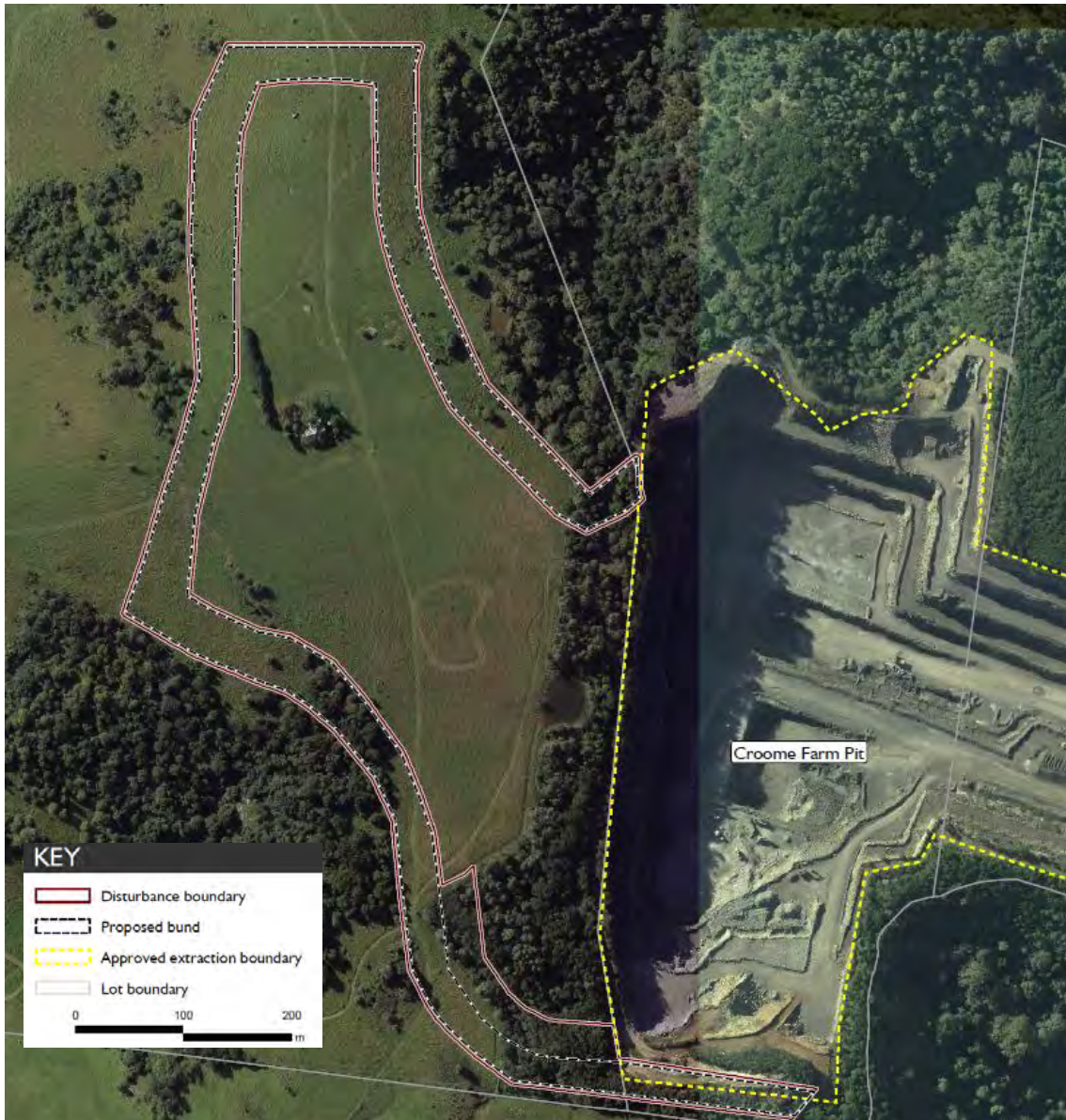
PACT.





# CONSOLIDATED CONSENT

## APPENDIX 5 LOCATION OF BUND





## APPENDIX 2

### Environment Protection Licence





# Environment Protection Licence

Licence - 77

## Licence Details

Number:	77
Anniversary Date:	01-July

## Licensee

BORAL RESOURCES (NSW) PTY LTD

PO BOX 6041

NORTH RYDE NSW 2113

## Premises

BORAL DUNMORE QUARRY

PRINCES HIGHWAY

DUNMORE NSW 2529

## Scheduled Activity

Crushing, grinding or separating

Extractive activities

## Fee Based Activity

## Scale

Crushing, grinding or separating

&gt; 2000000 T annual processing capacity

Extractive activities

&gt; 2000000 T annually extracted or processed

## Contact Us

NSW EPA

4 Parramatta Square

12 Darcy Street

PARRAMATTA NSW 2150

Phone: 131 555

Email: [info@epa.nsw.gov.au](mailto:info@epa.nsw.gov.au)

Locked Bag 5022

PARRAMATTA NSW 2124



# Environment Protection Licence

Licence - 77

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# Environment Protection Licence

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Licence - 77

## Information about this licence

### Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

### Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

### Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).



# Environment Protection Licence

Licence - 77

The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

## Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

## Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

## This licence is issued to:

<b>BORAL RESOURCES (NSW) PTY LTD</b>
<b>PO BOX 6041</b>
<b>NORTH RYDE NSW 2113</b>

subject to the conditions which follow.



# Environment Protection Licence

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## 1 Administrative Conditions

### A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity
Extractive activities	Extractive activities	> 2000000 T annually extracted or processed

### A2 Premises or plant to which this licence applies

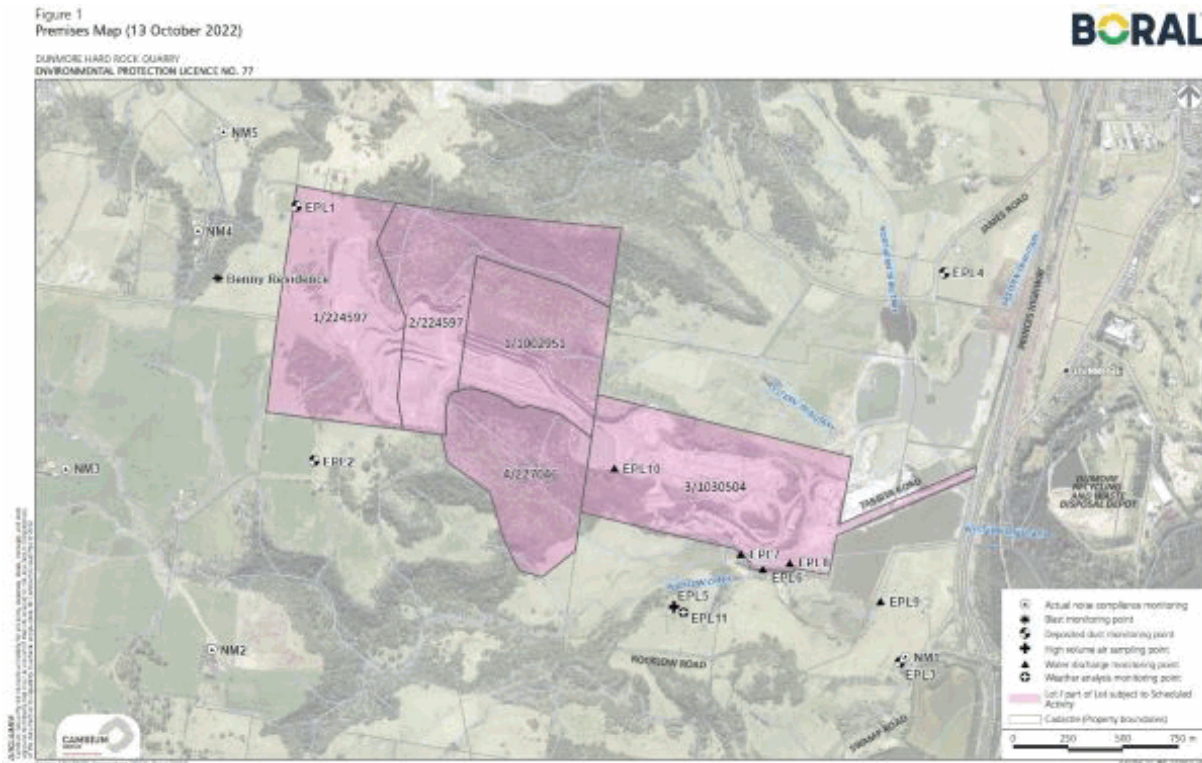
A2.1 The licence applies to the following premises:

Premises Details
BORAL DUNMORE QUARRY
PRINCES HIGHWAY
DUNMORE
NSW 2529
LOT 1 DP 224597, LOT 2 DP 224597, LOT 4 DP 227046, LOT 1 DP 1002951, LOT 3 DP 1030504

A2.2 The premises location is shown on the map below.

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## A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

A3.2 Further to condition A3.1, the works and activities must be carried out in accordance with:

- Correspondence entitled "Application to vary Environment Protection Licence No.77", dated 20 June 2006, record number WOF14132.
- Correspondence entitled "Response to Variation" emailed to DECC on 27 September 2006, including map "Boral Dunmore Quarry EPL 77 – Monitoring Location", record number DOC06/51716.
- Correspondence entitled "Dunmore Quarry – Revised Biodiversity Offset for Quarry Extension" prepared for Department of Planning and copied to the EPA, dated 22 September 2008.
- "Boral Resources (NSW) Pty Ltd, Dunmore Quarry Water Management, Draft Water Management Plan" dated 28 April 2008, prepared by Evans and Peck.

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## 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Air Emissions Monitoring - Dust Deposition		Dust deposition gauge located at Croome Farm north and labelled "EPL1" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
2	Air Emissions Monitoring - Dust Deposition		Dust deposition gauge located at Croome Farm south and labelled "EPL2" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
3	Air Emissions Monitoring - Dust Deposition		Dust deposition gauge located on the south-eastern side of quarry and labelled "EPL3" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
4	Air Emissions Monitoring - Dust Deposition		Dust deposition gauge located on the north-east side of quarry and labelled "EPL4" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
5	Air emissions monitoring - high volume air sampler or equivalent		High volume air sampler or equivalent located on the southern side of the quarry and labelled "EPL5" on the map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2

P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

### *Water and land*

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EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
6	Discharge to waters and discharge quality monitoring	Discharge to waters and discharge quality monitoring	Discharge from the bio-filtration swale to Rocklow Creek labelled as "EPL6" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
7	Discharge to waters and discharge quality monitoring	Discharge to waters and discharge quality monitoring	Uncontrolled discharge from upgraded existing stormwater treatment dam to Rocklow Creek labelled "EPL7" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
8	Effluent quality monitoring		At the discharge point end of the upgraded existing stormwater treatment dam labelled "EPL8" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
9	Discharge to waters and stormwater quality monitoring		Rocklow Creek at the boundary between Boral Quarry and Creagan Property labelled "EPL9" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2
10	Discharge to waters and discharge quality monitoring	Discharge to waters and discharge quality monitoring	Uncontrolled discharge from top stormwater treatment dam to Rocklow Creek labelled "EPL10" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2

P1.4 The following point(s) in the table are identified in this licence for the purpose of the monitoring of weather parameters at the point.

EPA Identification Number	Type of Monitoring Point	Description of Location
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Weather Analysis

Weather station located on the southern side of the quarry and labelled "EPL11" on map titled "Premises Map Dunmore Hard Rock Quarry", dated 13 October 2022 and filed as DOC22/937668 and displayed in licence condition A2.2

## 3 Limit Conditions

### L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

### L2 Concentration limits

L2.1 For each monitoring\discharge point or utilisation area specified in the table\ below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.

L2.4 Water and/or Land Concentration Limits

#### POINT 6

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Total suspended solids	milligrams per litre				50

### L3 Noise limits

L3.1 Noise from the premises must not exceed the limits in the following table when measured at the nominated receiver locations. Note that the noise limits represent the noise contribution from the premises.



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## L3.2 Noise Limits for the Dunmore Quarry Operations - LAeq(15 minute)

Receiver Locations (See Note)	Day dB(A)	Evening dB(A)	Night dB(A)	Shoulder dB(A)
Location K Stocker Residence	49	44	38	47
Location O Dunmore Lakes	49	44	38	47
Location J Cregan Residence	Negotiated Agreement in Place	Negotiated Agreement in Place	Negotiated Agreement in Place	Negotiated Agreement in Place
Location AA	38	38	38	38
Locations AB and T	36	36	36	36
Locations D, F, G and Z	40	40	40	40
Location S	37	37	37	37
Other privately-owned residences	35	35	35	35

## L3.3 Noise Limits for the Dunmore Quarry Operations LA1 - (1 minute)

Receiver Locations (See Note)	Night dB(A)	Shoulder dB(A)
Location K Stocker Residence	48	55
Location O Dunmore Lakes	48	55
Location J Cregan Residence	Negotiated Agreement in Place	Negotiated Agreement in Place
Location AA	45	45
Locations AB and T	45	45
Locations D, F, G and Z	45	45
Location S	45	45
Other privately-owned residences	45	45

Note: 1. Receiver location and monitoring points as nominated in Figure 3.1 of Dunmore Quarry Noise Management Plan prepared by EMM dated 11 December 2017.

2. The above table may be varied in the instance that negotiated agreements are entered into by the licensee and affected residents or if existing arrangements become void.

3. In conditions L3.2 and L3.3:

- "Day" refers to 07.00 am to 06.00 pm Monday to Saturday and 08:00 am to 06:00 pm Sundays and public holidays.
- "Evening" refers to 06.00 pm to 10.00 pm.
- "Night" refers to 10.00 pm to 06.00 am Monday to Saturday and 10:00 pm to 08:00 am Sundays and public holidays.

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- "Shoulder" refers to 06.00 am to 07.00 am Monday to Saturday.

L3.4 Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the LA1(1minute) noise limits.

L3.5 The noise emission limits identified above apply under meteorological conditions of:

- a) Wind speed up to 3m/s at 10 metres above ground level; or
- b) Temperature inversion conditions of up to 3oC/100m and wind speed up to 2m/s at 10 metres above the ground.

## L4 Blasting

L4.1 The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.2 The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.3 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.4 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.5 BLASTING TIMES AND FREQUENCY

Blasting operations on the premises may only take place:

- a) between 9.00am and 5.00pm Monday to Saturday inclusive;
- b) are limited to 2 blasts each day; and
- c) at such other times as may be approved by the EPA.

## L5 Hours of operation

L5.1 All work at the premises must be conducted between the following hours:

Activity	Days of the Week	Time
Extraction and Processing	Monday to Saturday	6:00am to 10:00pm
Product Transfer to Stockpiles	Monday to Saturday	6:00am to Midnight
Distribution of Product (Sales)	Monday to Saturday	24 hours



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Distribution of Product (Sales)	Sunday	Limited - See Condition L5.2
Maintenance	Monday to Sunday	24 hours

## L5.2 EXEMPTION FOR DISTRIBUTION OF PRODUCT FROM THE PREMISES (SALES) ON SUNDAYS

Distribution of product from the premises (Sales) on Sunday by road are to be no more than 15 Sundays in any one licensing year between the hours of 8-00am – 6-00pm unless prior approval is obtained from the EPA. This restriction does not apply to sales by rail, which are allowed 24 hours.

A logbook must be kept in the office building for the purpose of identifying Sundays when sales have occurred. An entry must be made in that log book on any Sunday when sales activities occur (excluding sales activities that consist of rail loading alone).

Note: Sales includes transfer of product to road and rail vehicles from stockpiles and subsequent haulage off-site. It does not include transfer of product from the processing plant to the product stockpile areas.

Note: The above contingency condition (L5.2) was developed to enable *Distribution of Product (Sales)* at times when rail distribution is compromised.

## L6 Other limit conditions

### L6.1 OVERSIZED MATERIAL

L6.2 Oversized raw feed material must not be processed during the shoulder period, being 6-00am – 7-00am.

Note: For the purpose of this condition oversized raw feed material is defined as where more than 50% of the shot is over 900mm in diameter.

Note: In consultation with the proponent the EPA will review at the EPL review stage the necessity to amend or continue the restriction in processing oversized raw feed material based on the findings of any submitted noise monitoring reports.

## 4 Operating Conditions

### O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

### O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

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- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

## **O3 Dust**

- O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

## **O4 Processes and management**

### **O4.1 WATER POLLUTION CONTROL**

- O4.2 The storm water management system is to be managed and operated in accordance with the operating principles of the revised Water Management Plan prepared by Evans and Peck, dated April 2008.
- O4.3 The stormwater management system must be maintained at its design capacity. In this regard the licensee must inspect the drainage system and associated stormwater infrastructure every three months and following heavy rainfall and arrange for routine maintenance as required. Inspection sheets certifying this work has been completed and detailing actions arising from the inspections must be kept in accordance with the requirements of this licence.
- O4.4 Any proposal for a change of flocculant other than those specified in the report titled Dunmore Quarry - Response to Water Management Issues, prepared by Environmental Resources Management Australia and dated February 2004, requires EPA approval and may require an appropriate eco-toxicological risk assessment to the satisfaction of the EPA. The flocculants nominated in the abovementioned report were aluminium sulphate and ferric chloride.
- O4.5 Impervious bunds must be constructed around all fuel, oil and chemical storage areas and the bund volume must be large enough to contain 110 per cent of the volume held in the largest container.

## **O5 Waste management**

- O5.1 All liquid and non liquid wastes resulting from activities and processes at the premises must be assessed, classified and managed in accordance with the EPA's Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes (1999), or any other EPA document superseding this guideline.

## **5 Monitoring and Recording Conditions**

### **M1 Monitoring records**

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:

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- a) in a legible form, or in a form that can readily be reduced to a legible form;
- b) kept for at least 4 years after the monitoring or event to which they relate took place; and
- c) produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:

- a) the date(s) on which the sample was taken;
- b) the time(s) at which the sample was collected;
- c) the point at which the sample was taken; and
- d) the name of the person who collected the sample.

## M2 Requirement to monitor concentration of pollutants discharged

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

### M2.2 Air Monitoring Requirements

#### POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Soluble matter	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Total Solid Particles	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

#### POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Soluble matter	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Total Solid Particles	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

#### POINT 3



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Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Soluble matter	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Total Solid Particles	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

## POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Ash	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Insoluble solids	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Soluble matter	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016
Total Solid Particles	grams per square metre per month	Monthly	AS/NZS 3580.10.1:2016

## POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Every 6 days	AS/NZS 3580.9.6:2015

## M2.3 Water and/ or Land Monitoring Requirements

## POINT 6

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Daily during any discharge	In situ
Flow	kilolitres per day	Continuous during discharge	Special Method 1
Oil and Grease	Visible	Daily during any discharge	Inspection
pH	pH	Daily during any discharge	In situ
Total suspended solids	milligrams per litre	Daily during any discharge	Grab sample
Turbidity	nephelometric turbidity units	Daily during any discharge	In situ

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## POINT 7

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Daily during any discharge	In situ
Oil and Grease	Visible	Daily during any discharge	Inspection
pH	pH	Daily during any discharge	In situ
Total suspended solids	milligrams per litre	Daily during any discharge	Grab sample
Turbidity	nephelometric turbidity units	Daily during any discharge	In situ

## POINT 8

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Monthly	In situ
Oil and Grease	Visible	Monthly	Inspection
pH	pH	Monthly	In situ
Total suspended solids	milligrams per litre	Monthly	Grab sample
Turbidity	nephelometric turbidity units	Monthly	In situ

## POINT 10

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Daily during any discharge	In situ
Oil and Grease	Visible	Daily during any discharge	Inspection
pH	pH	Daily during any discharge	In situ
Total suspended solids	milligrams per litre	Daily during any discharge	Grab sample
Turbidity	nephelometric turbidity units	Daily during any discharge	In situ

M2.4 For the purposes of the table(s) above Special Method 1 means measurement of flow at the controlled discharge from the upgraded existing stormwater treatment dam to the bio-filtration swale.

**Note:** In the event that the above monitoring locations become inaccessible due to site flooding, the associated monitoring requirements may be delayed until the affected locations become safely accessible. In the event site flooding prevents monitoring the licensee must notify the Environment Protection Authority.

## M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must

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be done in accordance with:

- a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
- c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2021* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

## M4 Weather monitoring

M4.1 For each monitoring point specified in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

POINT 11

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	millimetres	Continuous	1 hour	AS 3580.14
Wind speed @ 10 metres	metres per second	Continuous	15 minute	AS 3580.14
Wind direction @ 10 metres	degrees	Continuous	15 minute	AS 3580.14
Temperature @ 2 metres	degrees celcius	Continuous	15 minute	AS 3580.14
Temperature @ 10 metres	degrees celcius	Continuous	15 Minute	AS 3580.14
Additonal Requirements - Siting				AS/NZS 3580.1.1 & AS 3580.14
Additonal Requirements - Measurement				AS 3580.14

## M5 Recording of pollution complaints

M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

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M5.2 The record must include details of the following:

- a) the date and time of the complaint;
- b) the method by which the complaint was made;
- c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d) the nature of the complaint;
- e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the licensee, the reasons why no action was taken.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

## M6 Telephone complaints line

M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

## M7 Blasting

M7.1 To determine compliance with limit conditions relating to blasting:

- a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at the "Benny Residence" monitoring station for all production blasts carried out in or on the premises; and
- b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.

## M8 Other monitoring and recording conditions

M8.1 NOISE MONITORING

M8.2 Noise from the premises must be measured annually via attended noise surveys at potentially affected residences, including Location K Stocker Residence (as described elsewhere in the licence). The noise monitoring should be conducted during the period when it is known that noise propagation from the premises will be at its worst, that is, generally winter conditions.

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## 6 Reporting Conditions

### R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:

- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
- b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a) the licence holder; or
- b) by a person approved in writing by the EPA to sign on behalf of the licence holder.



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R1.8 The licensee must supply with the Annual Return a report, which provides:

- a) an analysis and interpretation of monitoring results; and
- b) actions to correct identified adverse trends.

Note: In consultation with the licensee the EPA will review at the EPL review stage the necessity to expand, reduce, amend or continue any specific aspects of the monitoring program based on the findings of any submitted monitoring reports.

## R1.9 REPORTING OF ENVIRONMENTAL MONITORING DATA

R1.10 A noise compliance assessment report, detailing the findings of the noise monitoring required by the monitoring conditions of this licence, must be submitted to EPA yearly as part of the Annual Return. The report shall be prepared by a suitably qualified acoustical consultant. The noise compliance assessment must include, but need not be limited to a comparison of actual noise levels from the premises with the noise limits specified in this licence.

R1.11 A dust deposition report, must be submitted to the EPA yearly as part of the Annual Return. This dust deposition report must contain:

- a) A brief summary of the results for all dust deposition monitoring sites.
- b) Tabulated monthly data and rolling annual averages for “insoluble solids” and “ash” for each site for the 12 month period covered by the Annual Return. Where the monthly insoluble solid level is greater than 4 g/m<sup>2</sup>/month an assessment to determine the likely reason for the elevated dust deposition level must be made of:
  - i) Weather data (including provision of a wind rose showing wind speed and direction for the period of the monitoring);
  - ii) Ash content of the sample;
  - iii) Operating conditions such as monthly production or quarry blasts that may have caused the elevated level; and
  - iv) Other relevant factors.

The findings of the above assessment must be included in the dust deposition report.

Where results are not available the licensee must provide an explanation for the reasons for such non-availability.

c) For each monitoring site, a graphical presentation(s) must be made of dust deposition results since 2002 which includes:

- i) The rolling 12 month annual average insoluble solids trendline;
- ii) The rolling average insoluble solids trendline since 2002;
- iii) The rolling average ash trendline since 2002;
- iv) The EPA’s impact assessment criteria for deposited dust; and
- v) Annual quarry production rates.

d) Where the rolling average ash trendline shows an upward trend the licensee must provide details of programs and/or works and/or actions that will be put in place to ensure the EPA’s impact assessment criteria for dust is not exceeded.

# Environment Protection Licence

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Note: The EPA's Annual Impact Assessment Criteria for insoluble solids of 4 g/m<sup>2</sup>/month (12 month rolling average) has been chosen as the standard at which the licensee will do a detailed assessment, if monthly results exceed this figure.

Note: If individual results are also included on the graph it is appropriate to adjust the vertical axis to a lower value, say 6 g/m<sup>2</sup>/month, so that long term trends can be identified.

Note: This condition is included on the licence as air quality dispersion modelling has predicted an increase in deposited dust with increased quarry production. The EPA's deposited dust impact assessment criteria is expressed in terms of insoluble solids. However due to the nature of the product being quarried any assessment of long-term trends needs to include an assessment of "ash" as dust from the quarrying activities conducted on the premises is mostly inorganic and will predominantly be recorded as "ash".

R1.12 A Fine Particulate (PM10) Report must be submitted to the EPA yearly as part of the Annual Return. This fine particulate report must contain:

- a) A brief summary of all the results for PM10 conducted over the licensing year;
- b) Graphical presentation of all results for PM10 conducted over the licensing year as well as the annual average and lines representing the impact assessment criteria for PM10 detailed in the publication "Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales";
- c) Where levels exceed the impact assessment criteria, an assessment to determine the likely reason for the elevated reading must be undertaken and included in the report. For individual results this may include:
  - i) Weather data (including an assessment of wind speed and direction for the 24 hours of the test);
  - ii) Operating conditions such as blasting that may have coincided with the 24 hour monitoring period; and
  - iii) Other relevant factors.

R1.13 A summary of the monitoring of all blasts undertaken during the licence period must be included in the Annual Return. The summary must include, but may not be limited to, the date, time, ground vibration (mm/sec - peak particle velocity), and airblast overpressure of (dB(Lin Peak)).

## R2 Notification of environmental harm

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.

## R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- a) where this licence applies to premises, an event has occurred at the premises; or
- b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying



# Environment Protection Licence

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out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
- the cause, time and duration of the event;
  - the type, volume and concentration of every pollutant discharged as a result of the event;
  - the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
  - the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
  - action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
  - details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
  - any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

## 7 General Conditions

### G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

### G2 Other general conditions

#### G2.1 Completed Programs

Program	Description	Completed Date
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# Environment Protection Licence

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PRP 1 - Undertake a noise assessment	Original Title: Undertake a Noise Assessment and Determine Appropriate Project Specific Noise Levels for the Site. Assessment of ambient noise levels within the residential areas surrounding quarry to determine project specific noise levels for site. Noise to be determined in accordance with the Industrial Noise Policy.. Boral to fully disclose environmental impact of noise from quarry	31-January-2002
PRP 2 – Dust Control Work Plan Quarry Roads	Original Title: Prepare a Plan of Works for the Control of Dust from Quarry Roads. Upgrade controls for dust emissions from quarry roads so that when implented quarry roads will not be a source of vehicle generated dust	01-March-2002
PRP 3 – Stormwater Pollution Control Work	Original Title: Prepare a Plan of Works for the Control of Stormwater Pollution from the Quarry. Develop a system of controls that captures all of the contaminated stormwater run off for reuse in dust suppression and/or treatment and discharge to Rocklow Creek.	03-May-2002
PRP 4 – Dust Control Work Plan - High Risk Ops	Original Title: Prepare a Plan of Work for the Control of Dust from the Screenhouse and Bunkers and the Secondary Crusher and Related Transfer Points. Ensure all dust generated within the screenhouse and bunker systems, and the area of the secondary crusher and related transfer points is suppressed.	01-June-2002
PRP 5 – Fixed Water Spray Installation	Original Title: Install Fixed Water Sprays on the roadway between the Site Offices/Weighbridge and the Crushing and Screening Plant Control Room. Installation of sprinkler system to suppress dust from quarry roads. Less dust from quarry road transport into sales area	30-September-2002
PRP 6 – Installation of Dust Controls	Original Title: Install the Following Dust Controls; Clad the Southern Side of the Quarry Product Bunkers; Install Fabric Filter Dust Controls at the tail and head of Conveyor 4 and; Install Fabric Filter Dust Collector at the discharge to Crushers CR6 and CR7. Dust control from screenhouse and other buildings. Prevention of wind and minimise emissions of dust	30-September-2002
PRP 7 – Air Quality Impact Assessment	Original Title: Undertake Air Quality Impact Assessment in Relation to Proposed Increased Extraction Rates. Air pollution assessment for the increased production proposal. Determine impacts to assist planning decisions	31-March-2004
PRP 8 – Emergency Contingency Management	Original Title: Develop an Emergency Contingency Management Plan. Emergency Contingency Management. Document and implement measures to minimise the environmental impacts of any emergency situations that could arise as a result of the operation of the Dunmore Quarry.	18-May-2005

# Environment Protection Licence

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PRP 9 – Dust Control Effectiveness Program	Original Title: Develop a Dust Control Effectiveness Program. Investigate the effectiveness of dust mitigation controls in relation to the production increase at the premises	01-December-2005
PRP 10 Construct Stormwater Pollution Control Dam	Original Title - Construct and commission stormwater pollution control dam. To capture and treat polluted runoff waters from storm events of less than and including a 1:10 year, 24 hours duration, average recurrence interval	26-June-2009
PRP 11 - Integrated Water Management Program	Original Title: Integrated Water Management Program. To address the external annual water demand for the operation of the premises, which has been estimated at an upper limit of 117 ML/year.	18-November-2005
PRP 12 – Water Control Installation	Original Title: Install Works to achieve better water pollution control. To implement the recommended works detailed in the report titled "Dunmore Quarry - response to water management issues"	13-July-2006
PRP 13 – Install a Rainfall Station	PRP 13 - Install a rainfall station. Install and maintain a rainfall monitoring device which will assist in determining compliance with the conditions of this licence	18-August-2005
PRP 15 - Nearfield Noise Monitoring Investigations	Original Title: Conduct Nearfield Noise Monitoring Investigations. To determine near field trigger levels which would assist in demonstrating compliance and verify the effectiveness of noise mitigation works	18-May-2005
PRP 16 - Fines Stockpile Management Plan	Original Title: Develop a Fines Stockpile Management Plan. Implement measures for the management of the minus 4mm stockpiles with the aim to stabilize the surface of the stockpiles to minimize wind blown dust emissions and to minimize erosion due to stormwater run off	01-March-2005
PRP 17 - Noise Compliance Investigation Program	PRP 17 - Noise Compliance Investigation Program. Identify a range of options to facilitate compliance with the EPL noise limits through physical attenuation measures and/or operational/management processes.	01-July-2006
PRP 18: Clad Secondary Crusher	Original Title: Enclose Secondary Crusher to Reduce Noise. The licensee has advised that cladding the Secondary Crusher will reduce noise at the source by about 12 dBA and this will allow noise limit compliance at the nearest noise receptor.	01-July-2006
PRP 19: Enclose Screen 1 and Fill In gaps	Original Title: Enclose Screen 1 and enclose gaps between the Primary Crusher and the Secondary Crusher. Reduce noise levels so as to comply with licence noise limits.	01-October-2006
PRP 20 Tertiary Screenhouse dust emissions	PRP 20: Improved Dust Controls for the Tertiary Screenhouse. Investigations and then works into reducing dust emissions from the Tertiary Screenhouse. Reduced dust emissions from the premises.	30-June-2010



# Environment Protection Licence

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## 8 Special Conditions

### E1 Biodiversity Conservation Offset

E1.1 The Licensee will conserve, maintain, enhance and ensure long term security of the vegetation offset by a means agreed to by the EPA.

Note: The vegetation offset is detailed in correspondence to the Department of Planning and copied to the EPA, dated 22 September 2008 (refer to A4.2).

# Environment Protection Licence

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## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

# Environment Protection Licence

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<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

# Environment Protection Licence

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<b>TSP</b>	Means total suspended particles
<b>TSS</b>	Means total suspended solids
<b>Type 1 substance</b>	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
<b>Type 2 substance</b>	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
<b>utilisation area</b>	Means any area shown as a utilisation area on a map submitted with the application for this licence
<b>waste</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>waste type</b>	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste
<b>Wellhead</b>	Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.

Mr Nigel Sargent

Environment Protection Authority

(By Delegation)

Date of this edition: 14-December-1999



# Environment Protection Licence

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## End Notes

- 1 Licence varied by notice V/M upgrade, issued on 08-Jul-2000, which came into effect on 08-Jul-2000.
- 2 Licence transferred through application 140020, approved on 27-Sep-2000, which came into effect on 31-Aug-1999.
- 3 Licence varied by notice 9418, issued on 09-Mar-2000, which came into effect on 30-Mar-2000.
- 4 Licence varied by notice 1012272, issued on 19-Oct-2001, which came into effect on 13-Nov-2001.
- 5 Licence varied by notice 1013531, issued on 14-Dec-2001, which came into effect on 08-Jan-2002.
- 6 Licence varied by notice 1016381, issued on 12-Aug-2002, which came into effect on 06-Sep-2002.
- 7 Licence varied by notice 1021119, issued on 11-Oct-2002, which came into effect on 05-Nov-2002.
- 8 Licence varied by notice 1026479, issued on 08-Jul-2003, which came into effect on 08-Jul-2003.
- 9 Licence varied by notice 1035077, issued on 17-Nov-2004, which came into effect on 18-Nov-2004.
- 10 Licence varied by notice 1056152, issued on 15-Feb-2006, which came into effect on 12-Mar-2006.
- 11 Licence varied by change to DEC Region allocation, issued on 16-Mar-2003, which came into effect on 16-Mar-2003.
- 12 Licence varied by notice 1057794, issued on 12-Apr-2006, which came into effect on 12-Apr-2006.
- 13 Licence varied by notice 1061796, issued on 23-Jun-2006, which came into effect on 23-Jun-2006.
- 14 Licence varied by notice 1065559, issued on 29-Sep-2006, which came into effect on 29-Sep-2006.
- 15 Licence varied by notice 1073479, issued on 17-May-2007, which came into effect on 17-May-2007.
- 16 Licence varied by notice 1081122, issued on 16-May-2008, which came into effect on 16-May-2008.
- 17 Licence varied by notice 1088505, issued on 14-Jul-2008, which came into effect on 14-Jul-2008.
- 18 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>





# Environment Protection Licence

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19	Licence varied by notice 1102292, issued on 12-Aug-2009, which came into effect on 12-Aug-2009.
20	Licence varied by notice 1106096, issued on 14-Sep-2009, which came into effect on 14-Sep-2009.
21	Licence varied by notice 1502449 issued on 03-Nov-2011
22	Licence varied by notice 1502884 issued on 15-May-2012
23	Licence varied by notice 1506167 issued on 17-May-2012
24	Licence varied by notice 1512744 issued on 27-Mar-2013
25	Licence varied by notice 1518429 issued on 22-Nov-2013
26	Licence varied by notice 1538680 issued on 26-Sep-2016
27	Licence varied by notice 1578483 issued on 17-Jul-2020
28	Licence fee period changed by notice 1600038 on 07-Sep-2020
29	Licence varied by notice 1610852 issued on 22-Jul-2021
30	Licence varied by notice 1621903 issued on 07-Nov-2022



## APPENDIX 3

### 2023 Audit Photographic Evidence



**Clean entry and exit conditions at Tabbita Road.**





Entry and exit at Tabbita Road.



**Oil drums being correctly stored in bunded area near maintenance workshop.**





**Looking towards the crusher area from property adjacent to Rocklow Road.**





**Maintenance workshop.**





**Maintenance workshop.**





**Drainage channel along internal access track into Lower Dam primary sedimentation entrance, with water cart in operation in background.**





**Water truck in operation on haul road.**



**Haul truck in operation with no visible dust.**





Example of waste storage and sorting.



Example of dangerous good storage





Example of spill kits kept ready.



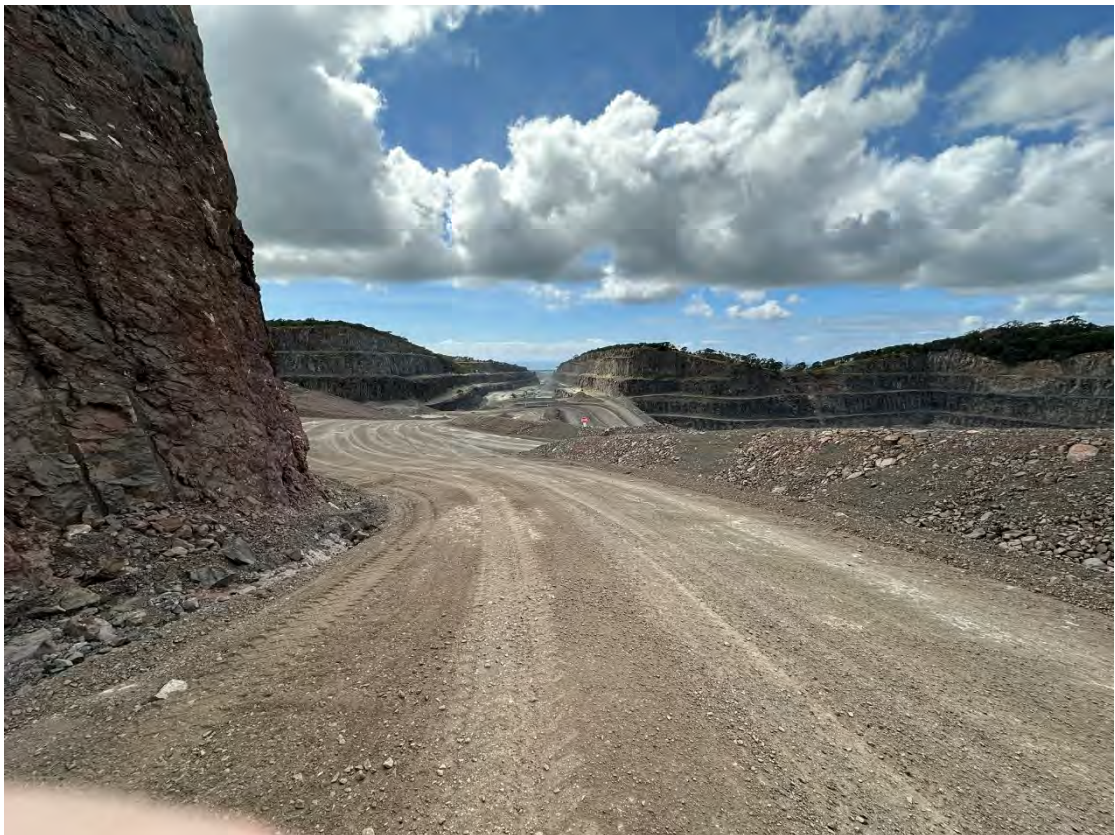


**Air sampling location.**





**Active aggregate sorting in quarry area, with no visible dust.**



**View over active quarry area.**





**Extraction limit marker example.**





**Vegetated bund and screen.**



**Example of site fencing.**





**Example of fire response equipment.**





Refuelling area.





**Parking area near refuelling area, example of tyre reuse on site.**



**Car parking at Quarry Site.**





**Example of offsite weather station and air quality monitoring equipment.**



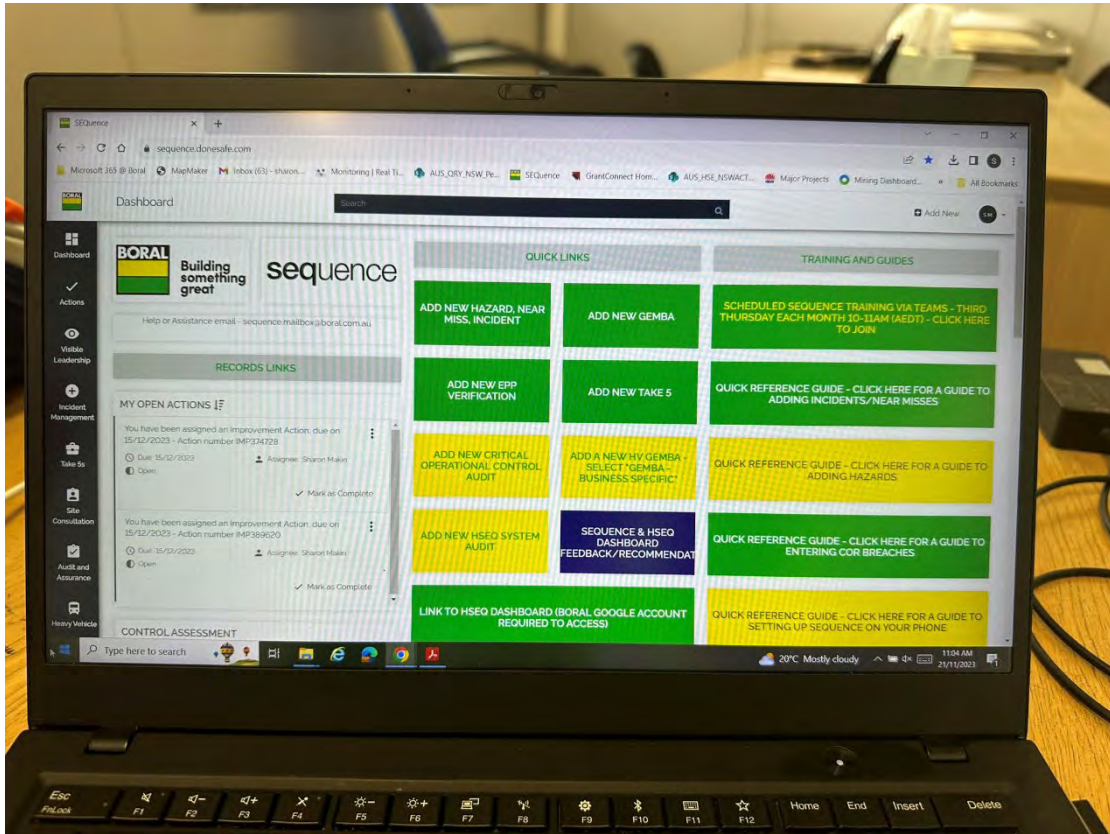


**Example of truck using wheel wash.**



**Example of covered loads when exiting the site.**





**Example of Borals Environmental Management System - Sequence.**



## APPENDIX 4

List of Documents reviewed for audit

## 11599 – Dunmore Quarry

Documents obtained from <https://www.boral.com.au/locations/boral-dunmore-operations> & <https://www.planningportal.nsw.gov.au/major-projects> & documentation provided post site inspection by Boral highlighted blue

Folder Name/Category	Documentation
Development Consent (11 documents)	1. MOD 12 - Dunmore Quarry - MOD 12 development consent
	2. Mod 12 - Dunmore Quarry Consolidated Consent
	3. MOD 12 - Dunmore Quarry DPI&E Assessment Report - Approved
	4. Mod 12 - Dunmore Quarry DPI&E Assessment Report - Recommendation
	5. MOD 12 - Dunmore Quarry Boral SEE Modification Report.
	6. MOD 12 - Dunmore Quarry Traffic Impact Assessment.
	7. MOD 12 - Dunmore Quarry - TfNSW response
	8. MOD 12 - Dunmore Quarry EPA Comments
	9. MOD 12 - Dunmore Quarry Shellharbour Council Comments
	10. MOD 12 - Dunmore Quarry DPI&E RFI Request for Additional Information
	11. MOD 12-Dumore Quarry Boral RtS to DPI&E
EPL 77 (9 documents)	1. 2019-2020-EPL-Dunmore Quarry Annual Return.pdf
	2. 2019-2020-EPL_Dunmore Quarry Annual Return_Statement of Compliance.pdf
	3. 2020-2021-EPL-Dunmore Quarry Annual Return.docx
	4. 2020-2021_EPL_Dunmore Quarry Annual Return_Statement of Compliance.pdf
	5. 2021-2022-EPL-Dunmore Quarry Annual Return.docx
	6. 2021-2022-EPL_Dunmore Quarry Annual Return_Statement of Compliance.pdf
	7. 2022-2023-EPL-Dunmore Quarry Annual Return.docx
	8. 2022-2023-EPL_Dunmore Quarry Annural Return_Statement of Compliance.pdf
	9. Feb 2023-EPL-Dunmore-Quarry_POELA_FEB_PM10.pdf
	10. May 2023-EPL_Dunmore-Quarry-POELA-Dust Data.pdf



Folder Name/Category	Documentation
	11. June 2023-EPL-Dunmore-Quarry-POELA-Blasting.pdf
	12. July 2023-EPL-Dunmore-Quarry_Annual_Noise_Compliance_Assessment_Reports.pdf
	13. July 2023-EPL-Dunmore-Quarry-POELA-Surface Water Data.pdf
EMPs (12 documents)	1. August 2016-Dunmore-Quarry-Bushfire-Management-Plan-0816
	2. September 2016-Dunmore-Quarry-Transport-Management-Plan-0416
	3. November 2016-Dunmore-Quarry-Water-Management-Plan-1116
	4. November 2016-Dunmore-Quarry-Rehabilitation-Management-Plan-1116
	5. September 2017 -1709 DUNM Quarry Plan Aboriginal Heritage Management (MOD 9)
	6. December 2017-1712 DUNM Quarry Mgmt Plan Noise
	7. May 2019-1905 DUNM Quarry Mgmt Plan Air Quality_0
	8. May 2019_1905 DUNM Quarry Mgmt Plan Blast
	9. June 2019-1906 DUNM Quarry Plan Flora Fauna Management (Part 1).
	10. June 2019 - 1906 DUNM Quarry Plan Flora Fauna Management (Part 2)
	11. August 2019-1908 DUNM Quarry Plan PIMRP_0
	12. <a href="#">March 2023 - Dunmore Quarry - PIRMP v18.pdf</a>
Environmental Management (1 document)	1. March 2023-DQ_Environmental_Management_Strategy_March_2023.pdf
Complaint Register ( 1 document)	1. May 2023- Current - COMPLAINTS_REGISTER-CR
Community Consultative Committee (5 documents)	1. February 2020-DUNM Quarry Minutes CCC FINAL.pdf
	2. September 2020-Dunmore Quarry CCC Minutes
	3. September 2021-DUNM Quarry Minutes CCC
	4. February 2022-Dunmore_Quarry_CCC_Meeting
	5. February 2023-Dunmore-Quarry-CCC-meeting-minutes
Public Reporting - Annual Reviews (2019-2020) & (2021- 2022) & (2022-2023) (7 documents)	1. July 2019-1907 DUNM Quarry Report AR Appendix C Noise
	2. August 2020-2008 DUNM Quarry Report AR Appendix E Groundwater.
	3. September 2020-2009 DUNM Quarry Report AR Appendix F Bushland Restoration
	4. July 2019- June 2020-2009 DUNM Quarry Report AR

Folder Name/Category	Documentation
	5. July 2020 - June 2021-DQ Annual Review_AR-Final
	6. July 2021-June 2022 - DQ_Annual_Review_AR
	7. July 2022 – June 2023 – DQ_Annual Review_AR
Annual Noise Compliance Assessment Reports (2 documents)	1. July 2020_2007 DUNM Quarry Report Annual Noise Compliance Assessment_NCA.pdf
	2. July 2022_DQ_Annual_Noise_Monitoring_Report_NCA.pdf
Public Reporting – Independent Environmental/Consent Auditing (2 documents)	1. 20200721 - EPS - 2020 - 2008 DUNM Quarry Report Independent Environmental Audit_IEA.pdf
	2. 2020 - 2008 DUNM Quarry Independent Environmental Audit Response_IEA.pdf



## APPENDIX 5

Department of Planning and Environment – Independent Environmental  
Audit 2023 Correspondence

Our ref: DA470-11-2003-PA-24

Mr Matt Bray

Stakeholder and Environmental Advisor

Boral Resources (NSW) Pty Ltd

38 Tabbita Road

DUNMORE NSW 2529

19/10/2023

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Sent via the Major Projects Portal only

Dear Mr Bray

**Dunmore Quarry (DA 470-11-2003)**

**Independent Environmental Audit 2023**

I refer to your email letter of 18 October 2023 seeking approval of Mr Stephen McCall of Environmental Property Services as the lead auditor for the upcoming Independent Environmental Audit of Dunmore Quarry (the project), in accordance with Schedule 5, Condition 10 of development consent DA 470-11-2003, as modified (the consent).

Having considered the qualifications and experience of Mr McCall, the Planning Secretary endorses the appointment of Mr McCall to undertake the audit in accordance with Schedule 5, Condition 10 of the approval. This approval is conditional on Mr McCall being independent of the development and maintaining a relevant industry certification.

Please ensure this correspondence is appended to the Independent Audit Report.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and you may wish to consider the Audit Post Approval Requirements (Department 2020 or as updated). A copy of this guideline can be located at <http://planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/Integrated-Mining-Policy>.

The audit report is to include the following:

1. consultation with the relevant agencies;
2. a compliance table indicating the compliance status of each condition of approval and any relevant EPL;



3. not use the term “partial compliance”;
4. recommend actions in response to non-compliances;
5. review the adequacy of plans and programs required under this consent; and
6. identify opportunities for improved environmental management and performance.

Within 12 weeks of commencing this audit, Boral is to submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report and a timetable to implement the recommendations. Prior to submitting the audit report to the Secretary, it is recommended that Boral review the report to ensure it complies with the relevant consent condition.

Failure to meet these requirements will require revision and resubmission of the Audit Report.

Should you have any enquiries in relation to this matter, please contact Georgia Dragicevic, Senior Compliance Officer, on (02) 4247 1852 or by email to [Georgia.Dragicevic@planning.nsw.gov.au](mailto:Georgia.Dragicevic@planning.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to read "K. O'Reilly".

Katrina O'Reilly  
Team Leader - Compliance  
Compliance

As nominee of the Planning Secretary