

Peppertree Quarry Independent Environmental Audit

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1. Introduction

This audit has been prepared in accordance with the NSW Department of Planning and Environment (DPE) Independent Audit Post Approval Requirements May 2020. The following document sets out the scope of the audit, methodology and audit findings.

1.1 Background

Peppertree Quarry (Peppertree) is a hard rock quarry owned and operated by Boral Resources (NSW) Pty Ltd (Boral) and is located south-east of Marulan NSW in the Southern Tablelands, approximately 175 km south-west of Sydney.

This audit represents the third independent compliance audit for Peppertree under the Major Project Approval MP 06_0074. Condition 11 of Schedule 5 of the development consent requires that an independent audit be undertaken to verify compliance with the relevant conditions of consent. This first audit is required to be conducted within 12 months of the date of commencing the development and every three years thereafter. The commencement of construction was June 2012, and preceding Independent Environmental Audits were conducted in 2015 and 2018.

1.2 Development Consent

The Quarry was first granted planning approval in February 2007 under Part 3A of the Environmental Planning and Assessment Act 1979 following the preparation and display of an Environmental Impact Assessment. Construction of the Quarry was completed in 2013 with commercial extraction operations having commenced in 2014. The project has since had the following seven modifications:

- Modification 1- March 2009
- Modification 2- November 2011
- Modification 3- October 2012
- Modification 4- August 2016
- Modification 5- October 2019
- Modification 6 – February 2020
- Modification 7 – September 2021

The September 2021 modification was approved at the end of the reporting period but has been included for completeness. Modification 7 covered the reconfiguration of a sediment basin located to the west of the Western Overburden Emplacement and the removal of a specific tree.

1.3 EPA Environment Protection Licence

The quarry holds Environment Protection Licence 13088 administered by the Environment Protection Authority covering all scheduled activities undertaken at the Quarry. The licence anniversary date for EPL 13088 is 23rd July each year.

1.4 Audit objectives

The conduct of this audit included the following activities:

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- Review of all environmental management plans;
 - Review of all collected environmental monitoring data;
 - Interviews with key management personnel;
 - Detailed site inspection; and
 - Consultation with relevant government agencies and the Community Consultative Committee.

The following report provides an assessment of compliance against the current development approval, the implementation of the required management plans and assessment of environmental performance of the operation. A detailed checklist against the conditions of the development consent is attached. The checklist follows the requirements of the Independent Audit Post Approval Requirements 2020 published by the Department of Planning and Environment. The following sections detail the status of the current operation, environmental management provisions and performance and compliance.

1.5 Audit Scope

The scope of this audit includes consideration and assessment of:

- conditions of Project Approval 06_0074;
- management plan requirements and effectiveness;
- implementation of the environmental management plans;
- requirements of relevant regulatory agencies;
- the key regulatory risks, including past or future risks;
- assessment of actual impacts compared to predicted impacts documented in the environmental impact assessment;
- the performance of the operation in terms of community engagement, emissions, rehabilitation and final closure planning and environmental performance monitoring;
- any environmental incidents or community complaints;
- feedback received from regulatory agencies on the performance of the operation or on any issues of concern;
- feedback received from the community consultative committee on the performance of the operation; and
- assess the implementation of previous audit findings.

1.6 Audit Criteria

In May 2020, the NSW Department of Planning and Environment (DPE) issued the Independent Audit Guideline which seeks to ensure that independent audits of State Significant Developments in NSW are conducted in a consistent manner and meet minimum standards expected by the Government. These guidelines represent an update from the earlier 2018 guidelines and are applicable to this and subsequent audits for Peppertree Quarry.

The consent lists a number of performance measures in Part B. These cover noise, blasting, air quality, soil and water, transportation, biodiversity, heritage, waste and visual impacts. The criteria are largely based on the data provided in the EA, subsequent modifications, government agency requirements and commitments made by Peppertree.

1.7 Endorsement of Auditor

Mr Robert Byrnes of International Environmental Consultants Pty Ltd was approved by the Department of Planning to undertake the independent audit. Correspondence from DPIE is attached in Appendix B. Mr Byrnes holds a Bachelor of Science and post graduate qualifications in environmental science and has 37 years experience in environmental assessment and management of mining and extractive industries.

1.8 Audit Period

The audit period covers the three year period ending December 2021. The audit period was extended to include the most recent modification which was granted in September 2021.

2. Audit Methodology

The audit process involved the interview of site personnel, a review of documentation and samples of records provided by quarry management and a site inspection of the operations to determine the level of compliance of the operations and assess the status of the quarry's operational performance. The audit process and methodology are described in more detail in the sections below.

2.1 Document Review

Documents, information and data available for this audit included:

- Environmental studies contained in the environmental assessments associated with the original approval and subsequent modifications.
- Environmental management plans prepared in response to the approvals.
- Monitoring data, specialist consultant summaries and reporting.
- Internal company documents such as production records.
- Advice from government agencies obtained through email and/or telephone discussions;
- Advice from the Chair of the Community Consultative Committee; and
- Site inspection and interviews with site personnel.

A list of documents used, reviewed or sighted as part of the audit is provided in Appendix D. Specific environmental management plans are listed in Section 3.1.1. These were separately reviewed and used to assess effectiveness of environmental management systems on site. Several additional documents were sighted during the audit interviews including quarry plans, survey documents, production records and equipment maintenance records. These were viewed but no copies were made.

2.2 Opening meeting

The opening meeting was held onsite at Peppertree Quarry office on 6th December 2021. The audit scope was discussed as well as information requirements for the audit. The audit methodology was described including the need for verification. The verification could be in the form of sighting documents, cross checking a sample of monitoring data or digital records, confirmation advice from agencies and visual inspection. The on site interviews were undertaken and a detailed site inspection was undertaken.

2.3 Site Interviews and Inspections

2.3.1 Site Interviews

Due to COVID-19 restrictions, interviews and discussions with key personnel were held remotely during January to March 2022. Sharon Makin was involved in all discussions while Christopher Brown provided specific data as requested. Information required for each condition of consent was methodically worked through. Where necessary, evidence was requested to verify compliance.

All information requested was provided progressively as at the time of the interview or by email shortly after. The full list of information made available for the audit is provided as Appendix D.

2.3.2 Data Collection and Verification

Where possible, documents and data were collected and reviewed prior to the on site audit inspections. Several documents were provided during the site visit while the remainder was provided progressively following the initial meeting.

All information obtained during the audit process was verified by the auditor where possible. For example, statements made by site personnel were verified by viewing documentation and/or site inspections where possible. Photographs were taken of key points around the site.

The environmental monitoring data was verified by reviewing trends in the results over the past three years. Noise and blasting data are generally compiled by an external consultant and these results have been reviewed for consistency. No samples or measurements were taken for third party verification.

2.3.3 Site Inspection

The site inspection focused on, but was not limited to, the operations and management of the following areas:

- The current extraction area;
- Processing and stockpiling area;
- Rail loading facilities;
- Overburden emplacement including the outer face of completed batters;
- Survey points showing the approved development footprint;
- Rehabilitation areas;
- Equipment parking and laydown areas;
- Fuel and oil containment facilities, workshop, equipment washdown facilities and storage areas; and
- The water management system including pollution control ponds and main drainage lines;

2.4 Closing Meeting

The closing meeting was held virtually on 16th May 2022. The objectives of this meeting were to discuss any outstanding matters, present preliminary findings and outline the process for finalising the audit report.

2.5 Authority Liaison

The following agencies and organisations were contacted as part of this audit.

- Environment Protection Authority.
- Roads and Maritime Services.
- WaterNSW.
- Goulburn Mulwaree Shire Council.
- Office of Environment and Heritage.

Responses received are contained in Appendix B and summarised in the following table.

Authority	Response	Comment
WaterNSW	<p>WaterNSW requested the audit give specific attention to the Project Approval conditions B30, B33, B36 and B41 relating to water management at the site and confirm the site operations are having a neutral or beneficial effect on water quality of receiving waters within the Sydney drinking water catchment.</p> <p>WaterNSW also provided a copy of their recent advice in relation to the draft Updated Water Management Plan</p>	<p>These conditions were assessed as part of this audit and compliance has been confirmed. The Water Management Plan was updated outside the period of this audit which was noted in the audit tables</p>
Transport for NSW	<p>TfNSW advised that that the specific conditions requiring examination in the audit are:</p> <p>Part A Administrative Conditions A9, A10 and A11 in relation to transportation of quarry products from the site.</p> <p>Part A Administrative Condition A16 in relation to the Community Consultative Committee, if any concerns have been raised relating to road and transport and if so details on the concerns raised, the total amount received and how they have been addressed.</p> <p>Part B Specific Environmental Conditions B42, B43 and B44 in relation to the Construction Traffic Management Plan, transport using the Option 2 transport route described in EA (MOD 5), public access to the site and traffic signals.</p> <p>Part D Environmental Management, Reporting and Auditing condition D13. TfNSW would appreciate a copy of the audit report and any traffic related matters in accordance with this condition.</p> <p>For each of the above conditions, details should be provided as part of the audit on what the applicant is doing to ensure compliance with these requirements as well as details on how compliance or otherwise has been determined.</p> <ol style="list-style-type: none"> 1. Confirmation that any complaints received from the community about development related traffic impacts are being addressed as per the approval issued; and 2. Identification of measures to address any non-compliances including a timeframe for the implementation of identified measures. 	<p>These conditions were assessed as part of this audit. Production and transport conditions were found be compliant.</p> <p>The CCC has rarely raised transportation related impacts however train horn noise and dust from train wagons have been a source of some complaints. Actions to rectify complaints are generally provided however evidence of close out of some actions are not available.</p> <p>A Construction Environmental Management Plan was prepared and is considered adequate.</p>
Council	<p>Council advised that they were satisfied with the operations of Peppertree Quarry and were not aware of any issues of non-compliance. They did raise one issue in relation to a particular resident who was experiencing adverse impacts from blasting activities.</p>	<p>The residence in question is located along Marulan South Road and is subject to independent noise and blasting assessment. Data at the premises shows compliance however following direction from DPE, an independent review of the data and property was undertaken, with the results of the review provided to DPE and the resident.</p>
EPA	<p>The EPA advised that it expected a thorough examination of the project's compliance with noise and air quality criteria.</p> <p>Over the past three years, the EPA has received two complaints relating to environmental issues, which have alleged Peppertree Quarry as the suspect. These complaints have individually related to noise and dust. On both occasions the complaints have been promptly and adequately dealt with.</p> <p>In relation to noise and complaints, the Quarry has been shown to be compliant with relevant limits in Environment Protection Licence 13088 and the EPA has not taken recent any regulatory action against the quarry.</p>	<p>The issues of noise and air quality have been covered in this audit. Based on the data available, this audit can also confirm that the noise, blasting and dust levels generated by the quarry are in line with the criteria listed in the consent.</p> <p>The issue of dust generation forms part of the recommendations of this audit.</p>

OEH	OEH did not raise any specific issues however advised that they were consulting in relation to the retirement of Biodiversity credits and Aboriginal cultural heritage.	
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2.5.1 Community Consultative Committee

A Community Consultative Committee (CCC) has been established since 2011 in accordance with Condition A16 of the consent. The CCC comprises of:

- Two representatives from Peppertree Quarry including the Environment and Community Adviser;
- One representative from Goulburn Mulwaree Council (the Mayor); and
- Three Local Community Representatives.

The CCC is independently chaired by Gordon Kirkby, Director Planning at Ethos Urban. Mr Kirkby was contacted as part of this audit and advised that:

“The Committee meets quarterly and is kept well informed by Boral of the environmental performance of the operations, including any incidents or complaints and how they have been addressed. The CCC operates in a very open and constructive fashion.”

Mr Kirkby also advised that there are no real issues of concern with the operation of the CCC. It is understood that the CCC may be reconstituted to cover the combined operations of Peppertree Quarry and the adjacent Marulan Limestone Mine.

The role of the CCC is to provide Boral with input from the community on matters of environmental performance and stakeholder relations. Meetings include the review of environmental data and any feedback provided to the site from local community members. Issues of concern can be raised with the site by the CCC representatives. A review of meeting minutes over the past three years has highlighted a range of community concerns in relation to the Peppertree Quarry operations. These include:

- Noise from the quarry extraction and processing area, particularly tonal and instantaneous;
- Noise from train operations, particularly the use of horns;
- Blasting and ground vibrations;
- Dust from the quarry and train wagons; and
- Traffic related such as poor truck driver behaviour.

Documentation provided as part of this audit indicates that the quarry management have been proactive in solving community complaints and issues.

2.6 Compliance Status Descriptors

The reporting of results from the compliance audit was determined based on the definitions presented below in Table 1. The results of the compliance audit are presented in Appendix A.

Status	Description
Compliant	The auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.

Non-compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Not triggered	A requirement has an activation or timing trigger that has not been met at the time when the audit is undertaken, therefore an assessment of compliance is not relevant.

The current DPE guidelines do not allow for separate categories of non-compliance.

3. Audit Findings

3.1 Documentation Used in the Audit

The documents used in this audit have been separated into assessment and approval related, environmental management plans and other data sources and reports.

3.1.1 Environmental Management Plans

Peppertree operate under a set of environmental management plans which fall under an overall Environmental Management Strategy. The plans that were listed on their web page at the time of this audit were:

- ❑ Environmental Management Strategy May 2020
https://www.boral.com.au/sites/default/files/media/field_document/2005%20PEPP%20Quarry%20Strategy%20Environment%20Management.pdf
- ❑ Noise and Blasting Monitoring Plan (April 2017)
https://www.boral.com.au/sites/default/files/media/field_document/031119_Peppertree_Quarry_NBMP_170406_v01.pdf
- ❑ Air Quality Monitoring Plan (April 2017)
https://www.boral.com.au/sites/default/files/media/field_document/031119_Peppertree_Quarry_AQMP_170406_v01.pdf
- ❑ Water Management Plan Part 1 (July 2017)
https://www.boral.com.au/sites/default/files/media/field_document/Peppertree%20Quarry%20WMP_April%202017_%20part%201%20%28section%201%20%26%202%29.pdf
- ❑ Water Management Plan Part 2 (July 2017)
https://www.boral.com.au/sites/default/files/media/field_document/Peppertree_Quarry_WMP_April%202017_Part%202%20%28section%203%20%26%204%29.pdf
- ❑ Water Management Plan Part 3 (July 2017)
https://www.boral.com.au/sites/default/files/media/field_document/Peppertree_Quarry_WMP_April%202017%20part%203.pdf
- ❑ Water Management Plan Part 4 (July 2017)
https://www.boral.com.au/sites/default/files/media/field_document/peppertree_water_mp.pdf
- ❑ Water Management Plan Part 5 (July 2017)
https://www.boral.com.au/sites/default/files/media/field_document/Peppertree%20Quarry%20WMP_April%202017%20part%204%20%28section%20part%207%2C%208%2C%209%2C%2010%2C%2011%2C%2012%20%26%20appendices%29.pdf
- ❑ Landscape and Rehabilitation Management Plan (May 2017)
https://www.boral.com.au/sites/default/files/media/field_document/Peppertree_Quarry_BRMP_170515_v01.pdf
- ❑ Aboriginal Heritage Management Plan (April 2017)
https://www.boral.com.au/sites/default/files/media/field_document/031119_Peppertree_Quarry_AHMP_170406_v01.pdf

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- ❑ Pollution Incident Response Management Plan (November 2019)
https://www.boral.com.au/sites/default/files/media/field_document/Peppertree%20Quarry%20PIRMP%20August%20%202020_Rev12%20Public%20copy.pdf

In December 2021, Boral prepared an updated Aboriginal Heritage Management Plan. This plan included additional information and management initiatives following the approvals of MOD 5, 6 and 7 as well as updating the stakeholder engagement outcomes. This plan was approved by the Department on 10th January 2022. At the time of this audit, this plan was not listed on the Boral Peppertree webpage.

In May 2020, Boral released an updated Noise and Blast Management Plan. This plan included updated management provisions following MOD 5 and 6 which covered the replacement of the existing air filtration network with two baghouse air filtration units and associated ducting attached to the existing and approved secondary and tertiary processing facilities (i.e. crushing and screening plant). This plan was approved by the Department on 24th July 2020. At the time of this audit, this plan was not listed on the Boral Peppertree webpage.

In May 2020, Boral released an updated Air Quality Management Plan covering the same modifications contained in the Noise and Blast Management Plan. This plan was approved by the Department on 24th July 2020. At the time of this audit, this plan was not listed on the Boral Peppertree webpage.

In October 2020, Boral prepared an update to the 2019 Waste Management Plan. This version of the plan included updated waste monitoring provisions as a result of the previous environmental audit. It also included minor updates following from the approval of MOD6. This plan is not listed on Boral's Peppertree Quarry web page.

In March 2022, an updated Construction Noise Management Plan was prepared to cover the new South-west Overburden Emplacement approved under MOD5 and also specifically cover the more recent MOD7 involving the realignment of the project footprint associated with the Western Overburden Emplacement sediment basin and removal of a specified tree. This plan was approved by the Department on 14th March 2022. At the time of this audit, this plan was not listed on the Boral Peppertree webpage.

In March 2022, an updated Water Management Plan was prepared to cover project changes approved by MOD5 and 6 as well as specific recommendations made in the previous Independent Audit. The plan was approved by the Department on 7th March 2022. At the time of this audit, this plan was not listed on the Boral Peppertree webpage.

An updated Biodiversity and Rehabilitation Management Plan was completed in March 2022 which incorporated the requirements of MOD5 and 6 reflects management of the landscape and rehabilitated areas associated with current quarry activities. The Department approved this plan on 10th March 2022.

Overall, the set of management plans covering the operation of Peppertree Quarry are of a high standard, largely prepared by external consultants and often peer reviewed. There is evidence of consultation with relevant government authorities and input provided has been incorporated into the management plans.

3.1.2 Environmental Studies and Assessments

The MOD5 Environmental Assessment and the MOD 6 Statement of Environmental Effects represent the primary environmental studies and assessments which formed the current. The assessment carried out for MOD 7 consisted of an additional biodiversity assessment and descriptive information on the reorientation of a sediment dam to maintain sufficient clearance from the easement of an adjacent high voltage power line.

3.1.3 Environmental Monitoring and Records

Environmental monitoring work associated with these plans is published on Boral's web page at <https://www.boral.com.au/what-we-do/environmental-reporting> and includes:

- Collection of depositional dust at three points;
- Atmospheric dust (PM₁₀) at monitoring point 2;
- TSP at monitoring point 1;
- PM2.5 at monitoring point 3.

The online data set at time of this audit was approximately 6 months behind. More recent data was available however this data has yet to be reported on the company's web page.

Blast monitoring data is also provided on line. The data covers overpressure and ground vibration at four separate locations. The data shows compliance with the required criteria but does indicate measurable and noticeable vibration impacts at two residences.

In addition to the online data reported, Boral engage an external consultant to undertake Noise Compliance Monitoring. This work is generally undertaken quarterly and is contained in the Annual Review. The latest recommendations for ongoing noise management at the quarry were to continue to:

- ensure that all significant noise generating plant, equipment and machinery are procured, maintained and managed to reduce noise and that mitigation is applied where feasible, reasonable and necessary;
- avoid concentrations of equipment in sensitive work areas such as on top of the dump or bund;
- avoid bunching of trucks along internal haul roads;
- monitor local meteorological conditions to manage the placement of equipment so that is is suitable for the best acoustic outcomes for those conditions; and
- undertake noise compliance monitoring at the affected receptors in accordance with the consent or at alternate monitoring locations in accordance with the requirements of the National Pollutant Inventory.

Over the past three years, the quarry continues to meet its noise and blasting obligations and the monitoring work has indicated that it is unlikely that the operation will exceed the assessment criteria in the future. To achieve this will however require ongoing management and attention given to the inadvertent use of multiple plant at elevated locations and prevailing weather conditions.

Surface water and ground water monitoring results are presented annually in the Annual Review under Appendix 5. The Annual Reviews are updated each year on the web page under the public reporting tab. These results include:

- Quarterly water quality monitoring results for 4 surface water sites;
- Six monthly water quality monitoring results for upstream and downstream in Barbers creek;
- Quarterly water quality and water level monitoring of 10 groundwater bores;

In addition to the reported monitoring data, Peppertree operate a dedicated weather station on site and has commenced monitoring and recording of rehabilitation activities and management of the Biodiversity Offset Areas. All monitoring data and records collected by Peppertree Quarry since 2018 were reviewed as part of this audit. Specific documents sighted in this audit are listed in Appendix D.

3.1.4 Environmental Reports

The following additional environmental reports were reviewed as part of the audit:

- Peppertree Quarry Annual Reviews covering the reporting years 2018, 2019 and 2020.
- Conservation and Rehabilitation Bond Cost Calculation.
- Peppertree Quarry Pollution Incident Response Management Plan.
- Production records.
- Boral Sustainability Report.
- Shot firing records.
- Survey data and reporting.
- Design plans for overburden emplacements.
- Extractive Materials Return (Form S 1).
- Various correspondence from government agencies in relation to the draft and final management plans.

A full list of reports and data obtained and reviewed for this audit is provided as Appendix D.

3.2 Compliance Performance

A detailed breakdown of the audit findings is provided in Appendix A. There were 2 noted non-compliances with the development consent. Overall the operation has a very good level of compliance. The non-compliances are mostly administrative in nature and do not pose a risk to the environment, increase environmental impacts or otherwise detract from the intent of the condition.

3.3 Notices, Penalties and Prosecutions

There have been no notices or penalties issued by regulatory authorities over the audit period. The EPA advised that they had received a total of 4 complaints over the past 2 years however on investigation, the operation of Peppertree Quarry was either not the cause or was otherwise complying with its operational requirements. Separate independent noise monitoring was undertaken by the EPA and the quarry was found to comply with its noise assessment criteria.

Boral advised the Department on 8th February 2021 that the onsite PM10 High Volume Air Sampler (HVAS) had failed. The unit was replaced and monitoring resumed. The results leading up to the failure and post failure were all in compliance with the assessment criteria. Total Suspended Particulates, PM2.5 and deposition data continued during the period and the results indicated that compliance with the PM10 criteria would have been highly likely.

The Resources Regulator has an outstanding prosecution in relation to exceeding Work Health and Safety Regulation exposure of airborne concentrations of crystalline silica. This issue does not relate directly to environmental legislation nor compliance status with the development consent.

3.4 Previous Audit Recommendations

The following table provides a summary of the previous audit recommendations and status.

Condition/Observation	Recommendation	Status
Condition 9 Schedule 3	NBMP meets criteria but the plan does not include a section on best practice as referenced in the condition	The NBMP was updated in 2019 and further updated in 2020
Condition 10 Schedule 3	The NBMP does not reflect recent changes to noise mitigation from the Voluntary Undertaking and minor typographic errors	The NBMP was updated in 2019 and further updated in 2020. Separate noise monitoring reports are also now undertaken annually. These include additional ongoing recommendations
Condition 17 Schedule 3	Discussions to be held with EPA and DPE in relation to the location of dust monitors	Completed in 2019 which resulted in updating the monitoring program with additional atmospheric HVAS units. AQMP update in 2020
Condition 19 Schedule 3	An investigation of best practice relating to air quality at similar facilities should be undertaken to understand the feasibility and value of implementing best practice systems such as continuous air quality monitoring.	Dust controls and monitoring systems have been subject to ongoing investigations and upgrading. This has included installing 2 baghouse filters, enclosures of crushing and screening plant and various additional dust suppression sprays
Condition 29 Schedule 3	Water flow monitoring should be undertaken in Barbers Creek or the condition modified.	Corresponding condition B36 still requires flow data from Barbers Creek. As Barbers Creek is inaccessible, no water flow data is obtained. This condition still needs to be modified.
Condition 41 and 42 Schedule 3	Boral should establish a clear procedure around monitoring and recording waste generation.	Peppertree developed a Waste Management Plan in October 2020 which details monitoring provisions for waste streams.
Condition 46 Schedule 3	Production data not included in Annual Review, should be provided to the Department	Boral committed to providing production data separately to the Department of Planning and Environment separately to the Annual Review process. Extractive Industry returns for 2019, 2020 and 2021 sighted.
Condition 9 Schedule 5	Environmental performance data not located on Peppertree specific web page but rather an overall Boral web page	Web page has been redesigned and is more user friendly. Web data is easily located however additional recommendations on this matter have been made as part of this audit.
EPL M5.2	Web page should be updated to clearly identify telephone number for complaints	Web page has been redesigned and the complaints procedure has been specifically highlighted

Additional recommendations were based on the review of the 2015 Independent Audit as well as a separate audit made by the Department of Planning and Environment in 2016. These included updating of the web page and additional waste tracking which has been completed.

3.5 Monitoring Data Review

Peppertree reports data required by the consent on both its web page and in its Annual Review. This data was reviewed as part of this audit and the following observations were noted:

- ❑ Dust deposition and atmospheric dust concentrations have in general reduced over the past 3 years. There are some individual months where dust readings are elevated which can occur due to prevailing weather conditions, particularly during period of drought which existed in 2019 to early 2020. The broad reduction in dust emissions over the past 18 months is probably a combination of wetter conditions as well as improved dust management on site. The analysis of dust impacts on surrounding properties is provided monthly by an external consultant. This provides a high level of confidence in the results and their interpretation.
- ❑ Noise emissions are assessed by an external consultant. The results demonstrate ongoing compliance with the assessment criteria. The monitoring is generally conducted quarterly although this was not always achieved as a result of COVID-19 restrictions. Each monitoring phase includes additional advice on noise monitoring locations, noise mitigation strategies and methodology refinement. The consultant also attempts to resolve community complaints as they arise such as tonal and instantaneous noise nuisance impacts. As these occur infrequently, it was not surprising that the consultant did not detect these during each attended noise surveys. Boral is however aware that these can and do occur from time to time and is addressing these through awareness training.
- ❑ Blast monitoring is undertaken for each blast undertaken. The results show continuous compliance with both overpressure and ground vibration. Monitoring occurs at 4 locations and the monitors often fail to register either overpressure or ground vibration, ie do not trigger. The nearest residence does however experience measurable ground vibration and overpressure levels on at least 20 occasions during a 12 month period albeit at levels within the assessment criteria.
- ❑ Surface water monitoring consists of on site water storages, water discharges and receiving ambient water quality. On site water storages ponds are tested to indicate potential water quality should a discharge occur. Quarterly ambient water quality monitoring provides data on the long term average receiving environment as well as to determine ANZECC trigger values which in turn can be used to assess the potential impacts of any water releases should they occur. Overall the results show that water quality within the receiving environment varies seasonally as well as from broader climatic changes such as between drought and high rainfall periods. The water quality held on site is generally good with short term spikes of both nutrients and solids following rainfall but the current practice of keeping these ponds as empty as possible reduces the potential for uncontrolled discharge. The program is considered current best practice.
- ❑ Groundwater monitoring occurs quarterly via five shallow and seven deep monitoring bores. One bore recently collapsed so the program currently consists of 11 bores. The purpose of the monitoring program is to determine if any long term changes occur to groundwater quality or piezometric level as a result of the extraction. As the resource being extracted at Peppertree Quarry is a tight, dense, granodiorite which does not act as an affective aquifer. The rock has a very low permeability so although the quarry void would cause some flow of

groundwater this tends to be very localised. The piezometric levels in surrounding bores have shown little draw down.

The monitoring program is considered adequate to determine if the project is meeting its environmental obligations and verify the impact predictions made in the various environmental assessment documents which formed the bases of the current development consent.

Peppertree Quarry has internal centralised process for managing environmental data. This system allows for identification of exceedances when they arise as well as identify short and long term trends which may indicate that additional mitigation or amelioration work is required.

3.6 Site Inspection and On-Site Environmental Management

The site inspection covered all aspects of the quarry operation and a photographic record is provided in Appendix C. Prior to the inspection, the audit team examined the operation's environmental management system. This is contained within "Peppertree Quarry Environmental Green Folder" which contains.



The inspection included:

- Office and administration buildings;
- Workshop, hardstand, washdown and storage areas;
- Waste treatment area;
- Crushing, screening and stockpile area;

-
-
- Extraction area;
 - Overburden emplacement;
 - Rehabilitation areas;
 - Creeks, drainage channels, dams and external embankments; and
 - Rail loading facilities.

An inspection of the fuel and oil containment facilities, workshop and storage areas showed adequate house keeping and did not indicate any areas of potential pollution, contamination or non-compliance. There were two empty drums lying outside the containment at the time of the audit which were subsequently removed. Boral maintain very strict safety procedures within its workshop which in turn results in a tidy and environmentally sound facility.

The washdown bay showed evidence of recent sediment removal indicating that it is regularly serviced. Similarly, the oil separator and waste oil tank appeared to be operating effectively.

The quarry extraction area was observed for some time. It was noticed that in accordance with the current Noise Management Plan that in-pit haul trucks moved separately along haul roads and no bunching up occurred. There were no areas where multiple plant were operating simultaneously. At the time of the audit there were two separate extraction areas on different benches. The previously blasted bench was being worked at the upper face by one dozer and the lower face by a single shovel loading the primary crusher hopper. Well spaced dump trucks loaded with primary crushed rock transport the material out of the lower quarry void to the main in pit crushing area. Conveyors move the material elsewhere on site.

During the site inspection there was little evidence of visible dust in any of the key operational areas. The noise environment seemed typical of an extractive industry but will limited tonal noises such as reversing alarms, instantaneous noises or uncharacteristic noises such as low frequencies. The conveyors were particularly low noise emitting with no evidence of failing roller bearings or vibration type noise.

The main stockpile area was relatively dust free with the exception of the conveyor tipping point. The use of underground feeders significantly reduce the overall dust emissions from stockpile by leaving the outer face stable. The overall dust extraction system is impressive and quite unique for an extractive industry.

All conveyor systems are either fully or three quarters enclosed while the train loading system as been designed to significantly reduce dust emissions. A train loading operation was witnessed during the audit which resulted in very little dust generation with no visible dust leaving the loading building.

Landforms that have been rehabilitated were inspected and found to be stable with little or no vegetation failure or erosion evident. The outer face of the emplacement is considered steep compared to other comparable rehabilitation profiles. At a slope of 1 in 2 (vertical to horizontal) it is at the upper limit for long term stability. Boral has recognised this and has employed rock armouring to assist with stability. The rock armoured sections were inspected and found to be stable. Rock armouring is also used on drainage lines used to convey water down to sediment ponds at the base of the emplacement. These also appear stable although there was evidence of some sediment build up, probably caused before the slopes were vegetated.

The Biodiversity and Rehabilitation Management Plan requires that the outer face of the overburden emplacement be rehabilitated with a native shrub and tree mix. At present the faces

have been stabilised with perennial pasture species. This issue is further discussed in Section 3.10.

3.7 Community Liaison

Inspection of the community complaints register showed that there have been a low but continuing number of complaints over the past few years. A review of the minutes of the Community Consultation Committee (CCC) meeting indicate that most issues are quickly resolved but that noise, blasting and dust issues has been regularly discussed. Minutes are prepared which document each issue raised by the committee, Boral's response and agreed actions to be taken. Minutes are presented at each CCC meeting. This process satisfies the consultation requirements of the Department's CCC guidelines.

As discussed in Section 2.5.1, the Chair of the CCC was contacted as part of this audit and no specific issues of concern was raised. The function and purpose of the CCC is considered satisfactory and issues raised are proactively addressed and resolved by Boral.

3.8 Record Keeping

The success of the Environmental Management System often rests with good data collection, proper analysis of data and record keeping. The environmental data is all kept on site and within the Boral intranet system. The data is accessible to on site management as well as the Boral environmental management team. There is a system to enable ongoing management of data to identify trends and potential future exceedances with specific Trigger Action Response Plans available for noise and dust.

3.9 Environmental Management Plan Review

All environmental management plans were reviewed as part of this audit. It was noted that the management plans were either entirely or substantially prepared by external consultants and in most instances, the plans represented updates to previously approved plans. The updated versions, where required, were separately reviewed by relevant government agencies and their comments incorporated into the final versions.

Management Plan	Date	Agency Review	Approved	Audit Review Comments
Peppertree Quarry Construction Traffic Management Plan	August 2021	Yes	Yes	Adequately addresses mitigation measures identified.
Peppertree Quarry Construction Noise Management Plan	March 2022	Yes	Yes	A high quality plan which provides fit for purpose mitigation measures and identifies additional proactive noise monitoring initiatives.
Peppertree Quarry Aboriginal Heritage Management Plan	December 2021	Yes	Yes	A high quality plan which adequately addresses potential impacts on Indigenous heritage.
Peppertree Quarry Noise and Blast Management Plan	May 2020	Yes	Yes	Adequately addresses mitigation measures identified. Will require ongoing monitoring and management of issues as they arise.
Peppertree Quarry Bushfire Management Plan	October 2020	Yes	N/A	Adequately addresses mitigation measures identified. Should be

				subject to ongoing review on a regular basis.
Peppertree Quarry Biodiversity and Rehabilitation Management Plan	March 2022	Yes	Yes	A high quality plan which adequately addresses proposed and ongoing rehabilitation initiatives. Subsequent reviews should provide more detail on native species to be used in rehabilitation and progressively tighten proposed completion criteria.
Peppertree Quarry Air Quality Management Plan	May 2020	Yes	Yes	Adequately addresses mitigation measures identified. Will require ongoing monitoring and management of issues as they arise, particularly as a result of community complaints.
Peppertree Quarry Water Management Plan	March 2022	Yes	Yes	A high quality plan which adequately addresses potential impacts on surface and groundwater systems. Related monitoring reports should refer to principles outlined in the plan. Any changes to the monitoring program should be first addressed in a subsequent modification to plan so that there is a level of consistency.
Peppertree Quarry Waste Management Plan	October 2020	N/A	N/A	Adequately addresses waste tracking mitigation measures identified in the previous audit. Should be subject to ongoing review on a regular basis.

The set of plans operating at Peppertree are all considered adequate and fit for purpose. Specific comments are provided below however it is stressed that these comments are not provided as necessary improvements but rather should be considered for incorporation in the next scheduled review:

- The Construction Noise Management Plan (CNMP) post dates the Noise and Blast Management Plan by nearly 2 years. The CNMP provides an up to date list of noise monitoring and management provisions which should be incorporated into a revised Noise and Blast Management Plan.
- The Construction Traffic Management Plan contains some bookmark field errors which can be corrected in any future reiteration.
- The latest noise compliance monitoring identifies some feasible and practical measures to further reduce noise emissions such as avoiding truck bunching on haul roads and concentrations of equipment on elevated positions, which are not specifically mentioned in the Noise and Blast Management Plan. These should be incorporated into the plan in its next update.
- The Biodiversity and Rehabilitation Management Plan provides comprehensive data and analysis required to manage biodiversity issues at Peppertree. However, the rehabilitation objectives for some areas, particularly the steep outer face of the overburden emplacements, lack detail and often described as “trees over grass”. The objectives for these areas include the establishment or expanding Box Gum Woodland but as a minimum to include native

grasses and shrubs. There is a lack of detail on methods for implementation and how the achievement of the completion criteria can be verified.

- ❑ The Water Management Plan (WMP) is based on the various environmental assessments and the resultant monitoring program is based on the need to verify the impact predictions made in those assessments. The WMP provides a comprehensive analysis of surface water management systems and monitoring. However, the groundwater monitoring program has progressively been modified and expanded beyond the requirement to verify the original impact predictions. The target granodiorite does not act as an affective aquifer. A small quantity of groundwater enters the quarry void which then forms part of the surface water management system. The groundwater monitoring program has demonstrated that the quarry does not impact on local groundwater quality. Therefore the main purpose of the monitoring program should be to continue to measure any localised drawdown that may be a result of the extraction area. Boral may be comfortable to continue the current groundwater monitoring program however it is well beyond what is necessary to determine any impacts of the quarry operation.

3.10 Actual vs Predicted Impacts

Boral detail the various assessment criteria and environmental performance in its Annual Review. The last three Annual Reviews have been assessed as part of this audit. The results are summarised below:

- ❑ Dust emissions have met the assessment criteria for the past two years. There was a period of higher dust emissions during 2018-19 which corresponded to a period of extreme drought. This in turn limited the amount of dust suppression water that was available.
- ❑ Noise emissions have consistently met the assessment criteria and are in line with predicted emissions. The monitoring data does not indicate any general trends over the past three years.
- ❑ Noise complaints have reduced but still represent a source of community concern.
- ❑ Surface water monitoring shows natural variability as would be expected. The Quarry's main Dam provides environmental flows into the ephemeral Tangarang Creek and as such the downstream water quality is largely representative of the discharges, with some minor natural variations from the wider catchment influences.
- ❑ There are no predictive impacts on groundwater quality and the monitoring program is providing a large database on regional groundwater quality. Depressurisation of local fractured rock aquifer has not occurred.

3.11 Improvement Opportunities

There are three areas of improvement identified as a result of this audit, these are:

- ❑ Boral should further examine the rehabilitation methods and species selection for the outer faces of the overburden emplacement.
- ❑ Consideration should be given to additional woodlot style tree planting in completed rehabilitation areas. Tree species should include key box gum woodland species such as *Eucalyptus melliodora*, *E albens* and *E blakelyi*. On steeper slopes, species such as *E*

sieberi and *E agglomerata* could be used. These species still occur within the target BioNet Plant Community Type PCT1330 but often occur on dry ridgelines and rocky outcrops within the Marulan district.

- ❑ Boral should ensure that their web page contains all current management plans and monitoring data.

4. Recommendations

4.1 Summary of Recommendations

The following recommendations have resulted from this audit:

- All current management plans should be uploaded onto the Boral Peppertree web page.
- Boral should ensure that monitoring data is uploaded onto the Boral Peppertree web page in accordance with the Protection of the Environment Operations Act 1979.
- As part of any future review of the Biodiversity and Rehabilitation Management Plan provide additional information on specific native species to be used in the rehabilitation work.
- Identify any specific batter slopes of the overburden emplacement where pasture species may be preferable than native species to provide long term stability.
- Align the monitoring program and scope of ongoing specialist consultants to centre on verifying the impact predictions made in the various environmental assessments.
- As part of any future consent modification, the requirement to monitor flow in Barbers Creek, as required by Condition B36, should be amended as per the current Water Management Plan.

Appendix A – Compliance Status Table

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
Schedule 2				
PART A ADMINISTRATIVE CONDITIONS				
A1	Obligation to minimise harm to the Environment 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.	Documents 1 to 10 Environmental Management Strategy May 2020 Documents 23, 23, 72	Prevention measures implemented are described in documentation	Compliant
A2	Terms of Approval The project may only be carried out:			
	(a) in compliance with the conditions of this approval;	This document	This audit has confirmed compliance of the consent	Compliant
	(b) in accordance with all written directions of the Secretary;	This document	This audit has confirmed compliance	Compliant
	(c) generally in accordance with the EA, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4), EA (MOD 5) and EA (MOD 6); and Modification Report (MOD 7).	EA and Modification Documents	Development matches EA and Modifications	Compliant
	(d) in accordance with the Project Layout in Appendix 2.	Documents 38, 39		Compliant
A3	Consistent with the requirements in this approval, the Secretary may make written directions to the Proponent 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 approval, including those that are required to be, and have been, approved by the Secretary; and	Documents 1 - 10, Environmental Monitoring Results documents 41 to 57	Documents listed comply with consent requirements.	Compliant
	(b) the implementation of any actions or measures contained in any such document referred to in condition A3(a).	Documents 1 - 10, Environmental Monitoring Results documents 41 to 57	Documents listed comply with associated requirements. These actions need to be followed for the life of the quarry. Management plans may need to	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
			be updated in light of operational changes or in response to monitoring data.	
A4	The conditions of this approval and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	Noted		
A5	Limits of Approval Identification of Boundaries Prior to the commencement of construction or as otherwise directed by the Secretary, the Proponent must:	Cond A7 SWOE pegs with red tape Document 72	Sighted documents plus site inspection	Compliant
	(a) engage an independent registered surveyor to survey the boundaries of the approved limit of extraction;	Document 72 Arcadis 2018 Audit	The email and report showing engagement of the surveyor was sighted during the 2018 Audit.	Compliant
	(b) submit a survey plan of these boundaries to the Secretary; and	Document 72	Plan prepared by Construction Surveys Pty Ltd, approved by registered surveyor Craig Stratton in April 2009. The plan was submitted to DP&E on 17/12/2010.	Compliant
	(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	Site inspection/ Photos	The extraction limit boundaries are clearly marked with orange pegs and extraction remained within the boundaries.	Compliant
A6	The Proponent must:			
	(a) prior to the commencement of construction of the SOE, or as otherwise agreed by the Secretary, engage an independent registered surveyor to survey the boundary of the emplacement area and submit a survey plan of this boundary to the Secretary; and	Arcadis 2018 Audit	Plan prepared by Craven, Elliston and Hayes Pty Ltd and approved by registered surveyor Matthew Bruce Smith in April 2017. The plan was submitted to DP&E on 26/4/2017.	Compliant
	(b) ensure that, during its construction and use, the boundary of the SOE is clearly marked in a manner that allows operating staff and inspecting officers to clearly identify its location.	Site Inspection Document 72	The SOE boundary is clearly marked with pegs and the	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
			extraction remained within the approved boundaries.	
A7	The proponent must:			
	(a) prior to the commencement of construction of the SWOE, or as otherwise agreed by the Secretary, engage an independent registered surveyor to survey the boundary of the emplacement area and submit a survey plan of this boundary to the Secretary; and	Document 72	Survey plan sighted during audit.	Compliant
	(b) ensure that, during its construction and use, the boundary of the SWOE is clearly marked in a manner that allows operating staff and inspecting officers to clearly identify its location.	Site Inspection/ photos Document 72 Document 73	The SOE boundary is clearly marked	Compliant
A8	Quarrying Operations Quarrying operations may be carried out on the site until 31 December 2038.	Noted	Quarrying operations on site are ongoing and are planned to continue until closer to this date.	Compliant
A9	Transport Limits A maximum of 3.5 million tonnes of quarry products may be transported from the site in any calendar year.	Train loadout manifest – tonnage records sighted during audit.	Screenshot of tonnages records provided. On average around 220,000 tonnes per month, around 2.6 million tonnes per year	Compliant
A10	The Proponent may dispatch up to two laden trucks containing quarry products per calendar day. Any additional truck dispatches of quarry products will require the written approval of the Secretary.	Weighbridge records Written letters of approval from the Secretary Paper records trucks. Signed by quarry manager. For 2 trucks/day. Approval for about 8 trucks/day during Covid	Some product has been transported by road and evidence of approval from the Secretary is supplied when required.	Compliant
A11	The Proponent must not receive overburden from the Marulan South Limestone Mine without the written approval of the Secretary, or the grant of a separate development consent. (such as Marulan South SSD consent (July 2021)	No overburden received to date from Marulan South Limestone The SWOE used to be part of Marulan South Limestone.	No Overburden was received from Marulan South.	Compliant
A12	Hours of Operation The Proponent must comply with the operating hours set out in Table 1.	Running times spreadsheet	Data recorded in the control room identifies start and finish times.	Compliant
A13	Between the hours of 5:00am to 7:00am and 7:00pm to 11:00pm the:			

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(a) in-pit crusher must not operate above RL 555; and	Survey data by photomapping services	The crusher operates within the lowest level of the active pit floor which is surveyed to be approximately RL555.	Compliant
	(b) mobile plant in the pit, including excavators, front-end loaders and trucks, must not operate above RL 570.	Site inspection and photos		Compliant
A14	The following activities may be carried out outside the hours specified in Table 1.			
	(a) delivery or dispatch of materials as requested by Police or other public authorities; and	Noted	Works can be completed at any time.	Compliant
	(b) emergency work to avoid the loss of lives, property or to prevent environmental harm. In such circumstances, the Proponent must notify the Department and affected residents prior to undertaking the activities, or as soon as is practical thereafter.	Noted	Works can be completed at any time.	Compliant
A15	Notification of Commencement The date of commencement of each of the following phases of the project must be notified to the Department in writing, at least one month before that date:			
	(a) commencement of works in the Modification 5 disturbance area;	Issued letter from Boral. Plans must be approved.		Compliant
	(b) cessation of quarrying operations; and		Operations continuing	Not Triggered
	(c) any period of suspension of quarrying operations.		No suspensions have occurred	Not Triggered
A16	Community Consultative Committee The Proponent must operate a CCC for the project, to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Department's <i>Community Consultative Committee Guidelines: State Significant Projects (2019)</i> .	CCC presentations and meeting minutes sighted. Correspondence from the Chair	CCC run in accordance with CCC Guidelines. Meeting minutes are distributed to the DP&E.	Compliant
A17	Evidence of Consultation Where conditions of this approval require consultation with an identified party, the Proponent must:			
	(a) consult with the relevant party prior to submitting the subject document; and	Site interview	Consultation letters and emails sighted	Compliant
	(b) provide details of the consultation undertaken including:			

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(i) the outcome of that consultation, matters resolved and unresolved; and	Site interview	Consultation letters and emails sighted	Compliant
	(ii) details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed the matters not resolved.	Site interview	All comments received were incorporated into the respective management plans	Compliant
A18	Staging, Combining and Updating Strategies, Plans or Programs With the approval of the Secretary, the Proponent may:	No formally stage approvals		
	(a) prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the project to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);	N/A		Not Triggered
	(b) combine any strategy, plan or program required by this approval (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and	N/A		Not Triggered
	(c) update any strategy, plan or program required by this approval (to ensure the strategies, plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the project). and	Environmental Management Strategy May 2020	The Environmental Management Strategy was last updated in May 2020.	Compliant
	(d) combine any strategy, plan or program required by this approval with any similar strategy, plan or program required by an adjoining mining consent or approval, in common ownership or management.	N/A		Not Triggered
A19	If the Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this approval if those requirements are not applicable to the particular stage.	Noted		Not Triggered
A20	If the Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this approval.	Noted		Not Triggered

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
A21	Application of Existing Strategies, Plans or Programs	Documents 1 to 10	Existing management plans were followed prior, during and after the approval of Mod 5. A review of all management plans has been provided in this audit	Compliant
A22	Protection of Public Infrastructure Unless the Proponent and the applicable authority agree otherwise, the Proponent must:	The project involves the use of some public infrastructure including some potential impacts to Marulan South Road which is crossed by the SWOE haul road and a gas pipeline		
	(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by carrying out the project; and	Noted	No repairs of public infrastructure have been required in this audit period. Previously triggered and satisfied.	Compliant
	(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.	Noted	No repairs of public infrastructure have been required in this audit period. Previously triggered and satisfied.	Compliant
A23	Demolition All demolition must be carried out in accordance with Australian Standard AS 2601-2001 The Demolition of Structures (Standards Australia, 2001).	Noted	No demolition was carried out in the auditing period	Not Triggered
A24	Structural Adequacy All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the project, must be constructed in accordance with the relevant requirements of the BCA.	Construction certification sighted	The construction of the dust collectors in accordance with MOD6	Compliant
A25	Operation of Plants and Equipment All plant and equipment used on site, or to monitor the performance of the project must be:			
	(a) maintained in a proper and efficient condition; and	All work orders require SWMS Maximo generates work orders	Plant operation and maintenance is undertaken in accordance with SWMS designed for each item of equipment. Maintenance timing is controlled by the Maximo program.	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(b) operated in a proper and efficient manner.	SWMS	Plant operation is undertaken in accordance with SWMS designed for each item of equipment.	Compliant
A26	Compliance The Proponent must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the project.	Site Inductions SWMS Site uses Rapid Induction System	All site personnel must be inducted for specific tasks on site and are required to read and sign the relevant SWMS which outlines compliance of conditions.	Compliant
A27	Applicability of Guidelines References in the conditions of this approval to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update in the condition).	Noted		
A28	However, consistent with the conditions of this approval and without altering any limits or criteria in this approval, the Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	Noted		
A29	Production Data Each year, from the commencement of quarrying operations, the Proponent must provide annual quarry production data to DRG.	AEMR 2018, 2019, 2020 Production data sighted	Production data has been provided to the DRE as required.	Compliant
A30	The data must be provided using the relevant standard form and a copy of the data must be included in the Annual Review (required under condition D11).	AEMR 2018, 2019, 2020 Production data sighted	Production data is provided within the relevant AEMRs.	Compliant
PART B- SPECIFIC ENVIRONMENTAL CONDITIONS				
B1	Noise Bund Construction In carrying out the construction of the noise bunds, the Proponent must:	Bund for original pit – complete Site inspection		Compliant
	(a) comply with the construction noise criteria in the <i>Environmental Noise Control Manual 1994</i> for the first three months of the construction work;	Bund for original pit – complete Site inspection		Compliant
	(b) thereafter comply with daytime operational noise criteria in condition B3; and	Noise measurement records (Appendix 3 of AEMR 2019 & 2020)	Noise is in compliance with criteria.	Compliant
	(c) ensure bunds do not exceed 10 meters in height.	Site inspection	Bunds remain under 10m in height	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B2	Construction Noise Management Plan The Proponent must prepare and implement a Construction Noise Management Plan for the project to the satisfaction of the Secretary. This plan must be submitted to the Secretary for approval prior to the commencement of construction, and include:	Document 4 - Peppertree Quarry Construction Noise Management Plan and Document 1 Peppertree Quarry Construction Traffic Management Plan	Plans have been approved with correspondence sighted.	Compliant
	(a) a detailed description of the measures that would be implemented to achieve the construction noise limits in the Environmental Noise Control Manual 1994 and the operational noise criteria in condition B3;	Document 4 - Peppertree Quarry Construction Noise Management Plan and Document 1 Peppertree Quarry Construction Traffic Management Plan	Plans have been approved with correspondence sighted.	Compliant
	(b) a community notification protocol for the proposed construction activities;	Document 4 - Peppertree Quarry Construction Noise Management Plan and Document 1 Peppertree Quarry Construction Traffic Management Plan	Plans have been approved with correspondence sighted.	Compliant
	(c) a description of the measures that would be implemented where the construction noise limits and/or operational noise limits are unlikely to be achieved or are not being achieved; and	Document 4 - Peppertree Quarry Construction Noise Management Plan and Document 1 Peppertree Quarry Construction Traffic Management Plan	Plans have been approved with correspondence sighted.	Compliant
	(d) details of who would be responsible for monitoring, reviewing and implementing the plan.	Document 4 - Peppertree Quarry Construction Noise Management Plan and Document 1 Peppertree Quarry Construction Traffic Management Plan	Plans have been approved with correspondence sighted.	Compliant
B3	Operational Noise Criteria Except during noise bund construction, the Proponent must ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land.	Noise measurement records (Appendix 3 of AEMR 2019 & 2020) 5 noise monitoring locations 3 monthly unattended – 3 days continuous and attended ½ hour (2 x 15 mins) day and night – ERM Real time monitor at Coopers. Sound Science monitoring	Noise levels remained below criteria.	Compliant
B4	For the purposes of condition B3:			
	(a) day means the period from 7am to 7pm Monday to Saturday and the period from 8am to 6pm Sunday and public holidays;	Noted.		
	(b) evening means the period from 7pm to 10pm; and	Noted.		
	(c) night means the period from 10pm to 7am Monday to Saturday and the period from 10pm to 8am Sunday and public holidays.	Noted.		

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B5	Noise generated by the project must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the <i>NSW Noise Policy for Industry</i> (EPA, 2017).	Noise and Blasting Management Plan AEMR Section 6.4	Noise monitoring is conducted as per the <i>NSW Noise Policy for Industry</i>	Compliant
B6	The noise criteria in Table 2 do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of this agreement.	Noted		Compliant
B7	Land Acquisition Data If the noise generated by the project exceeds the criteria in Table 3, the Proponent must, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions C8 and C9.	Site interview and review of monitoring data documents 41 to 52	There have been no written requests for acquisition and no material exceedances of criteria have been recorded.	Not Triggered
B8	Noise Operating Conditions The Proponent must:			
	(a) take all reasonable steps to minimise all noise from construction and operational activities, including low frequency noise and other audible characteristics, as well as rail and road noise associated with the project;	Noise and Blasting Management Plan Section 4.0 Site interview and review of monitoring data documents 41 to 52	The NBMP provides framework and guidance for activities to be conducted implementing appropriate control measures to minimise the potential for adverse noise and blasting impacts	Compliant
	(b) operate a noise management system to guide day to day planning of quarrying operations and implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;	Noise and Blasting Management Plan Section 4.0 and 6.0 Site interview and review of monitoring data documents 41 to 52	Adequate noise management controls are in place to mitigate noise pollution.	Compliant
	(c) take all reasonable steps to minimise the noise impacts of the project during noise-enhancing meteorological conditions when the noise criteria in this approval do not apply;	Noise and Blasting Management Plan Section 4.0 and 6.0 Site interview and review of monitoring data documents 41 to 52	Real-time measurements of meteorological conditions are taken to support noise monitoring to identify weather conditions which may trigger the need to modify operations.	Compliant
	(d) take all reasonable steps to minimise the cumulative noise impacts generated by the project and the Marulan South Limestone Mine; and	Noise and Blasting Management Plan Section 4.0 and 6.0 Site interview and review of monitoring data documents 41 to 52	Avoidance of concurrent blasts with Marulan South. Blast design and monitoring	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(e) regularly assess the noise monitoring data, and modify or stop operations on the site to ensure compliance with the relevant conditions of this approval.	Noise and Blasting Management Plan Section 6.0	Attended and unattended noise monitoring occurs on a quarterly basis.	Compliant
	(f) report on the implementation and effectiveness of these measures in the Annual Review, to the satisfaction of the Secretary.	AEMR 2019 AEMR 2020 Noise and Blasting Management Plan Section 11.0	The activities and performance outcomes of the NBMP are presented in the AEMR	Compliant
B9	Noise Management Plan The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:	Noise and Blasting Management Plan April 2017		
	(a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;	Document prepared by external consultants and updated by site personnel		Compliant
	(b) be prepared in consultation with the EPA;	Noise and Blasting Management Plan Section 1.5, Appendix 1	Consultation with the EPA was undertaken for the revision of the plan on 19/12/16 and the EPA made comments on the 1/2/17.	Compliant
	(c) describe the measures to be implemented to ensure:			
	(i) compliance with the noise criteria and operating conditions in this approval;	Noise and Blasting Management Plan Section 4.0 and 6.0	The NBMP complies with Noise Operating conditions in B8.	Compliant
	(ii) best practice management is being employed;	Noise and Blasting Management Plan Section 4.0 and 6.0	The NBMP provides framework and guidance for activities to be conducted implementing appropriate control measures to minimise the potential for adverse noise and blasting impacts	Compliant
	(iii) noise impacts of the project are minimised during noise-enhancing meteorological conditions under which the noise criteria in this approval do not apply;	Noise and Blasting Management Plan Section 4.0 and 6.0	Real-time measurements of meteorological conditions are taken to support noise monitoring to identify weather conditions which may trigger the need to modify operations.	Compliant
	(d) describe the noise management system; (i) includes a protocol for distinguishing noise emissions of the development from any neighbouring developments; and	Site interview and review of monitoring data documents 41 to 52		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(e) include a monitoring program that: (i) is capable of evaluating the performance of the project against the noise criteria;	Noise and Blasting Management Plan Section 7.0	Monitoring results are compared against the assessment criteria as outlined in Section 7.0.	Compliant
	(ii) carries out regular attended and unattended noise monitoring at appropriate locations, including at receiver locations R4 and R17 to determine whether the project is complying with the relevant conditions of this approval;	Noise and Blasting Management Plan Section 6.0 Site interview and review of monitoring data documents 41 to 52	Attended and unattended noise monitoring occurs on a quarterly basis.	Compliant
	(iii) provides for the use of real-time and/or supplementary attended monitoring measures, if directed by the Secretary;	Noise and Blasting Management Plan Section 6.0	Attended noise monitoring occurs on a quarterly basis.	Compliant
	(iv) adequately supports the noise management system; and	Noise and Blasting Management Plan Section 4.0 and 6.0	Adequate noise management controls are in place to mitigate noise pollution.	Compliant
	(v) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event; and	Noise and Blasting Management Plan Section 11.3.6	The procedure for incident reporting is outlined in the NBMP in Section 11.3.6 to satisfy this condition.	Compliant
	(f) detail who would be responsible for monitoring, reviewing and implementing the plan.	Noise and Blasting Management Plan Section 1.0	Detailing management plan responsibilities is outlined in Section 1.	Compliant
B10	The Proponent must submit the Noise Management Plan for approval by the Secretary, within three months of the approval of Modification 5.	Dated May 2020 submitted Jan 2020	MOD 5 approved 1/10/2019	Compliant
B11	The Proponent must implement the Noise Management Plan as approved by the Secretary.	Noise and Blasting Management Plan Site interview and review of monitoring data documents 41 to 52	The NBMP is implemented as per this condition.	Compliant
B12	Blasting- Airblast Overpressure Criteria The Proponent must ensure that the air blast overpressure level from blasting on the site does not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.	AEMR 2019- Section 6.5, Appendix 4 AEMR 2020-- Section 6.5, Appendix 4 Site interview and review of monitoring data documents 41 to 52	No blasts exceeded the trigger level 120 in 2019, 2020 or 2021	Compliant
B13	Ground Vibration Criteria The Proponent must ensure that the ground vibration level from blasting on the site does not cause exceedances of the criteria in Table 5 at any residence or sensitive receiver on privately-owned land.	AEMR 2019- Section 6.5, Appendix 4 AEMR 2020-- Section 6.5, Appendix 4 Site interview and review of monitoring data documents 41 to 52	No blasts exceeded the trigger level 10 in 2019, 2020 or 2021	Compliant
B14	The airblast overpressure and ground vibration criteria in Table 4 and Table 5 do not apply if the Proponent has an agreement with	Noise monitoring data reviewed		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	the owner/s of the relevant residence or infrastructure to exceed these criteria, and the Proponent has advised the Department in writing of the terms of this agreement.			
B15	Conditions B12 and B13 do not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.	Noise monitoring data reviewed		Compliant
B16	Blast Operating Conditions During blasting operations, the Proponent must:			
	(a) take all reasonable steps to:			
	(i) ensure the safety of people and livestock from blasting impacts of the project;	NBMP Section 4.4		Compliant
	(ii) ensure that fly-rock does not leave the site;	NBMP Section 4.4	Blast design ensures minimal occurrence of fly-rock	Compliant
	(iii) protect public or private infrastructure and property in the vicinity of the site from blasting damage associated with the project;	NBMP Section 4.0	Adequate protection measures are in place	Compliant
	(iv) minimise blast-related dust and fume emissions; and	NBMP Section 4.0	Measures in place to minimise emissions from blasts	Compliant
	(v) minimise the cumulative blast-related impacts of the project and the Marulan South Limestone Mine;	NBMP Section 4.4.4	Measures are in place to avoid concurrent blasts with Marulan South	Compliant
	(b) operate a suitable system to enable interested members of the public to get up-to-date information on the proposed blasting schedule on the site, including:	Site interview and review of monitoring data documents 41 to 52		Compliant
	(i) notifying the landowner/occupier of any residence within 2 kilometres of the quarry pit who registers an interest in being notified about the blasting schedule on site;	NBMP Section 4.4.5	Two neighbours are currently notified by email and 2 by phone.	Compliant
	(ii) operate a blasting hotline, or alternative system agreed by the Secretary, to enable the public to get up-to-date information on blasting operations at the project; and	NBMP Section 4.0	Invitation to the register is permanently posted on the website.	Compliant
	(iii) keep the public informed about this hotline (or any alternative system), to the satisfaction of the Secretary; and	NBMP Section 4.0	Invitation to the register is permanently posted on the website.	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(c) carry out regular blast monitoring to determine whether the project is complying with the relevant conditions of this approval.	NBMP Section 6.2	Monthly review of noise and blast monitoring data. A separate BMP record is collated for each blast.	Compliant
B17	Blast Monitoring Program The Proponent must prepare a Blast Monitoring Program for the Project to the satisfaction of the Secretary. This program must:			
	(a) be submitted to the Secretary for approval prior to the commencement of construction;	NBMP Section 6.2	BMP approved by secretary.	Compliant
	(b) be prepared in consultation with the EPA; and	NBMP Section 6.2	BMP approved by EPL.	Compliant
	(c) monitor the performance of the project against the relevant blast criteria.	NBMP Section 7.2	Air-blast overpressure (dB Lin peak) should not exceed 115 (5%) and 120 (0%) Ground vibration (mm/s) should not exceed 5 (5%) and 10 (0%)	Compliant
B18	The Proponent must implement the Blast Monitoring Program as approved by the Secretary.	NBMP Site interview and review of monitoring data documents 41 to 52	BMP has been approved by the Secretary	Compliant
B19	Air Quality- Odour The Proponent must ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.	AQMP Section 4.0, 7.0	Specific objective of the AQMP is to minimise off site odours. Due to the nature of the quarry activities odours are not generated.	Compliant
B20	Air Quality Criteria The Proponent must ensure that particulate matter emissions generated by the project do not cause exceedances of the criteria in Table 6 at any residence on privately-owned land, or on more than 25 percent of any privately owned land.	AQMP Section 4.0, 7.0 AEMR 2019 AEMR 2020 Dust gauges on Boral owned land. Data given to Todoroski Air Consulting for assessment and comparing with original impact assessment modelling	No exceedances were noted in the 2019 and 2020 reporting periods. PM10 was above the annual average criteria during the first half of 2020 due to smoke from local bushfires which was not attributed to the quarry. DDG1 damaged by wind- no sample taken in Feb 2020	Compliant
B21	The air quality criteria in Table 6 do not apply if the Proponent has an agreement with the owner/s of the relevant residence or infrastructure to exceed the air quality criteria, and the Proponent has advised the Department in writing of the terms of this agreement.	Noted		

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B22	Air Quality Operating Conditions The Proponent must:			
	(a) take all reasonable steps to:			
	(i) minimise odour, fume and particulate matter (including PM10 and PM2.5) emissions of the development, paying particular attention to minimising wheel-generated haul road emissions;	AQMP Section 4.0 Boral has committed to carbon reductions by 2050	A range of engineering controls and operational protocols have been implemented to minimise potential for dust generation and control air emissions.	Compliant
	(ii) improve energy efficiency and reduce greenhouse gas emissions of the development;	Site interview, Document 8		Compliant
	(iii) minimise any visible off-site air pollution generated by the project; and	Document 8 Section 4.0	A range of engineering controls and operational protocols have been implemented to minimise potential for dust generation and control air emissions.	Compliant
	(iv) minimise the extent of potential dust generating surfaces exposed on the site at any given point in time;	Document 8 Section 4.0	A range of engineering controls and operational protocols have been implemented to minimise potential for dust generation and control air emissions.	Compliant
	(b) operate an air quality management system to guide the day to day planning of quarrying operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this approval;	AQMP Section 4.5 (Table 8)	In addition to the HSEQMS Standards, the Quarry has developed a range of operational management protocols with allocated responsibilities for the 'day-to-day' control of air emissions	Compliant
	(c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note c to Table 6 above);	AQMP Section 4.5.1 and 7.5	Real-time meteorological data is reviewed regularly, including prior to any blasting, to identify triggers for implementing changes to operations	Compliant
	(d) take all reasonable steps to minimise the cumulative air quality impacts generated by the project and the Marulan South Limestone Mine;	Document 8	Dust controls are well documented	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(e) carry out regular air quality monitoring to determine whether the project is complying with the relevant conditions in this approval; and	Document 8 Section 6.0 Table 9	The site monitoring deposited dust averaging over a monthly period. The HVAS monitors TSP and PM10 every 6 days.	Compliant
	(f) 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 approval.	Document 8 Section 7.5 Peppertree has a Weatherzone subscription that provides warning of adverse weather conditions	Real-time meteorological data is reviewed regularly, including prior to any blasting, to identify triggers for implementing changes to operations	Compliant
B23	Air Quality and Greenhouse Gas Management Plan The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:	Document 8, Site interview	Secretarial approval	Compliant
	(a) be prepared by a suitably qualified and experienced person/s;	Document 8, Site interview	Document prepared by Sharon Makin as an update to the original prepared by external consultants	Compliant
	(b) be prepared in consultation with the EPA;	Document 8, Site interview	Comments received by EPA 8/4/17	Compliant
	(c) describe the measures to be implemented to ensure:			
	(i) compliance with the air quality criteria and operating conditions in this approval;	Document 8, Site interview Section 4.0	The AQMP has been developed in compliance with the condition and adequately addresses all assessment criteria.	Compliant
	(ii) best practice management is being employed (including in respect of minimisation of greenhouse gas emissions from the site and energy efficiency); and	Document 8, Site interview Section 4.0	A range of engineering controls and operational protocols have been implemented to minimise potential for dust generation and control air emissions.	Compliant
	(iii) air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events;	Document 8, Site interview Section 4.0	Real-time meteorological data is reviewed regularly, including prior to any blasting, to identify triggers for implementing changes to operations	Compliant
	(d) describe the air quality management system; and	Document 8, Site interview Section 4.5	Adequate air quality management system is described in Section 4.5	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(e) include an air quality monitoring program, undertaken in accordance with the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007), that:	AQMP Section 6	Appropriate Air Quality Monitoring Program is outlined in AQMP.	Compliant
	(i) is capable of evaluating the performance of the project against the air quality criteria;	AQMP Section 7	Capabilities of evaluating performance against completion criteria outlined in Section 7	Compliant
	(ii) uses a combination of high volume samplers and dust deposition gauges to evaluate the performance of the project;	AQMP Section 6.0 Table 9	The site monitoring deposited dust averaging over a monthly period. The HVAS monitors TSP, PM2.5 and PM10 every 6 days.	Compliant
	(iii) adequately supports the air quality management system;	Document 8, Site interview		Compliant
	(iv) includes a protocol for identifying any air quality-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of these events; and	AQMP 2017 Section 8.0	Section 8.2 outlined the air quality monitoring exceedance response plan	Compliant
	(v) provides for the use of real-time monitoring measures, if directed by the Secretary.	Document 8, Site interview		Compliant
B24	The Proponent must submit the Air Quality and Greenhouse Gas Management Plan for approval by the Secretary, within three months of the approval of Modification 5.	Document 8, Site interview	MOD 5 determination date: 1/10/19, revised AQMP first lodged December 2019	Compliant
B25	The Proponent must implement the Air Quality and Greenhouse Gas Management Plan as approved by the Secretary.	Document 8, Site interview	The plan is implemented as approved by the secretary	Compliant
B26	Meteorological Monitoring Prior to the commencement of construction and for the life of the project, the Proponent must ensure that there is a suitable meteorological station operating in close proximity to the site that:			
	(a) complies with the requirements in the <i>Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales</i> (DEC, 2007); and	Site inspection, calibration records	Monitoring station has been on site since 2012. The weather station is recalibrated every two months.	Compliant
	(b) is capable of measuring meteorological conditions in accordance with the <i>NSW Noise Policy for Industry</i> (EPA, 2017), unless a suitable alternative is approved by the Secretary following consultation with the EPA.	Site inspection	The weather station provides continuous real time measurements of temperature lapse rate in accordance with the NSW INP.	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B27	<p>Soil and Water- Water Supply</p> <p>The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of the project to match its available water supply.</p>	Sighted relevant water licences	Water licence 10WA116000 sighted for use of Ground Water, expires in 2026. Water Licence 10WA102571 for use of surface water source (Bywash Dam), expires 2024.	Compliant
B28	The Proponent must obtain the necessary approvals for the project under the Water Act 1912.	<p>Sighted relevant water licences</p> <p>WALS – 3 WALS. Bore 15ML to be decommissioned. Purchased 300ML GW allocation (from pit – modelling says 34 ML needed). Looking at production bore to use some of the 300ML – works approval pending.</p> <p>112 ML main dam; 140 ML usage per year</p>	Water licence 10WA116000 sighted for use of Ground Water, expires in 2026. Water Licence 10WA102571 for use of surface water source (Bywash Dam), expires 2024.	Compliant
B29	<p>Soil and Water- Discharges</p> <p>Except as may be expressly provided for by an EPL, the Proponent must not discharge any dirty water from the quarry or ancillary operation areas.</p>	AEMR 2019 AEMR 2020 EPL annual return	No discharged or dirty water occurred during the audit period.	Compliant
B30	The Proponent must prepare an onsite wastewater report for the proposed effluent management system consistent with the requirements of <i>WaterNSW – “Development in Sydney’s Drinking Water Catchment” – Water Quality Information Requirements, 2011</i> . The effluent management system must be designed and constructed to be in accordance with this onsite wastewater report and its design must be approved by Council prior to construction.	Report sighted	An onsite wastewater assessment and system design report has been prepared.	Compliant
B31	<p>Soil and Water- Tangarang Creek Environmental Flow</p> <p>The Proponent must provide an environmental flow to Tangarang Creek equivalent to 10% of average daily flows. Details of the management of these environmental flows must be included in the Site Water Balance required under condition B34 of this Schedule.</p>	AEMR 2019 Section 7.1.4 Table 17 WMP Sections 5.4, 7.2.1 and 7.2.2	Overall for 2021 the quarry complied with the 10% environmental flow requirement	Compliant
B32	<p>Soil and Water- Sediment Dams</p> <p>For sediment dams described in the EA, the Proponent must ensure that:</p>	Dam level (in) flow out v notch. Dam leaks		

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(a) critical structures such as "dirty water" dams are designed, constructed and maintained to accommodate a 1 in 100 year ARI 24-hour event; and	Arcadis 2018 Audit WMP Sections 5.2.3, 5.4 and 6.3	Structures designed to accommodate a 1 in 100-year ARI 24-hour event. As-built drawings sighted by Arcadis showing dams constructed in accordance with design. Structures Maintained through regular inspections and quarterly review of erosion and sediment controls.	Compliant
	(b) other dams and water management structures are designed, constructed and maintained to accommodate a 1 in 20 year ARI 24-hour event.	Arcadis 2018 Audit WMP Sections 5.2.3, 5.4 and 6.3	Structures designed and maintained to accommodate a 1 in 20-year ARI 24-hour event.	Compliant
B33	Soil and Water- Water Management Plan The Proponent must prepare a Water Management Plan for the project to the satisfaction of the Secretary. This plan must:	WMP Document 9		
	(a) be prepared in consultation with the DPIE Water, EPA, NRAR and WaterNSW; and	WMP Document 9 Section 1.6	All feedback included in revised plan	Compliant
	(b) include a:			
	(i) Site Water Balance;	WMP Document 9 Section 5.4	The site water balance is outlined in Section 5.4 of the WMP	Compliant
	(ii) Erosion and Sediment Control Plan;	WMP Document 9 Section 6, Appendix D	The Erosion and Sediment Control Plan is outlined in Appendix D	Compliant
	(iii) Surface Water Monitoring Program;	WMP Document 9 Section 4.1, 4.2, 7.1, 7.2 and Appendix D	The surface water monitoring program is outlined in the WMP	Compliant
	(iv) Ground Water Monitoring Program; and	WMP Document 9 Section 4.2, 7.1, 7.3	The ground water monitoring program is outlined in the WMP	Compliant
	(v) Surface and Ground Water Response Plan to address any potential adverse impacts associated with the project.	WMP Document 9 Section 8	The Surface and Ground Water Response Plans are detailed in Section 8 of the WMP	Compliant
B34	Soil and Water- Site Water Balance The Site Water Balance must:			
	(a) include details of all water extracted (including make up water), dewatered, transferred, used and/or discharged by the project; and	WMP Document 9 Section 5.4 Site interview	Water usage/extraction outlined in Table 5.5: Quarry water demand and discharge	Compliant
	(b) describe measures to minimise water use by the project.	WMP Document 9 Section 5.4		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B35	Soil and Water- Erosion and Sediment Control The Erosion and Sediment Control Plan must:	WMP Document 9 Section 6, Appendix D		Compliant
	(a) be consistent with the requirements of <i>Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition, 2004</i> (Landcom);	WMP Document 9 Site interview	Previously audited and found to be compliant	Compliant
	(b) identify activities that could cause soil erosion and generate sediment;	WMP Document 9	Previously audited and found to be complaint	Compliant
	(c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;	WMP Document 9 Appendix D- Table C1.	Control techniques have been outlined for erosion and sedimentation in WMP Appendix D Table C1	Compliant
	(d) describe the location, function, and capacity of erosion and sediment control structures;	WMP Document 9	Data provided in WMP	Compliant
	(e) describe what measures would be implemented to maintain (and if necessary decommission) the structures over time;	WMP Document 9	Data provided in WMP	Compliant
	(f) include interim surface water management for Catchment C of the SWOE (see Figure 5 of Appendix 4) pending possible future expansion of the emplacement area; and	WMP Document 9	Data provided in WMP	Compliant
	(g) include detailed performance and completion criteria to ensure the SWOE is geomorphologically stable following the completion of works, including triggers for remedial action, where these performance or completion criteria are not met.	WMP Document 9	Data provided in WMP	Compliant
B36	Soil and Water- Surface Water Monitoring The Surface Water Monitoring Program must include:	WMP 2017 Section 4.1, 4.2, 7.1, 72 and Appendix D		Compliant
	(a) detailed baseline data on surface water flows and quality in Tangarang Creek and Barbers Creek;	WMP Document 9 Table 4.3 Listed as non-compliant in AEMR	Table 4.3 of the WMP includes water quality statistics and ANZECC Default Water Flow monitoring is not possible within Barbers Creek due to accessibility. Alternative methodologies and locations have been proposed by Boral and recognised by DPE in	Non-Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
			correspondence on the annual review 2020 and 2021.	
	(b) surface water impact assessment criteria;	WMP Document 9 Section 7.1, 72	Data provided in WMP	Compliant
	(c) a program to monitor surface water flows and quality;	WMP Document 9 Section 7.1, 72	Data provided in WMP	Compliant
	(d) a protocol for the investigation of identified exceedances of the surface water impact assessment criteria; and	WMP Document 9 Section 7.1, 72	Data provided in WMP	Compliant
	(e) a program to monitor the effectiveness of the Erosions and Sediment Control Plan, which includes:	WMP Document 9 Appendix D	Data provided in WMP	Compliant
	(i) periodic review of sheet, rill and gully erosion risks; and	WMP Document 9 Appendix E and F	Erosion and Sediment Control Checklist included in WMP	Compliant
	(ii) monitoring of the geomorphological stability of the SWOE, in consultation with WaterNSW.	WMP Document 9	Data provided in WMP	Compliant
B37	Soil and Water- Groundwater Monitoring Program The Ground Water Monitoring Program must include:			
	(a) detailed baseline data on ground water levels, flows and quality, based on statistical analysis;	WMP Document 9 Section 4.2	Major groundwater ions and metals listed in Table 4.5	Compliant
	(b) groundwater impact assessment criteria for monitoring bores;	WMP Document 9 Section 7.1	Data provided in WMP	Compliant
	(c) a program to monitor regional ground water levels and quality; and	WMP Document 9 Section 7.3	Data provided in WMP	Compliant
	(d) a protocol for the investigation of identified exceedances of the ground water impact assessment criteria.	WMP Document 9 Section 7.3	Data provided in WMP	Compliant
B38	The Proponent must submit the Water Management Plan for approval by the Secretary, with six months of the approval of Modification 5.	Site interview WMP Document 9	MOD 5 determination date: 1/10/19 first issued to Secretary on 20/5/20. Correspondence was provided to the DPIE advising that the plan would be late in being provided.	Compliant
B39	The Proponent must implement the Water Management Plan approved by the Secretary.	WMP	The plan is implemented as approved by the secretary	Compliant
B40	Soil and Water- Overburden Emplacements In constructing and operating the SOE, the Proponent must ensure that:			

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(a) the surface water management system is constructed in accordance with the plan shown on Figure 4 in Appendix 4; and	Site interview WMP Document 9	Data provided in WMP	Compliant
	(b) the surface water management system includes appropriate scour protection at discharge points to ensure the potential for erosion and transport of sediment to downstream waters is minimised.	Site interview WMP Document 9	Data provided in WMP	Compliant
B41	On completion of the construction of the surface water management system for the SOE, the Proponent must commission an audit by a suitably qualified, experienced and independent person, approved by the Secretary, to determine whether the system has been constructed in accordance with this approval. A copy of the audit report and the Proponent's response to its recommendations must be provided to the Secretary and WaterNSW within 12 weeks of its commissioning.	Site interview WMP Document 9	Audit not yet required	Not Triggered
B42	Transport- Construction Traffic Management Plan The Proponent must prepare and implement a Construction Traffic Management Plan for the project to the satisfaction of the RMS and Council.	Document 1 Construction Traffic Management Plan	Not sighted in this Audit but was identified in the previous audit as being compliant.	Compliant
B43	Transport Operating Conditions The Proponent may transport overburden to the SWOE using the Option 2 transport route described in EA (MOD 5) until 31 December 2020, or as otherwise agreed by the Secretary.	Document 1 Construction Traffic Management Plan		Compliant
B44	While there is public access to the site from the intersection of the new Haul Road and Marulan South Road, the Proponent must:			
	(a) make suitable arrangements to ensure the safety of public road users (including traffic signals, signage or other traffic control measures), to the satisfaction of Council, prior to commencing the transportation of overburden to the SWOE; and	Document 1 Construction Traffic Management Plan		Compliant
	(b) ensure that any traffic signals at this intersection are designed, installed and operated to the satisfaction of the RMS.	Document 1 Construction Traffic Management Plan		Compliant
B45	Heritage Operating Conditions The Proponent must ensure that the project does not cause any direct or indirect impact on any identified heritage item located outside the approved disturbance area, beyond those predicted in the document/s listed in condition A2(c).	Document 2 Aboriginal Heritage Management Plan		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B46	If suspected human remains are discovered on site, then all work surrounding the area must cease, and the area must be secured. The Proponent must immediately notify NSW Police and BCD, and work must not recommence in the area until authorised by NSW Police and BCD.	Aboriginal Heritage Management Plan Section 5.2	Procedure is outlined in Section 5.2- Discovery of Human Skeletal Remains	Compliant
B47	If any previously unknown Aboriginal object is discovered on the site:			
	(a) all work in the immediate vicinity of the object or place must cease immediately;	Aboriginal Heritage Management Plan Sections 5.0	Procedure is discussed in AHMP	Not triggered
	(b) a 10 metre buffer area around the object or place must be cordoned off; and	Aboriginal Heritage Management Plan Sections 5.0	Procedure is discussed in AHMP	Not triggered
	(c) BCD must be contacted immediately.	Aboriginal Heritage Management Plan Sections 5.0	Procedure is discussed in AHMP	Not triggered
B48	Work in the immediate vicinity may only recommence if:			
	(a) the potential Aboriginal object is confirmed by BCD upon consultation with the Registered Aboriginal Parties not to be an Aboriginal object; or	Aboriginal Heritage Management Plan	Procedure is discussed in AHMP	Not triggered
	(b) the Aboriginal Cultural Heritage Management Plan is revised to include the Aboriginal object and appropriate measures in respect of it, to the satisfaction of the Secretary; or	Aboriginal Heritage Management Plan	Procedure is discussed in AHMP	Not triggered
	(c) the Secretary is satisfied as to the measures to be implemented in respect of the Aboriginal object and makes a written direction in that regard.	Aboriginal Heritage Management Plan	Procedure is discussed in AHMP	Not triggered
B49	The Proponent must ensure that all known Aboriginal objects or Aboriginal places on the site and within any offset areas are properly recorded, in the Aboriginal Heritage Information Management System (AHIMS) Register, and those records are kept up to date.	Aboriginal Heritage Management Plan Section 9.2	Procedure is discussed in AHMP	Not triggered
B50	Aboriginal Cultural Heritage Management Plan The Proponent must prepare an Aboriginal Cultural Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:			
	(a) be prepared by suitably qualified and experienced person/s;	Document 2 AHMP		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(b) be prepared in consultation with BCD and Registered Aboriginal Parties;	AHMP Section 1.3	The plan has been written in line with the principles of the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter 1999)	Compliant
	(c) describe the measures to be implemented on the site or within any offset area to:	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(i) comply with the heritage-related operating conditions of this consent;	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(ii) ensure all workers on the site receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(iii) map and salvage or relocate the Aboriginal objects in the Tangarang Creek Dam 1 area and the Modification 5 disturbance area (shown in Appendix 5);	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(iv) protect, monitor and manage identified Aboriginal objects and Aboriginal places (including any proposed archaeological investigations of potential subsurface objects and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c);	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(v) protect Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the project;	Aboriginal Heritage Management Plan	Sites outside the disturbance area are fenced to avoid disturbance (e.g MQ120)	Compliant
	(vi) manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, including provisions for burials, over the life of the project;	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(vii) maintain and manage reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places (outside of the approved disturbance area); and	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(viii) facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site;	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
	(d) include a strategy for the care, control and storage of Aboriginal objects salvaged on site, both during the life of the project and in the long term, in consultation with Registered Aboriginal Parties.	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
B51	The Proponent must submit the Aboriginal Cultural Heritage Management Plan for approval by the Secretary, prior to commencing any work in the Modification 5 disturbance area.	Aboriginal Heritage Management Plan	Information provided in AHMP	Compliant
B52	The Proponent must implement the Aboriginal Cultural Heritage Management Plan approved by the Secretary.	Aboriginal Heritage Management Plan	The AHMP is implemented on site.	Compliant
B53	Biodiversity and Rehabilitation- Threatened Species Protection The Proponent must:			
	(a) clearly and securely mark out the boundaries of the WOE and the Modification 5 disturbance area prior to clearing and site preparation within those areas;	Document 7 Biodiversity and Rehabilitation Management Plan	Descriptive material provided in BRMP	Compliant
	(b) not clear vegetation in the WOE area or the Modification 5 disturbance area unless a fauna survey of the area to be cleared has been undertaken within the prior 21 days, by a suitably qualified expert who has been approved by the Secretary;	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
	(c) seek to avoid clearing of native vegetation in the WOE area and the Modification 5 disturbance area during the period August to November of any year; and	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
	(d) not damage or clear any Box Gum Woodland EEC or other native vegetation located adjacent to the WOE or the Modification 5 disturbance area.	Document 7 Biodiversity and Rehabilitation Management Plan Site inspection	Descriptive material provided in BRMP	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B53A	The Applicant may remove the tree described in Modification Report (MOD 7) at any time, except during winter months (June to August, inclusive), in accordance with the threatened fauna mitigation measures outlined in Modification Report (MOD 7) and the requirements of condition B53B below.	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
B53B	In the event that threatened bat species are identified during a pre-clearance survey of the tree described in Modification Report (MOD 7), the Applicant must: (a) ensure that:	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
	(i) the tree is gradually dismantled and lowered to the ground, using ropes or a crane; and	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
	(ii) any bats identified within the tree are captured and released at night; under the supervision of a suitably qualified and experienced ecologist; and	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
	(b) provide a copy of an ecologist's report which outlines the bat species recorded and the mitigation and relocation measures which were implemented to BCS within 21 days of the removal of the tree.	Document 7 Biodiversity and Rehabilitation Management Plan Site interview	Descriptive material provided in BRMP	Compliant
B54	Habitat Management Area The Proponent must implement the Habitat Management Area in a manner that is generally consistent with the documents listed in condition A2(c) (and shown conceptually in Appendix 6), including the establishment, conservation and maintenance of at least 13.5 hectares of vegetation characteristic of Box Gum Woodland, to the satisfaction of the Secretary.	Document 7 Biodiversity and Rehabilitation Management Plan Sections 3.7 and 6.1.2.	Referred to throughout Landscape and Rehabilitation Management Plan. Final Landform Plan would be developed with such rehabilitation principles.	Compliant
B55	Biodiversity Offset Strategy The Proponent must:			
	(a) implement the SOE BOS described in EA (MOD 4);	Document 7 Biodiversity and Rehabilitation Management Plan	Offset formerly used the area to the north of the pit as offset. Due to recent changes in legislation (BC Act), the offset is now to be made through a payment to OEH. Receipt for offset payment sighted. Conceptual final landform for the pit is currently	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
			being developed by the Cambium Group. Monitoring is ongoing.	
	(b) within 12 months of the commencement of the construction of the SOE, retire a total of 225 ecosystem credits in accordance with the <i>Framework for Biodiversity Assessment - NSW Biodiversity Offsets Policy for Major Projects</i> , to offset the removal of 8.1 hectares of White Box Yellow Box Blakely's Red Gum Grassy Woodland; and	Document 7 Biodiversity and Rehabilitation Management Plan	"	Compliant
	(c) provide long-term security and funding for the biodiversity offset area identified in the Biodiversity Offset Strategy through a Biobanking Agreement under the <i>Threatened Species Conservation Act 1995</i> ; to the satisfaction of the Secretary.		"	Compliant
B56	Within 12 months of commencing any work within the Modification 5 disturbance area, or other timeframe agreed by the Secretary, the Proponent must implement the SWOE BOS, by retiring the biodiversity credits specified in Table 7 below. The retirement of credits must be carried out in consultation with BCD and in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.	Site interview	As at Dec 2021 Mod 5 purchased credits from Wagga (veg credits). Neriga property mostly fauna (Stewardship site).	Compliant
B57	The retirement of the biodiversity credits specified in Table 7 must be carried out in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.	Noted		Compliant
B58	Rehabilitation Objectives The Proponent must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with Chapter 2.8 of the EA and must comply with the objectives in Table 8.	EA Ch. 2.8	The rehabilitation objectives comply with the environmental performance outlined in the EA.	Compliant
B59	Progressive Rehabilitation The Proponent must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.	Document 7 Biodiversity and Rehabilitation Management Plan Section 5.3, Table 7, Appendix C-D	Objectives of progressive rehabilitation of the site is discussed throughout the report.	Compliant
B60	Biodiversity and Rehabilitation Management Plan			

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	The Proponent must prepare a Biodiversity and Rehabilitation Management Plan for all land disturbed by the project to the satisfaction of the Secretary. This plan must:			
	(a) be prepared by suitably qualified and experienced person/s;	Document 7 Biodiversity and Rehabilitation Management Plan	Prepared by external consultants	Compliant
	(b) be prepared in consultation with BCD and Council;	Document 7 Biodiversity and Rehabilitation Management Plan Section 1.8	Consultation has been undertaken with the OEH, and Goulburn Mulwaree Council in the revision of this plan.	Compliant
	(c) describe the short, medium, and long-term measures to be undertaken to:			
	(i) implement the SOE BOS, SWOE BOS and the Habitat Management Area;	Document 7 Biodiversity and Rehabilitation Management Plan		Compliant
	(ii) comply with the rehabilitation principles in Chapter 2.8 of the EA;	Document 7 Biodiversity and Rehabilitation Management Plan	The BRMP complies with the EA rehabilitation principles	Compliant
	(iii) manage the remnant vegetation and fauna habitat on the site and in any offset areas; and	Document 7 Biodiversity and Rehabilitation Management Plan Section 6.1, Appendix B-D	The conservation of remnant vegetation is discussed throughout the report.	Compliant
	(iv) ensure compliance with the rehabilitation objectives in this approval;	Document 7 Biodiversity and Rehabilitation Management Plan Section 8.0	A monitoring program has been developed and is included in the BRMP to ensure the rehabilitation work meets the criteria.	Compliant
	(d) provide details of the conceptual final landform and associated land uses for the site;	Document 7 Biodiversity and Rehabilitation Management Plan Section 5.2		Compliant
	(e) consider actions identified in relevant Threat Abatement Plans;	Document 7 Biodiversity and Rehabilitation Management Plan		Compliant
	(f) include detailed performance and completion criteria for evaluating the performance of the SOE BOS, SWOE BOS and the Habitat Management Area and rehabilitation of the site, including triggers for remedial action, where these performance or completion criteria are not met;	Document 7 Biodiversity and Rehabilitation Management Plan		Compliant
	(g) describe how the implementation of the SOE BOS would be integrated with the management of the Habitat Management Area, and the overall rehabilitation of the site;	Document 7 Biodiversity and Rehabilitation Management Plan		Compliant
	(h) include a detailed description of the measures to be implemented on the site and any offset area to:	Document 7 Biodiversity and Rehabilitation Management Plan		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(i) maximise the salvage of environmental resources within approved disturbance area, including tree hollows, vegetation and soil resources, for beneficial reuse in the SOE biodiversity offset area, the Habitat Management Area or for rehabilitating other areas of the site;	Document 7 Biodiversity and Rehabilitation Management Plan Section 4 to 7 and 10	Environmental resources are stored in salvage areas to be relocated following rehabilitation.	Complaint
	(ii) restore and enhance the quality of native vegetation and fauna habitat in the SOE biodiversity offset area, the Habitat Management Area and other areas of the site through:	Document 7 Biodiversity and Rehabilitation Management Plan		Compliant
	• assisted natural regeneration;	Document 7 Biodiversity and Rehabilitation Management Plan Section 4 to 7 and 10	The potential for natural regeneration is assessed prior to implementing a regeneration approach.	Complaint
	• targeted vegetation establishment (with a particular focus on Box Gum Woodland EEC); and	Document 7 Biodiversity and Rehabilitation Management Plan Section 4 to 7 and 10	Vegetation	Complaint
	• the introduction of fauna habitat features;	Document 7 Biodiversity and Rehabilitation Management Plan Section 4 to 7 and 10	Fauna habitat features will be added to the site when required.	Complaint
	(iii) minimise impacts on tree hollows and termite mounds where reasonable and feasible;	Document 7 Biodiversity and Rehabilitation Management Plan Section 4 to 7 and 10	Tree hollows and termite mounds will be undisturbed when possible.	Complaint
	(iv) minimise impacts on fauna, including undertaking pre-clearance surveys;	Document 7 Biodiversity and Rehabilitation Management Plan Section 7.2, Appendix B	Pre-clearance surveys will be undertaken by qualified personnel so animals inhabiting trees can be relocated.	Complaint
	(v) manage potential indirect impacts on threatened plant and animal species, including supervision of clearing activities by a suitably qualified spotter/handler;	Document 7 Biodiversity and Rehabilitation Management Plan Section 7.2, Appendix B	Clearing activities will be supervised by personnel qualified to handle and relocate wildlife.	Complaint
	(vi) manage or handle animals caught or injured during clearing;	Document 7 Biodiversity and Rehabilitation Management Plan Section 7.2, Appendix B	Clearing activities will be supervised by personnel qualified to handle and relocate wildlife.	Complaint
	(vii) introduce naturally scarce fauna habitat features such as den structures, nest boxes and salvaged tree hollows, and promote the use of these introduced habitat features by threatened fauna species;	Document 7 Biodiversity and Rehabilitation Management Plan Section 4, 7 and 10	Fauna habitat features will be added to the site following rehabilitation when required.	Complaint

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(viii) minimise the amount of clearing within the approved disturbance area where reasonable and feasible;	Document 7 Biodiversity and Rehabilitation Management Plan Section 4, 7 and 10	Clearing will be minimised where possible.	Complaint
	(ix) establishing vegetation screening and landscaping the site (including the bunds and overburden emplacement areas) to minimise the visual impacts of the project on surrounding receivers;	Document 7 Biodiversity and Rehabilitation Management Plan Table 9	A goal within the rehabilitation phase is to enhance visual screening.	Complaint
	(x) control weeds, including measures to avoid and mitigate the spread of noxious weeds;	Document 7 Biodiversity and Rehabilitation Management Plan addressed throughout report.	Sites will be monitored and managed for noxious weeds in the 12 months following works and until native species have regenerated the site.	Complaint
	(xi) control feral pests, including but not limited to goats, rabbits, fox, cats and pigs, with consideration of actions identified in relevant threat abatement plans;	Document 7 Biodiversity and Rehabilitation Management Plan addressed throughout report. (Section 7.8)	Pest management for feral animal and over abundant herbivores (following consultation with OEH and Local Land Services and NPWS to determine suitable timing. 1080 baiting program proposed and annual monitoring	Complaint
	(xii) manage the collection and propagation of seed;	Document 7 Biodiversity and Rehabilitation Management Plan Section 7.6	Seed has been collected from healthy, vigorous plants that are well-spaced to encourage genetic diversity.	Complaint
	(xiii) control access;	BRMP	Descriptive material provided in BRMP	Complaint
	(xiv) manage bushfire hazards; and	Document 7 Biodiversity and Rehabilitation Management Plan Section 7.7 Bush Fire Management Plan	A fire management plan has been developed in consultation with the RFS.	Complaint
	(xv) progressively rehabilitate the site and minimise disturbance areas;	Document 7 Biodiversity and Rehabilitation Management Plan Section 5.3, Table 7, Appendix C-D	Objectives of progressive rehabilitation with minimal disturbance is discussed throughout the report.	Complaint
	(i) include a seasonally-based program to monitor and report on the effectiveness of the above measures, progress against the detailed performance indicators and completion criteria, and identify any improvements that could be implemented to improve biodiversity outcomes;	Document 7 Biodiversity and Rehabilitation Management Plan Section 8	Rehabilitation monitoring is discussed in Chapter 8 which includes EFA, Biobanking and visual methodologies undertaken every 2 years during spring.	Complaint

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
			Rapid visual assessments undertaken annually in November.	
	(j) identify the potential risks to the successful implementation of the SOE BOS, SWOE BOS, Habitat Management Area and final rehabilitation, and include a description of the contingency measures to be implemented to mitigate against these risks, including provisions for alternative direct and/or supplementary offset measures where regeneration of EECs do not meet performance and completion criteria; and	Document 7 Biodiversity and Rehabilitation Management Plan		Complaint
	(k) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Document 7 Biodiversity and Rehabilitation Management Plan Section 12.2	The site Environmental Officer is responsible for carrying out and/or coordinating the monitoring and reporting requirements of this plan.	Complaint
B61	The Proponent must submit the Biodiversity and Rehabilitation Management Plan for approval by the Secretary, prior to commencing any work in the Modification 5 disturbance area.	Document 7 Biodiversity and Rehabilitation Management Plan		Complaint
B62	The Proponent must implement the Biodiversity and Rehabilitation Management Plan as approved by the Secretary.	Document 7 Biodiversity and Rehabilitation Management Plan	The plan is implemented as approved by the Secretary	Complaint
B63	Conservation and Rehabilitation Bond Within six months of the approval of the Biodiversity and Rehabilitation Management Plan, the Proponent must lodge a Conservation and Rehabilitation Bond with the Department to ensure that the SWOE BOS and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and the relevant conditions of this approval. The sum of the bond must be an amount agreed by the Secretary and determined by:	Document 70 Site interview	Calculations prepared and reviewed	Complaint
	(a) calculating the full cost of implementing the SWOE BOS at third party rates (other than land acquisition costs);	Document 70 Site interview	Calculations prepared and reviewed	Complaint
	(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; and	Document 70 Site interview	Calculations prepared and reviewed	Complaint
	(c) employing a suitably qualified, independent and experienced person to verify the calculated costs.	Document 70 Site interview	Prepared by external consultant	Complaint

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B64	The Secretary may waive the requirement for a Conservation Bond if, in the opinion of the Secretary, the implementation of the SWOE BOS has substantially progressed.	Document 70 Site interview		Compliant
B65	The calculation of the Conservation and Rehabilitation Bond must be submitted to the Department for approval at least 2 months prior to the lodgement of the bond.	Document 70 Site interview		Compliant
B66	The Conservation and Rehabilitation Bond must be reviewed and if required, an updated bond must be lodged with the Department within 3 months following:	Document 70 Site interview		Compliant
	(a) any update or revision to the Biodiversity and Rehabilitation Management Plan;	Noted		Not Triggered
	(b) the completion of an Independent Environmental Audit in which recommendations relating to the implementation of the SWOE BOS or rehabilitation have been made; or	Noted		Not Triggered
	(c) in response to a request by the Secretary,	Noted		Not Triggered
B67	If the SWOE BOS and rehabilitation are completed generally in accordance with the relevant performance and completion criteria, to the satisfaction of the Secretary, or if alternate funding arrangements are provided for the SWOE BOS under a long term security arrangement (see condition B56) the Secretary will release the bond.	Noted		Not Triggered
B68	If the SWOE BOS or rehabilitation is not completed generally in accordance with the relevant performance and completion criteria, the Secretary will call in all, or part of, the bond, and arrange for the completion of the relevant works.	Noted		Not Triggered
B69	Quarry Exit Strategy The Proponent must prepare and implement a Quarry Exit Strategy for the project to the satisfaction of the Secretary. This strategy must:	N/A		Not Triggered
	(a) be submitted to the Secretary for approval by 31 December 2033;	N/A		Not Triggered
	(b) be prepared in consultation with relevant agencies;	N/A		Not Triggered
	(c) define the objectives and criteria for quarry closure;	N/A		Not Triggered
	(d) investigate options for the future use of the site; including any final void/s;	N/A		Not Triggered

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(e) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the project; and	N/A		Not Triggered
	(f) describe how the performance of these measures would be monitored over time.	N/A		Not Triggered
B70	Visual The Proponent must:			
	(a) take all reasonable steps to minimise the visual and off-site lighting impacts of the project;	Documents 5, 7, 59 and 73	Documents reviewed and found adequate	Compliant
	(b) revegetate overburden emplacements, emplacement extensions and bunds as soon as practicable;	Documents 5, 7, 59 and 73	Documents reviewed and found adequate	Compliant
	(c) ensure no fixed outdoor lights shine directly above the horizontal or above the building line or any illuminated structure;	Documents 5, 7, 59 and 73	Documents reviewed and found adequate	Compliant
	(d) ensure that all external lighting associated with the project complies with relevant Australian Standards including <i>Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting</i> ; and	Documents 5, 7, 59 and 73	Documents reviewed and found adequate	Compliant
	(e) not erect or display any advertising structure(s) or signs on the site without the written approval of the Secretary.	Site inspection		Compliant
B71	Waste The Proponent must:		Waste Management plan issued to the DPIE in 2019 and 2020	
	(a) monitor the amount of waste generated by the project;	AEMR 2020 Section 6.6 and 11 Document 10	Documents reviewed and found adequate	Compliant
	(b) minimise the waste generated by the project; and	Document 10	Documents reviewed and found adequate	Compliant
	(c) report on waste minimisation and management in the Annual Review referred to in condition D11.	Document 10	Documents reviewed and found adequate	Compliant
B72	The Proponent must ensure that all waste generated or stored on site is assessed, classified and managed in accordance with the EPA's <i>Waste Classification Guidelines (EPA 2014)</i> .	Document 10	Documents reviewed and found adequate	Compliant
B73	Liquid Storage The Proponent must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.	Site inspection Document 10	Appropriate storage and bunding has been inspected on site	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
B74	Dangerous Goods The Proponent must ensure that the storage, handling, and transport of:	Site inspection Document 10	Documents reviewed and found adequate	Compliant
	(a) dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the <i>Dangerous Goods Code</i> ; and	Site inspection Dangerous goods register	Boral maintains a Safety Data System (SDS) using Chem Alert and a hazardous goods register is in place. The storage of dangerous goods is conducted in accordance with the relevant Australian Standards. Dangerous goods were sighted and appeared to be stored correctly.	Compliant
	(b) explosives are managed in accordance with the requirements of the Resources Regulator.	Site inspection Dangerous goods register	Boral maintains a Safety Data System (SDS) using Chem Alert and a hazardous goods register is in place. The storage of dangerous goods is conducted in accordance with the relevant Australian Standards. Dangerous goods were sighted and appeared to be stored correctly.	Compliant
B75	Safety The Proponent must secure the project to ensure public safety to the satisfaction of the Secretary.	Site inspection	The site is well fenced and sign posted	Compliant
B76	Bushfire Management The Proponent must:			
	(a) prepare a Fire Management Plan in consultation with NSW RFS Southern Tablelands District Office, within six months of the approval of Modification 5;	Bushfire Management Plan	The BMP was prepared in May 2020 and includes evidence of consultation with RFS	Compliant
	(b) ensure that the project:			
	(i) provides for asset protection in accordance with the relevant requirements in <i>the Planning for Bushfire Protection</i> (RFS, 2006) guideline; and	Bushfire Management Plan		Compliant
	(ii) ensure that there is suitable equipment to respond to any fires on the site; and	Bushfire Management Plan		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(c) assist the RFS and emergency services to the extent practicable if there is a fire in the vicinity of the site.	Bushfire Management Plan		Compliant
B77	Crown Land The Applicant must consult with DPIE – Crown Lands prior to undertaking any development on Crown land or Crown roads.	Noted		Not Triggered
PART C- ADDITIONAL PROCEDURES				
C1	Notification of Exceedances As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners and/or tenants. For any exceedance of any air quality criterion in PART B of this consent, the Applicant must also provide to any affected land owners and tenants a copy of the fact sheet entitled “ <i>Mine Dust and You</i> ” (NSW Health, 2017).	N/A		Not Triggered
C2	Independent Review If a landowner considers the project to be exceeding any noise, blasting or air quality criterion in PART B of this approval, they may ask the Secretary in writing for an independent review of the impacts of the project on their land.	N/A		Not Triggered
C3	If the Secretary is not satisfied that an independent review is warranted, the 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		Not Triggered
C4	If the Secretary is satisfied that an independent review is warranted, within 3 months, or as otherwise agreed by the Secretary and the landowner, of the Secretary's decision, the Proponent must:	N/A		Not Triggered
	(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:	N/A		Not Triggered
	(i) consult with the landowner to determine their concerns;	N/A		Not Triggered
	(ii) conduct monitoring to determine whether the project is complying with the relevant criteria in PART B of this approval; and	N/A		Not Triggered

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(iii) if the project is not complying with that criteria, identify measures that could be implemented to ensure compliance with the relevant criteria; and	N/A		Not Triggered
	(b) give the Secretary and landowner a copy of the independent review; and	N/A		Not Triggered
	(c) comply with any written requests made by the Secretary to implement any findings of the review.	N/A		Not Triggered
C5	If the independent review determines that the quarrying operations are complying with the relevant criteria in PART B, then the Proponent may discontinue the independent review with the approval of the Secretary.	N/A		Not Triggered
C6	If the independent review determines that the quarrying operations are not complying with the relevant criteria in PART B, and that the quarry is primarily responsible for this non-compliance, then the Proponent must:	N/A		Not Triggered
	(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or	N/A		Not Triggered
	(b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Secretary.	N/A		Not Triggered
C7	If the independent review determines that the relevant criteria are being exceeded, but that more than one quarry/mine is responsible for this exceedance, then together with the relevant quarry/mine/s, the Proponent must:	N/A		Not Triggered
	(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or	N/A		Not Triggered
	(b) secure a written agreement with the landowner and other relevant mine/s to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Secretary.	N/A		Not Triggered
C8	Land Acquisition	N/A		Not Triggered

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent must make a binding written offer to the landowner based on:			
	(a) the current market value of the landowner's interest in the property at the date of this written request, as if the land was unaffected by the project the subject of the project application, having regard to the:	N/A		Not Triggered
	(i) existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and	N/A		Not Triggered
	(ii) 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;	N/A		Not Triggered
	(b) the reasonable costs associated with: (i) relocating within the Goulburn Mulwaree local government area, or to any other local government area determined by the Secretary; and	N/A		Not Triggered
	(ii) obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and	N/A		Not Triggered
	(c) reasonable compensation for any disturbance caused by the land acquisition process. However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.	N/A		Not Triggered
	Institute to appoint a qualified independent valuer to:	N/A		Not Triggered
	(a) consider submissions from both parties;	N/A		Not Triggered
	(b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;	N/A		Not Triggered
	(c) prepare a detailed report setting out the reasons for any determination; and	N/A		Not Triggered
	(d) provide a copy of the report to both parties.	N/A		Not Triggered

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
C9	The Proponent must pay all reasonable costs associated with the land acquisition process described in condition C8 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	N/A		Not Triggered
PART D- ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING				
D1	Environmental Management Strategy The Proponent must prepare an Environmental Management Strategy must be prepared for the project to the satisfaction of the Secretary. This strategy must:	EMS 2020	The EMS has been prepared to the satisfaction of the secretary.	Compliant
	(a) provide the strategic framework for environmental management of the project;	EMS 2020	Environmental management framework is discussed throughout the EMS document.	Compliant
	(b) identify the statutory approvals that apply to the project;	EMS 2020 Section 3.2	Statutory Requirements are outlined in Section 3.2 of the EMS	Compliant
	(c) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;	EMS 2020 Section 1.4	Responsibilities outlined in Section 1.4	Compliant
	(d) set out the procedures to be implemented to:			
	(i) keep the local community and relevant agencies informed about the operation and environmental performance of the project;	EMS 2020 Section 4.3	Stakeholder communication and engagement is discussed in Section 4.3	Compliant
	(ii) receive record, handle and respond to complaints;	EMS 2020 Section 4.3.5	Complaints procedures outlined in Section 4.3.5	Compliant
	(iii) resolve any disputes that may arise during the course of the project;	EMS 2020 Section 4.3.6	Dispute resolution outlined in Section 4.3.6	Compliant
	(iv) respond to any non-compliance and any incident;	EMS 2020 Section 5.3	Management of non-compliances and incidents outlined in Section 5.3	Compliant
	(v) respond to emergencies; and	EMS 2020 Section 4.6	Emergency response and preparedness outlined in Section 4.6	Compliant
	(e) include:			

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(i) references to any strategies, plans and programs approved under the conditions of this approval; and	EMS 2020 throughout report	Relevant plans, programs, strategies are referenced throughout the document.	Compliant
	(ii) a clear plan depicting all the monitoring to be carried out under the conditions of this approval.	EMS 2020 Section 5.1	Monitoring program outlines in Section 5.1	Compliant
D2	The Proponent must submit the Environmental Management Strategy for approval by the Secretary, within six months of the approval of Modification 5.	EMS 2020	EMS submitted May 2020 MOD5 determination date 1/10/2019	Compliant
D3	The Proponent must implement the Environmental Management Strategy as approved by the Secretary.	EMS 2020	EMS implemented as per conditions	Compliant
D4	Management Plan Requirements Management plans required under this approval must be prepared in accordance with relevant guidelines, and include:		Sighted management plans and relevant DPE approval.	Compliant
	(a) a summary of relevant background or baseline data;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(b) details of:	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	
	(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(ii) any relevant limits or performance measures and criteria; and	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(e) a program to monitor and report on the:	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(i) impacts and environmental performance of the project; and	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(ii) effectiveness of the management measures set out pursuant to condition D4(d);	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(f) 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;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(g) a program to investigate and implement ways to improve the environmental performance of the project over time;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(h) a protocol for managing and reporting any:	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	
	(i) incident, non-compliance or exceedance of the impact assessment criteria or performance criteria;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(ii) complaint; or	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(iii) failure to comply with statutory requirements;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development;	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(j) a protocol for periodic review of the plan; and	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
	(k) 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 Secretary's approval.	Documents 1 to 10	Management Plans reviewed and found to be satisfactory	Compliant
D5	<p>Adaptive Management</p> <p>The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in PART B. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:</p>			

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not re-occur;	All management plans	Boral assess and manages project related risk through management plans as assessed above.	Compliant
	(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	All management plans	Boral assess and manages project related risk through management plans as assessed above.	Compliant
	(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.	All management plans	Remediation measures outlined in management plans have been approved.	Compliant
D6	Revision of Strategies, Plans and Programs Within three months of:			
	(a) the submission of an incident report under condition D9;	Noted		Not Triggered
	(b) the submission of an Annual Review under condition D11;	AEMR 2019/2020	AEMR 2019 dated 31/3/2020 AEMR 2020 dated 31/3/2021	Compliant
	(c) the submission of an Independent Environmental Audit under condition D13;	This Document		Compliant
	(d) the approval of any modification of the conditions of this approval (unless the conditions require otherwise);	Noted		Not Triggered
	(e) notification of a change in project stage under condition A15; or	Noted		Not Triggered
	(f) the issue of a direction of the Secretary under condition A2(b) which requires a review, the suitability of existing strategies, plans and programs required under this approval must be reviewed by the Proponent.	Noted		Not Triggered
D7	If necessary, to either improve the environmental performance of the project, cater for a modification or comply with a direction, the strategies, plans and programs required under this approval must be revised, to the satisfaction of the Secretary and submitted to the Secretary for approval within six weeks of the review.	Noted		Not Triggered

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
D8	The Applicant must continue to apply existing management strategies, plans or monitoring programs required and approved under this consent prior to the approval of any modification of this consent, until the approval of a similar plan, strategy or program required as a result of the modification.	Noted		Not Triggered
D9	Reporting and Auditing- Incident Notification The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the project (including the project application number and name) and set out the location and nature of the incident.	PIRMP	No incidences to date requiring notification. PIRMP should be updated to include the DPIE in the notification list of any pollution events as defined under the PIRMP.	Compliant
D10	Reporting and Auditing- Non-compliance Notification Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the non-compliance. The notification must be in writing to compliance@planning.nsw.gov.au and identify the project (including the project application number and name), set out the condition of this approval that the project is 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.	Site interview, non compliances have been reported in AEMR documents and separately by email		Compliant
D11	Reporting and Auditing- Annual Review By the end of March in each year after the commencement of project, or other timeframe agreed by the Secretary, a report must be submitted to the Department reviewing the environmental performance of the project, to the satisfaction of the Secretary. This review must:	AEMR 2019/2020		Compliant
	(a) describe the project (including any rehabilitation) that was carried out in the previous calendar year, and the project that is proposed to be carried out over the current calendar year;	AEMR 2019/2020 Section 4	Quarry operations, production, sales and transport for the last 12 months and next 12 months described in chapter 4.	Compliant
	(b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, including a comparison of these results against the:			
	(i) relevant statutory requirements, limits or performance measures/criteria;	AEMR 2019/2020 Table 9 – 12, 16	Tables are included in each section which state the relevant criteria	Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(ii) requirements of any plan or program required under this approval;	AEMR 2019/2020 Section		Compliant
	(iii) monitoring results of previous years; and	AEMR 2019/2020 Section 6.3.1.2, 6.4.2, 7.1.3, Appendices 2-5	Long term trends analysis is included in each section	Compliant
	(iv) relevant predictions in the documents listed condition A2(c).	AEMR 2019/2020 Section 6.3.2.2, 6.4.2, 7.1.3, Appendices 2-5	Results are compared to predictions in each section.	Compliant
	(c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;	AEMR 2019/2020 Table 2 and Section 7	Non-compliances outlined in Table 2 and addressed in Section 7	Compliant
	(d) evaluate and report on:			
	(i) the effectiveness of the noise and air quality management systems; and	AEMR 2019/2020 Section 6.3 and 6.4	Effectiveness of management systems is discussed based on monitoring results.	Compliant
	(ii) compliance with the performance measures, criteria and operating conditions in this approval;	AEMR 2019/2020 Section 6.3.1.2, Appendices 2-5	Results are compared to performance measures and criteria in each section.	Compliant
	(e) identify any trends in the monitoring data over the life of the project;	AEMR 2019/2020 Section 6.3.1.2, 6.4.2, 6.5.2, 7.1.3, Appendices 2-5	Long term trends analysis is included in each section	Compliant
	(f) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and	AEMR 2019/2020 Section 6.3.2.2, 6.4.2, 7.1.3, Appendices 2-5	Results are compared to predictions in each section.	Compliant
	(g) describe what measures will be implemented over the next calendar year to improve the environmental performance of the project.	AEMR 2019/2020 Section 6.3.2.3, 6.4.3, 7.1.5, 7.2.3	Opportunities for improvement are discussed for dust, noise, blasting, surface and ground water.	Compliant
D12	Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.	Site interview	Documents listed on web page and provided to CCC	Compliant
D13	Independent Environmental Audit Within three years of the date of the commencement of construction, and every three years after, unless the Secretary directs otherwise, the Proponent must commission and pay the full cost of an Independent Environmental Audit of the project. The audit must:			
	(a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Secretary;	This Document		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Secretary) whose appointment has been endorsed by the Secretary;	This Document		Compliant
	(c) be carried out in consultation with the relevant agencies and the CCC;	This Document Section 3.7		Compliant
	(d) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval, any relevant EPL, water licences and mining leases for the project (including any assessment, strategy, plan or program required under these approvals);	This Document Chapter 3		Compliant
	(e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this approval;	This Document Section 3.1.1		Compliant
	(f) recommend appropriate measures or actions to improve the environmental performance of the project and any assessment, strategy, plan or program required under the abovementioned approvals and this approval; and	This Document Section 4.1		Compliant
	(g) be conducted and reported to the satisfaction of the Secretary. Within three months of commencing an Independent Environmental Audit, or within another timeframe agreed by the Secretary, the Proponent must 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 for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary.	This Document		Compliant
D14	Monitoring and Environmental Audits Any condition of this approval that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.	Noted		

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	For the purposes of this condition, as set out in the EP&A Act, “monitoring” is monitoring of the project to provide data on compliance with the approval or on the environmental impact of the project, and an “environmental audit” is a periodic or particular documented evaluation of the project to provide information on compliance with the approval or the environmental management or impact of the project.			
D15	Noise, blast and air quality monitoring under this consent may be undertaken at suitable representative monitoring locations instead of at privately-owned residences or other locations listed in Part B, providing that these representative monitoring locations are set out in the respective management plan/s.	NBMP AQMP		Compliant
D16	Access to Information Before the commencement of construction until the completion of all rehabilitation required under this approval, the Proponent must:			
	(a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this approval) publicly available on its website:			
	(i) the document/s listed in condition A2(c);	Boral Peppertree website		
	(ii) all current statutory approvals for the project;	Boral Peppertree website	General Approvals tab includes a link to the original project approval and the consolidated consent document which is a link to the wrong document.	Non Compliant
	(iii) all approved strategies, plans and programs required under the conditions of this approval;	Boral Peppertree website	Environmental Management Strategy Noise and Blasting Monitoring Plan Air Quality Monitoring Plan Water Management Plan Landscape and Rehabilitation Management Plan (BRMP) Aboriginal Heritage Management Plan	Compliant
	(iv) minutes of CCC meetings;	Boral Peppertree website		Compliant

Condition	Requirement	Evidence (Document numbers from Appendix D)	Audit Findings and Recommendations	Compliance Status
	(v) regular reporting on the environmental performance of the project in accordance with the reporting requirements in any plans or programs approved under the conditions of this approval;	Boral Peppertree website	Under public reporting there is a link to POELA environmental monitoring reports which include POEO reports for Air Quality, Blasting and Noise.	Compliant
	(vi) a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;	Boral Peppertree website	Discussed in the AEMR	Compliant
	(vii) a summary of the current stage and progress of the project;	Boral Peppertree website	Discussed in the AEMR	Compliant
	(viii) contact details to enquire about the project or to make a complaint;	Boral Peppertree website	Phone number supplied for Peppertree Community and environmental concerns.	Compliant
	(ix) a complaints register, updated monthly;	Boral Peppertree website	Public feedback register last updated November 2020	Compliant
	(x) the Annual Reviews of the project;	Boral Peppertree website	The 2020 Annual Review is the latest on line.	Compliant
	(xi) audit reports prepared as part of any Independent Environmental Audit of the project and the Proponent's response to the recommendations in any audit report;	Boral Peppertree website	Links to independent audit reports under public reporting	Compliant
	(xii) any other matter required by the Secretary; and	Boral Peppertree website		Compliant
	(b) keep such information up to date, to the satisfaction of the Secretary.	Boral Peppertree website		

Appendix B – Audit Correspondence

robert.byrnes@iec.com.au

From: Gordon Kirkby <gkirkby@ethosurban.com>
Sent: Monday, 9 May 2022 5:37 PM
To: robert.byrnes@iec.com.au
Subject: RE: Peppertree Quarry Independent Environmental Audit

Robert,

thanks for seeking my input in the audit process. In terms of the Community Consultative committee, there are currently no real issues of concern. The Committee meets quarterly and is kept well informed by Boral of the environmental performance of the operations, including any incidents or complaints and how they have been addressed. The CCC operates in a very open and constructive fashion.

As you may be aware, the CCC is currently going through the process of being reconstituted to cover the combined operations of Peppertree and the adjoining Limestone Quarry.

Regards

Gordon

Gordon Kirkby

Director, Planning (Environmental Assessment)
Planning

T. +612 9956 6962
M. +61 448 476 754
W. ethosurban.com

173 Sussex Street
Sydney NSW 2000
(Gadigal Land)



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Ethos Urban acknowledges and pays respect to the past, present and emerging Traditional Custodians and Elders of this nation and the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples.

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From: robert.byrnes@iec.com.au <robert.byrnes@iec.com.au>
Sent: Wednesday, 4 May 2022 3:15 PM
To: Gordon Kirkby <gkirkby@ethosurban.com>
Subject: Peppertree Quarry Independent Environmental Audit

Hi Gordon

I have been engaged to undertake a compliance audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. As Chair of the Community Consultative Committee, I would appreciate your advice on any issues of concern with the operation of the CCC, or any other matters which you would like included or addressed as part of the audit.

If you require any further information or clarification please do not hesitate to contact me.

Kind Regards

Rob Byrnes

International Environmental Consultants

"Longmead"

700 Wombeyan Caves Road

High Range NSW 2575

Phone: 02 48785502

Mobile: 0417437120



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robert.byrnes@iec.com.au

From: robert.byrnes@iec.com.au
Sent: Thursday, 18 November 2021 3:31 PM
To: 'Michael Saxon'
Cc: 'Kirsty Nielsen'; 'Allison Treweek'; 'Jackie Taylor'; 'Paula Pollock'
Subject: RE: Peppertree Quarry Independent Environmental Audit
Attachments: Peppertree quarry Consolidated Consent - MOD 7_Final.pdf

Thank you Michael much appreciated. I should have also pointed out that the audit covers the last three years and therefore doesn't technically cover the latest modification approved last month (attached). However as this modification covers some additional biodiversity conditions it would be appropriate to reference this consent in any response.

Kind Regards
Rob Byrnes

From: Michael Saxon <Michael.Saxon@environment.nsw.gov.au>
Sent: Thursday, 18 November 2021 2:30 PM
To: robert.byrnes@iec.com.au
Cc: Kirsty Nielsen <kirsty.nielsen@iec.com.au>; Allison Treweek <Allison.Treweek@environment.nsw.gov.au>; Jackie Taylor <Jackie.Taylor@environment.nsw.gov.au>; Paula Pollock <Paula.Pollock@environment.nsw.gov.au>
Subject: RE: Peppertree Quarry Independent Environmental Audit

Hi Robert,

Allison Treweek from South East Branch can provide advice on the implementation of conditions relating to biodiversity. I have also cc'd in Jackie Taylor from Heritage NSW who may be able to provide advice on the conditions relating to Aboriginal cultural heritage and Paula Pollock from the BCT for those matters relating to the retirement of biodiversity credits.

Regards
Mike

Michael Saxon
Director South East Branch

Biodiversity and Conservation | Department of Planning, Industry and Environment
T 02 6229 7107 | M 0427 231477 | E michael.saxon@environment.nsw.gov.au
Level 1, 11 Farrer Place, Queanbeyan NSW 2620
www.dpie.nsw.gov.au



**Planning,
Industry &
Environment**

Our Vision: Together, we create thriving environments, communities and economies.

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: robert.byrnes@iec.com.au <robert.byrnes@iec.com.au>
Sent: Thursday, 18 November 2021 1:53 PM
To: Michael Saxon <Michael.Saxon@environment.nsw.gov.au>
Cc: Kirsty Nielsen <kirsty.nielsen@iec.com.au>
Subject: Peppertree Quarry Independent Environmental Audit

Dear Michael,

I have been engaged to undertake a compliance audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. I would appreciate your advice on any issues of concern or other matters which you would like included or addressed as part of the audit. The timeframe for the audit is short so we would appreciate receiving your input by the end of December if possible.

If you require any further information or clarification please do not hesitate to contact me.

Regards

Rob Byrnes
International Environmental Consultants
"Longmead"
700 Wombeyan Caves Road
High Range NSW 2575
Phone: 02 48785502
Mobile: 0417437120



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From: Tim Mahoney <Tim.Mahoney@transport.nsw.gov.au>
Sent: Monday, 6 December 2021 4:14 PM
To: robert.byrnes@iec.com.au
Cc: Development South; Andrew Lissenden
Subject: STH06/01275/04 - Peppertree Quarry MOD 5 Marulan - Audit query

Dear Robert,

Further to your email below Transport for NSW (TfNSW) thanks you for the opportunity to provide input into the Compliance Audit on the Peppertree Quarry.

TfNSW has reviewed the Project Approval 06_0074 (as modified by Mod 6) and provides the following comments concerning what it believes should be included in the audit from a traffic/state classified road perspective:

1. An assessment of the development's compliance with applicable transport related conditions in the issued approval. Specifically:
 - Part A Administrative Conditions A9, A10 and A11 in relation to transportation of quarry products from the site.
 - Part A Administrative Condition A16 in relation to the Community Consultative Committee, if any concerns have been raised relating to road and transport and if so details on the concerns raised, the total amount received and how they have been addressed.
 - Part B Specific Environmental Conditions B42, B43 and B44 in relation to the Construction Traffic Management Plan, transport using the Option 2 transport route described in EA (MOD 5), public access to the site and traffic signals.
 - Part D Environmental Management, Reporting and Auditing condition D13. TfNSW would appreciate a copy of the audit report and any traffic related matters in accordance with this condition.

For each of the above conditions, details should be provided as part of the audit on what the applicant is doing to ensure compliance with these requirements as well as details on how compliance or otherwise has been determined.

2. Confirmation that any complaints received from the community about development related traffic impacts are being addressed as per the approval issued; and
3. Identification of measures to address any non-compliances including a timeframe for the implementation of identified measures.

If you have any questions, please contact me via email on tim.mahoney@transport.nsw.gov.au.

Kind Regards,

Tim

From: robert.byrnes@iec.com.au [mailto:robert.byrnes@iec.com.au]
Sent: Thursday, 18 November 2021 1:54 PM
To: Chris Millet <Chris.MILLET@transport.nsw.gov.au>
Cc: Development Southern <development.south@transport.nsw.gov.au>; Kirsty Nielsen

<kirsty.nielsen@iec.com.au>

Subject: Peppertree Quarry Independent Environmental Audit

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Dear Chris,

I have been engaged to undertake a compliance audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. I would appreciate your advice on any issues of concern or other matters which you would like included or addressed as part of the audit. The timeframe for the audit is short so we would appreciate receiving your input by the end of December if possible.

If you require any further information or clarification please do not hesitate to contact me.

Regards

Rob Byrnes
International Environmental Consultants
"Longmead"
700 Wombeyan Caves Road
High Range NSW 2575
Phone: 02 48785502
Mobile: 0417437120



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robert.byrnes@iec.com.au

From: Development South <development.south@transport.nsw.gov.au>
Sent: Tuesday, 23 November 2021 11:22 AM
To: robert.byrnes@iec.com.au
Subject: re: Peppertree Quarry Independent Environmental Audit (Our Ref: STH06/01275/04)
Attachments: Peppertytree Quarry Consolidated Consent.pdf

Transport for NSW (TfNSW previously RMS) has received your referral below.

The development assessment officer assigned to this matter is Tim Mahoney who can be reached on 0242 212548. We will endeavour to respond within 21 days of your referral.

Please ensure any future correspondence is sent to development.south@transport.nsw.gov.au.

From: robert.byrnes@iec.com.au <robert.byrnes@iec.com.au>
Sent: Thursday, 18 November 2021 1:54 PM
To: Chris Millet <Chris.MILLET@transport.nsw.gov.au>
Cc: Development Southern <development.south@transport.nsw.gov.au>; Kirsty Nielsen <kirsty.nielsen@iec.com.au>
Subject: Peppertree Quarry Independent Environmental Audit

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Dear Chris,

I have been engaged to undertake a compliance audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. I would appreciate your advice on any issues of concern or other matters which you would like included or addressed as part of the audit. The timeframe for the audit is short so we would appreciate receiving your input by the end of December if possible.

If you require any further information or clarification please do not hesitate to contact me.

Regards

Rob Byrnes
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High Range NSW 2575
Phone: 02 48785502
Mobile: 0417437120



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robert.byrnes@iec.com.au

From: Tim Usback <Tim.USBACK@epa.nsw.gov.au> on behalf of EPA South Operations Regional Mailbox <EPA.Southopsregional@epa.nsw.gov.au>
Sent: Friday, 3 December 2021 12:29 PM
To: robert.byrnes@iec.com.au
Cc: kirsty.nielsen@iec.com.au
Subject: Peppertree Environmental Audit
Attachments: Peppertree Quarry Environmental Audit - EPA submission - 3 December 2021.pdf

Good afternoon Rob

Please find attached, the EPA's submission in response to your email below.

Regards

EPA Regional Operations South Mailbox

EPA.Southopsregional@epa.nsw.gov.au www.epa.nsw.gov.au  @NSW EPA  EPA YouTube

Report pollution and environmental incidents on 131 555 (NSW only) or +61 2 9995 5555



The EPA acknowledges the traditional custodians of the land and waters where we work. As part of the world's oldest surviving culture, we pay our respect to Aboriginal elders past, present and emerging.

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DOC21/1054476

Mr Rob Byrnes
International Environmental Consultants Pty Ltd
"Longmead"
700 Wombeyan Caves Road
MITTAGONG NSW 2575

Email: robert.byrnes@iec.com.au

Dear Mr Byrnes

**RE: Peppertree Quarry, Marulan – Environment Protection Licence 13088
Compliance Audit**

I refer to your email of 18 November 2021 to the NSW Environment Protection Authority (EPA) requesting advice as part of compliance audit of Peppertree Quarry (the premises), operated by Boral Resources (NSW) Pty Ltd (Boral). The EPA understands that you have been engaged to conduct the audit according to Part D, Condition D13 of Project Approval 06_0074 for Peppertree Quarry. You have indicated that the purpose of this consultation is to determine if there are any issues of concern to the EPA or other matters which you would like included or addressed as part of the audit.

The EPA is satisfied that the scope adequately covers relevant issues for the EPA with regard to the Peppertree Quarry, notably the inclusion of compliance with the conditions within EPL 13088. The EPA would also expect a thorough review of project compliance with noise related conditions and those related to air quality.

The EPA has had minimal interaction with Boral or the premises recently, and there have been few areas of concern for the EPA in relation to the premises apart from reports to the EPA's Environment Line as listed below. The EPA has also liaised with Boral with regard to consent modifications during this time, with the EPA providing advice and recommendations to the Department of Planning, Industry and Environment.

Complaints

Over the past three years, the EPA has received two complaints relating to environmental issues, which have alleged Peppertree Quarry as the suspect. These complaints have individually related to noise and dust. On both occasions the complaints have been promptly and adequately dealt with.

- 2021 - noise – Boral has been proactively engaging with the complainant with regard to an allegation of continuous noise impacts, either from the premises or the neighbouring limestone mine (also Boral).
- 2018 – dust – during a period of drought conditions (prior to the 2019/2020 bushfires), allegations were made of dust impacts at small villages along the railway line on which product is shipped from the premises. EPA investigations included a review of load-out practices at the premises, which appeared to be adequate.

Phone 131 555

TTY 133 677

Locked Bag 5022

4 Parramatta Square

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12 Darcy St, Parramatta

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(from outside NSW)

NSW 2124 Australia

NSW 2150 Australia

In summary, in relation to noise and complaints, the Quarry has been shown to be compliant with relevant limits in Environment Protection Licence 13088 and the EPA has not taken recent any regulatory action against the quarry.

If you have any further questions about this issue, Michael Heinze can be contacted on 6229 7002 or at EPA.Southopsregional@epa.nsw.gov.au .

Yours sincerely



3/12/2021

JANINE GOODWIN
Unit Head
Regulatory Operations Regional

robert.byrnes@iec.com.au

From: Michael Saxon <Michael.Saxon@environment.nsw.gov.au>
Sent: Thursday, 18 November 2021 2:30 PM
To: robert.byrnes@iec.com.au
Cc: Kirsty Nielsen; Allison Treweek; Jackie Taylor; Paula Pollock
Subject: RE: Peppertree Quarry Independent Environmental Audit
Attachments: Peppertytree Quarry Consolidated Consent.pdf

Hi Robert,

Allison Treweek from South East Branch can provide advice on the implementation of conditions relating to biodiversity. I have also cc'd in Jackie Taylor from Heritage NSW who may be able to provide advice on the conditions relating to Aboriginal cultural heritage and Paula Pollock from the BCT for those matters relating to the retirement of biodiversity credits.

Regards
Mike

Michael Saxon
Director South East Branch

Biodiversity and Conservation | Department of Planning, Industry and Environment
T 02 6229 7107 | **M** 0427 231477 | **E** michael.saxon@environment.nsw.gov.au
Level 1, 11 Farrer Place, Queanbeyan NSW 2620
www.dpie.nsw.gov.au



**Planning,
Industry &
Environment**

Our Vision: Together, we create thriving environments, communities and economies.

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: robert.byrnes@iec.com.au <robert.byrnes@iec.com.au>
Sent: Thursday, 18 November 2021 1:53 PM
To: Michael Saxon <Michael.Saxon@environment.nsw.gov.au>
Cc: Kirsty Nielsen <kirsty.nielsen@iec.com.au>
Subject: Peppertree Quarry Independent Environmental Audit

Dear Michael,

I have been engaged to undertake a compliance audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. I would appreciate your advice on any issues of concern or other matters which you would like included or addressed as part of the audit. The timeframe for the audit is short so we would appreciate receiving your input by the end of December if possible.

If you require any further information or clarification please do not hesitate to contact me.

Regards

Rob Byrnes
International Environmental Consultants
"Longmead"
700 Wombeyan Caves Road
High Range NSW 2575
Phone: 02 48785502
Mobile: 0417437120



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robert.byrnes@iec.com.au

From: Scott Martin <Scott.Martin@goulburn.nsw.gov.au>
Sent: Friday, 19 November 2021 11:00 AM
To: 'robert.byrnes@iec.com.au'
Cc: Kirsty Nielsen; Michelle Hughes
Subject: RE: Peppertree Quarry Independent Environmental Audit

Hi Rob

Thanks for your email. Generally Council is satisfied with the operations of Peppertree and aren't aware of any issues of non-compliance.

One matter I will raise is in relation to the impacts of blasting being experienced at [REDACTED] Marulan South Rd. This matter was originally brought to the attention of Council in late-2020, where the owner has advised that changes to blasting techniques and frequency had led to them experiencing the effects of blasting, which they had not experienced previously. These included being able to feel blasts at their residence, and a number of cracks appearing throughout their home.

Council understands that independent monitoring has taken place at the affected residence, but this has shown Peppertree to be within the parameters of Conditions B12 to B18 of the consent. Boral's reporting data also shows the blasting activities to be compliant.

Whilst Council is not the ARA, we feel that we have a responsibility to ensure that the best interests of our residents are being upheld. The owners of [REDACTED] Marulan South Road are genuinely concerned about the long-term structural integrity of their home and this is causing concern and undue stress.

Whilst this is technically not a breach of the consent, Council believes that it is an important matter that relates to the impacts of quarrying operations at Peppertree, and should therefore be referenced within the audit process.

Please let me know if you require any further information.

Kind regards,
Scott

Scott Martin
Director Planning & Environment
T: 02 4823 4452

[Goulburn Mulwaree Council](#) Locked Bag 22 Goulburn NSW 2580 | Connect on [Facebook](#)



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From: robert.byrnes@iec.com.au [mailto:robert.byrnes@iec.com.au]
Sent: Thursday, 18 November 2021 3:16 PM
To: Scott Martin
Cc: Kirsty Nielsen
Subject: Peppertree Quarry Independent Environmental Audit

Hi Scott,

I have been appointed to undertake the Independent Environmental Audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions over the past three years, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. I have also attached the most recent MOD7 consent which was approved last month. This consent is not strictly associated with the audit but will be referenced for completeness.

I would appreciate your advice on any issues of concern to Council or other matters which you would like included or addressed as part of the audit. The timeframe for the audit is short so we would appreciate receiving your input by the end of December if possible.

If you require any further information or clarification please do not hesitate to contact me.

Regards

Rob Byrnes
International Environmental Consultants
"Longmead"
700 Wombeyan Caves Road
High Range NSW 2575
Phone: 02 48785502
Mobile: 0417437120



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From: Ravi Sundaram <ravi.sundaram@waterNSW.com.au>
Sent: Thursday, 25 November 2021 8:14 AM
To: robert.byrnes@iec.com.au; Daryl Gilchrist
Cc: Jim Caddey; Kirsty Nielsen; Girja Sharma
Subject: RE: Peppertree Quarry Independent Environmental Audit

Hi Rob

Thank you for seeking WaterNSW's input with regards to the environmental compliance audit for Boral's Peppertree Quarry. WaterNSW requests the audit give specific attention to the Project Approval conditions B30, B33, B36 and B41 relating to water management at the site and confirm the site operations are having a neutral or beneficial effect on water quality of receiving waters within the Sydney drinking water catchment.

WaterNSW recently reviewed the updated Water Management Plan dated July 2021 for the site and submitted the following comments thru DPIE's planning portal on 17th September 2021.

Thank you for providing WaterNSW with the opportunity to review the Updated Pepper Tree Quarry Water Management Plan. Peppertree Quarry is located within the Shoalhaven River sub-catchment of the Sydney Drinking Water Catchment. Tangarang Creek and Barbers Creek (which reports to the Shoalhaven River) are the primary receiving watercourse for any discharges or runoff from the site.

WaterNSW notes that the 2017 WMP has been updated to incorporate changes/findings associated with:

- Modification 5 (2019) – approved for development of a new overburden emplacement (South-west Overburden Emplacement – SWOE),
- Modification 6 (2020)- approved for the replacement of existing dust extraction units with two baghouses recommendations from the Independent Audit undertaken in November 2018 and actions identified from the 2018 and 2019 Annual Review outlining water management associated with current quarry activities
- Modification 7 (July 2021) – approval pending for the relocation of sediment basin P2 outside of the existing approved footprint, for safety reasons.
- The Independent Audit undertaken in November 2018; and
- Actions identified from the 2018 and 2019 Annual Review outlining water management associated with current quarry activities

WaterNSW notes key changes in the WMP to respond to the above and issues raised by WaterNSW in its submissions to DPIE on each the modification applications include:

- Adequate number of surface water quality monitoring sites with sufficient baseline data available with downstream monitoring sites in Shoalhaven River due to access issues along Barber Creek.
- Implementing new Erosion and Sediment Control structures including additional five sediment dams to be installed as per Modification 5 and three new sediment dams N1, N2 and N3 prior to the construction of the SWOE
- Considered the long-term stability of the SWOE with regard to erosion (sheet, rill and gully) including:
 - Implementing a geomorphic stability monitoring program is in place and covers landform stability monitoring, ecological development monitoring, rapid visual assessment and drainage and sediment dam monitoring
 - Committed to specific actions to respond to verified impacts of geomorphic instability that include restricting access to area impacted, notifications to regulators and key stakeholders including DPI&E, WaterNSW and the EPA, undertaking investigations using qualified personnel or consultants and documenting and implementing any identified actions from the investigations to repair, replace or change the identified cause of the instability and impacts.

WaterNSW is satisfied that the updated WMP will lead to continued management and of erosion and sediment runoff within the quarry site and ensure there is a neutral or beneficial effect on water quality of

receiving waters. WaterNSW would appreciate receiving a copy of the annual review report for the quarry when it becomes available.

Please contact Ravi Sundaram (0428226152; ravi.sundaram@waternsw.com.au) if you have any queries with regards to the above.

WaterNSW requests to be informed of any specific findings from the audit with regards to water monitoring and management at the site. WaterNSW also requests for a copy of the audit report once finalized.

Please contact me directly if you wish to discuss any of the above matters.

Regards

Ravi

Ravi Sundaram
Mining Catchment Specialist



PO Box 398, Parramatta NSW 2124
Level 14, 169 Macquarie Street
Parramatta NSW 2150

T: 02 9865 2507

M.: 0428 226 152/ 0451 510 194

ravi.sundaram@waternsw.com.au

www.waternsw.com.au

Note: Please contact me by email or on my mobile until further notice as I may be working remotely.

From: robert.byarnes@iec.com.au <robert.byarnes@iec.com.au>

Sent: Thursday, 18 November 2021 1:54 PM

To: Ravi Sundaram <ravi.sundaram@waternsw.com.au>

Cc: Jim Caddey <James.Caddey@waternsw.com.au>; Kirsty Nielsen <kirsty.nielsen@iec.com.au>

Subject: Peppertree Quarry Independent Environmental Audit

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Hi Ravi,

I have been engaged to undertake a compliance audit of Peppertree Quarry as required under Part D, Condition D13 of Project Approval 06_0074, which we have attached for your information. The audit scope will include compliance with the Development Consent and Environment Protection Licence conditions, an assessment of environmental performance and a review of the adequacy of management strategies in place to maintain compliance. I would appreciate your advice on any issues of concern to WaterNSW or other matters which you would like included or addressed as part of the audit. The timeframe for the audit is short so we would appreciate receiving your input by the end of December if possible.

If you require any further information or clarification please do not hesitate to contact me.

Regards

Rob Byrnes
International Environmental Consultants
"Longmead"
700 Wombeyan Caves Road
High Range NSW 2575
Phone: 02 48785502
Mobile: 0417437120



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Appendix C – Site Inspection Photos



Plate 1 – Quarry Extraction Area with shaped and unshaped overburden in background



Plate 2 – Quarry Extraction Area showing drill pad prior to blast and unshaped overburden in background



Plate 3 – Covered Drum stores but with empty drums outside



Plate 4 – Inspection of Waste Oil Tank



Plate 5 – Washdown Bay and silt sump



Plate 6 – Workshop Oil and Grease Dispensing hoses and reels



Plate 7 – Welding and Retractable Reels



Plate 8 – External Wall of Workshop showing separation of Acetylene and Oxygen cylinders



Plate 9 – Primary Crushed Rock stockpile prior to entering processing plant



Plate 10 – Various views of the processing plant, conveyor systems, screens and dust extraction systems



Plate 11 – Primary Crushed Rock Stockpile prior to entering secondary processing plant



Plate 12 – Product Stockpile



Plate 13 – Train Loader



Plate 14 – Top of Overburden Emplacement showing progressive rehabilitation



Plate 15 – Progressive Rehabilitation on top of overburden emplacement



Plate 16 – Southern Face of Overburden Emplacement showing progressive rehabilitation, benching and sediment ponds



Plate 17 – Rock Armoured section of outer emplacement wall



Plate 18 – Northern side of overburden emplacement showing first 10 m lift of the noise bund with completed rehabilitation. The second bench being unshaped scalps stockpile



Plate 19 – Northern side of quarry showing processing area in background and Tangarang Creek Habitat Management Area in middle ground



Plate 20 – Eastern Overburn Emplacement showing commencement of rehabilitation work (noise bund)

Appendix D – Audit Documents

ID No.	Title	Date
Management Plans		
1	Peppertree Quarry Construction Traffic Management Plan	31 August 2021
2	Peppertree Quarry Aboriginal Heritage Management Plan	December 2021
3	Peppertree Quarry Noise and Blast Management Plan	May 2020
4	Peppertree Quarry Construction Noise Management Plan	14 March 2022
5	Peppertree Quarry Annual Reviews for 2018, 2019 and 2020 reporting years	Jan-Dec 2020
6	Peppertree Quarry Bushfire Management Plan	October 2020
7	Peppertree Quarry Biodiversity and Rehabilitation Management Plan	March 2022
8	Peppertree Quarry Air Quality Management Plan	May 2020
9	Peppertree Quarry Water Management Plan	March 2022
10	Peppertree Quarry Waste Management Plan	October 2020
Community		
11	Peppertree Community Consultative Committee Minutes	7 February 2019
12	Peppertree Community Consultative Committee Minutes	11 December 2019
13	Peppertree Community Consultative Committee Minutes	11 September 2019
14	Peppertree Community Consultative Committee Minutes	12 June 2019
15	Peppertree Community Consultative Committee Minutes	December 2021
16	Peppertree Community Consultative Committee Minutes	9 December 2020
17	Peppertree Community Consultative Committee Minutes	17 June 2020
18	Peppertree Community Consultative Committee Minutes	22 June 2021
19	Peppertree Community Consultative Committee Minutes	17 March 2020
20	Peppertree Community Consultative Committee Minutes	31 March 2021
21	Peppertree Community Consultative Committee Minutes	20 October 2021
22	Peppertree Community Consultative Committee Minutes	9 September 2020
Correspondence		
23	Planning Industry & Environment letter to Boral re Annual Review	24 May 2021
24	Planning Industry & Environment letter to Boral re Annual Review	27 April 2020
25	Planning Industry & Environment letter to Boral re Water Management Plan	7 March 2022
26	Planning Industry & Environment letter to Boral re Aboriginal Cultural Heritage Management Plan	10 January 2022
27	Planning Industry & Environment letter to Boral re Biodiversity and Rehabilitation Management Plan	10 March 2022
28	Planning Industry & Environment letter to Boral re Construction Noise Management Plan	14 March 2022
29	Planning Industry & Environment letter to Boral re Revised Air Quality Management Plan	27 July 2020
30	Planning Industry & Environment letter to Boral re Noise and Blasting Management Plan	24 July 2020
31	Boral letter to Environmental Assessment Office Energy and Resource Assessments (DPIE)	24 March 2021
32	Boral letter to Senior Compliance Officer Department of Planning Industry and Environment	8 February 2021
33	Planning Industry & Environment letter to Boral re Notification Modification 5 Works Commencement	8 April 2021
34	Department of Planning Industry and Environment email to Boral re Incident Air Monitoring 21	23 February 2021
35	Planning Industry & Environment letter to Boral re Southwestern Overburden Emplacement	12 August 2021
36	Boral email to various agencies re Peppertree Quarry Annual Review 2019	28 April 2020
37	Extractive Materials Return (Form S 1) year ended 30 June 2019, 2020, 2021	15 October 2019
38	Boral email to Department of Planning Industry & Environment re Consultation for Air Quality MP & Survey Plan for Southern Overburden	9 May 2017
39	Boral email to Department of Planning Industry & Environment re Southern Overburden	26 April 2017

40	Planning Industry & Environment letter to Boral re Annual Environmental Management Report	23 April 2019
Monitoring Data		
41	Peppertree Quarry Noise Compliance Monitoring (2 docs)	23 May 2019
42	Peppertree Quarry Noise Compliance Monitoring Oct-Dec 2019 quarter	15 July 2020
43	Peppertree Quarry Noise Compliance Monitoring Jan-Mar 2020 quarter	15 July 2020
44	Peppertree Quarry Noise Compliance Monitoring Apr-Jun 2020 quarter	15 July 2020
45	Peppertree Quarry Noise Compliance Monitoring Jul-Sep 2020 quarter	17 September 2020
46	Peppertree Quarry Noise Compliance Monitoring Oct-Dec 2020 quarter	17 February 2021
47	Peppertree Quarry Noise Compliance Monitoring October 2021	10 December 2021
48	Load and Firing the Shot	6 July 2021
49	Load and Firing the Shot	20 July 2021
50	Load and Firing the Shot	29 July 2021
51	Load and Firing the Shot	19 August 2021
52	Load and Firing the Shot	7 September 2021
53	Peppertree Quarry Quarterly Groundwater Monitoring April 2021	18 June 2021
54	Peppertree Quarry Quarterly Groundwater Monitoring September 2021	20 October 2021
55	POEO Noise Monitoring web published data	September 2021
56	POEO Blasting Results web published data	September 2021
57	POEP Air Quality Results web published data	September 2021
Environmental Assessments		
58	Peppertree Quarry MOD 5 Environmental Assessment	October 2018
59	Peppertree Quarry Response to Submissions	July 2016
60	Peppertree Quarry MOD 6 Statement of Environmental Effects	February 2020
61	Peppertree Quarry MOD 7 Biodiversity Assessment	9 July 2021
62	MP06_0074 MOD 7 Sediment Basin Modification	16 August 2021
63	Notice of Modification – MOD7	27 September 2021
64	Peppertree Quarry Modification 7 SSD Modification Assessment Report	September 2021
Other Audit Documents		
65	Boral Sustainability Report	October 2021
66	Peppertree Quarry Consolidated Consent MOD7	September 2021
67	Peppertree Quarry Environment Protection Licence 13088	23 July 2021
68	Peppertree Quarry Pollution Incident Response Management Plan	November 2019
69	Peppertree Quarry Complaints Register	December 2021
70	Conservation and Rehabilitation Bond Cost Calculation	2 September 2021
71	Details of Bank Guarantee between DPE and Boral Resources	7 November 2018
72	Registered Surveyors report on boundaries	April 2017
73	Peppertree Quarry Environment Green Folder	N/A

Appendix E – Certification Form

Development Name: Peppertree Hardrock Quarry
Development Consent: 06_0074
Development Description: Hardrock Quarry
Development Address: 5 Hume Street, Marulan South NSW 2579
Operator: Boral Resources (NSW) Pty Ltd
Title of Audit: Independent Environmental Audit of Peppertree Quarry

I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:

- The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the 2020 Post Approval Guidelines – Independent Audits
- The findings of the audit are reported truthfully, accurately and completely;
- I have exercised due diligence and professional judgement in conducting the audit;
- I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;
- I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;
- I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);
- Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and
- I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

Note.

a) The Independent Audit is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.

b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).



Robert Byrnes
Director

International Environmental Consultants Pty Limited
"Longmead"
700 Wombeyan Caves Road
High Range NSW 2575

robert.byrnes@iec.com.au