

Oberon Quarries Pty Ltd

Independent Environmental Audit:

Oberon Quarry Continuation Project SSD 6333, NSW

Audit Number: 1219

January 2017

Prepared by



Independent Audit Certification Form

Development Name Oberon Quarry Continuation Project
Development Consent No. SSD-6333
Description of Development Hard Rock Quarry
Development Address Hargraves Quarry Road, Oberon, New South Wales
Operator Oberon Quarries Pty. Limited
Operator Address 315 Commercial Rd, Vineyard NSW 2765

Independent Audit

Title of Audit Independent Environmental Audit: Oberon Quarry Continuation Project SSD 6333, NSW

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 auditing standard AS/NZS ISO 19011:2014 and 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).

Signature



Name of Lead or Principal Auditor James Hart
Address 426 King Street Newcastle
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Auditor Certification Exemplar Global Lead Environmental Auditor No 12107
Date 17 July 2017

Contents

1 INTRODUCTION.....	1
1.1 OVERVIEW.....	1
1.2 AUDIT OBJECTIVES	1
1.3 AUDIT SCOPE AND CRITERIA.....	1
2 Methodology.....	2
2.1 METHODOLOGY.....	2
2.2 APPROVALS AND DOCUMENTS AUDITED.....	2
2.3 AGENCY AND COMMUNITY CONSULTATION	2
2.4 NAME AND POSITION OF PERSONS INTERVIEWED	3
2.5 AUDIT PROCESS.....	3
2.6 AUDIT COMPLIANCE DEFINITIONS	4
2.7 ISSUES TO BE CONSIDERED IN REVIEWING THIS REPORT	4
3 AUDIT FINDINGS.....	5
3.1 OVERVIEW.....	5
3.2 DEVELOPMENT CONSENT (SSD_6333)	5
3.3 ENVIRONMENTAL PROTECTION LICENCE (EPL 4442).....	6
3.4 BLAST MANAGEMENT PLAN.....	6
3.5 AIR QUALITY MANAGEMENT PLAN.....	6
3.6 WATER MANAGEMENT PLAN.....	7
3.7 LANDSCAPE MANAGEMENT PLAN	7
3.8 NOISE MANAGEMENT PLAN	7
3.9 POLLUTION INCIDENT RESPONSE PLAN.....	7
3.10 TRANSPORT MANAGEMENT PLAN	7
3.11 ENVIRONMENTAL MANAGEMENT STRATEGY	7
3.12 STATEMENT OF COMMITMENTS.....	7
3.13 AREAS OF NON-COMPLIANCE	8
3.14 AREAS OF ADMINISTRATIVE NON-COMPLIANCE	8
3.15 OBSERVATIONS.....	10
3.16 AREAS OF COMPLIANCE	11
4 CONCLUSIONS.....	12
CV – James Hart.....	13
5 Audit Checklist	16
Audit Checklist	16

➤ **Abbreviations**

AQMP	Air Quality Management Plan
BMP	Blast Management Plan
DA	Development Approval
DPE	Department of Planning and Environment
EMS	Environmental Management Strategy
EPA	Environment Protection Authority
EPL	Environment Protection Licence
LRMP	Landscape and Rehabilitation Management Plan
NMP	Noise Management Plan
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
PIRMP	Pollution Incident Response Management Plan
RMS	Roads and Maritime Services
TMP	Transport Management Plan
WMP	Water Management Plan

1 INTRODUCTION

1.1 Overview

Oberon Quarries Pty Limited (Oberon Quarries) operates Oberon Quarry, an existing hard rock quarry located approximately 4 kilometres south of Oberon, New South Wales (NSW). Oberon Quarries was granted the original Oberon Quarries Development Consent (DA92/164) on 1 October 1993 by the NSW Minister for Planning to establish and operate a hard rock quarry at 'Langley Heights', Oberon, New South Wales. The Oberon Quarry Continuation Project Development Consent (SSD 6333) was granted to Oberon Quarries on 14 September 2015 and provides for the continued operations of Oberon Quarry. The original Oberon Quarries Development Consent (DA92/164) was relinquished on 2 December 2015.

The objective of this audit was to assess compliance with the Department of Planning and Environment (DPE) Development Consent (SSD_6333) for management of the environmental impacts of the quarry operations.

The conditions of approval require Oberon Quarries to appoint an independent auditor to assess compliance with the Minister's Conditions of Approval obtained for the quarry operations.

Schedule 5, condition 10 of the approval requires an Independent Environmental Audit to be conducted within one year of the date of the commencement of quarrying operations, and every 3 years thereafter, unless the Director-General directs otherwise. The condition requires the proponent to commission and pay the full cost of the audit. The audit must:

- a) Be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been approved by the Secretary;
- b) Include consultation with relevant agencies;
- c) Assess the environmental performance of the project, and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);
- d) Review the adequacy of any strategy/plan/program required under this approval; and, if necessary
- e) Recommend appropriate measures or actions to improve the environmental performance of the development, or any assessment, strategy, plan or program required under the abovementioned approvals.

1.2 Audit Objectives

The objective of this Independent Environmental Audit was to assess the operations at the Oberon Quarry and provide a report in accordance with the requirements of Schedule 5, condition 10 of the development approval.

1.3 Audit Scope and Criteria

The scope of this audit was limited to the site, being Lots 2 and 3 of DP 1087170, Lot 3 DP845776, and Lots 94, 107 and 108 of DP 757067, and the activities and processes carried out by Oberon Quarries in operating the quarry. The audit is the first for the project and covered the period from project determination on 14 September 2015 to January 2017.

The audit scope included:

- the conditions of all relevant approvals;
- management plan requirements;

- the requirements of relevant regulatory agencies;
- the status of the operation;
- the performance of the operation;
- results from previous audits;
- any incidents or community complaints;
- feedback received from other regulatory agencies on the performance of the operation; and
- feedback received from the community / community consultative committee on the performance of the operation.

The audit criteria were developed by the Lead Auditor, and are included as a checklist at the end of this report.

2 Methodology

The audit methodology included a review of approval conditions and key management plans prepared for the quarry operations, interviews with project personnel, and a site inspection to assess the level of compliance with and implementation those requirements.

2.1 Methodology

The audit was conducted by the following:

Auditor	Role	Qualifications and Experience
James Hart	Lead Environmental Auditor Exemplar Global No 12105	See attached CV

James Hart was endorsed by the Secretary of the Department of Planning and Environment on 8 November 2016.

No additional specialist auditors were required for the project.

2.2 Approvals and Documents Audited

The following documents and approvals were reviewed and included within the audit:

- Development Consent – Oberon Quarry Continuation Project, SD_6333;
- Blast Management Plan – Oberon Quarry, Final, May 2016;
- Air Quality Management Plan – Oberon Quarry, Final May 2016;
- Noise Management Plan – Oberon Quarry, Final March 2016;
- Transport Management Plan – Oberon Quarry, Final March 2016;
- Water Management Plan – Oberon Quarry, Final August 2016;
- Landscape and Rehabilitation Management Plan – Oberon Quarry, Final May 2016;
- Environmental Management Strategy – Oberon Quarry, Final December 2016; and
- Pollution Incident Response Management Plan – Oberon Quarry, Final March 2015.

2.3 Agency and Community Consultation

The following people were consulted with prior to the audit to obtain feedback and to focus the audit criteria towards key issues.

Contact	Agency	Comments
Alice Buckley	NSW Department of Primary Industries Water	Not aware of any specific issues related to the site.
Andrew Helms	NSW EPA	Liaising with the Quarry consultant Umwelt to formalise a surface water discharge point at the premises. Currently, the licence stipulates upstream and downstream monitoring in the receiving waters adjacent to the quarry. The intention is to alter the licence to include a discharge point, water quality limits and monitoring requirements. The site seldom, if ever, discharges so this proposed action is not a priority.
Paul Rutherford	Department of Planning & Environment	Audit report by DP&E in December 2015 raised a few minor issues related to better records of truck movements and hours of operation for different machinery. Review of the Annual Review provided for the period September to December 2015 raised several issues which were required to be addressed and the Annual Review resubmitted. These matters relate to the previous development consent under which the quarry operated.

2.4 Name and Position of Persons Interviewed

The following site personnel were interviewed during the conduct of the audit:

Name	Position/Role	Organisation	Date of Interview
Neil Hargraves	Oberon Operations Manager	Oberon Quarries	12/01/2017
Deborah Murray	Work, Health & Safety Representative	Oberon Quarries	12/01/2017
Samara Pringle	Administration Manager	Oberon Quarries	12/01/2017
Andrew Helms	Regional Operations Officer – Central West	Environmental Protection Authority - EPA NSW	9/01/2017
Alice Buckley	Water Regulation Officer	Department of Primary Industry – DPI Water	9/01/2017
Paul Rutherford	Senior Compliance Officer	Resource Assessments & Compliance Department of Planning & Environment	16/01/2017

2.5 Audit Process

The audit commenced with an Opening Meeting to confirm the scope, purpose and timeline of the audit. This was held at 08.30 AM, 12 January 2017 in the Oberon Quarry site office.

The audit involved a review of Oberon Quarry records, a site inspection, and interviews with project personnel.

- The site inspection included inspection of roads and drainage structures, inspection of access control measures implemented and inspection of quarrying operations. At the time of audit activities being undertaken included loading and haulage of material from the quarry to the processing plant, screening of material, loading of trucks; and weighbridge operations.

A closing meeting was held on 12 January 2017 where the preliminary audit findings were presented to Oberon Quarries. Additional information was provided by Oberon Quarries subsequent to the audit.

2.6 Audit Compliance Definitions

Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.
Non-compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.
Administrative non-compliance	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session).
Not triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.

2.7 Issues to be considered in reviewing this report

This audit was based on a review of compliance with the approval conditions for the operation of Oberon Quarry.

In particular, the audit focused on the implementation of measures described in the various Environmental Management Plans to manage the impacts of the activities on the surrounding environment. The checklist appended to this report identifies those compliance issues that could be assessed given the stage of the project.

By its very nature an audit does not guarantee full compliance of all aspects of the project with the undertakings of the Management Plans and associated documentation. However; in the opinion of the auditor, the extent and scope of the field inspection together with the records maintained by Oberon Quarries were sufficient evidence to verify general compliance of the activities with the requirements of the conditions of approval.

3 AUDIT FINDINGS

3.1 Overview

Specific activities being undertaken at the time of audit were:

- Loading and haulage of material from the quarry to the processing plant;
- Screening of material;
- Loading of trucks; and
- Weighbridge operations.

Documentation reviewed included a combination of hard copy records and electronic records maintained by Oberon Quarries, with records generally available during the audit.

The attached checklists record the outcomes of the audit process. One non-compliance, nine administrative non-compliances and four observations were identified. The following sections summarise key findings for review and action by Oberon Quarries as appropriate.

3.2 Development Consent (SSD_6333)

Schedule 2 – Administrative Controls

The site had implemented processes to generally ensure compliance with the administrative control requirements of the conditions of consent was verified. Review of administrative controls did not identify any non-compliances.

Schedule 3 – Environmental Performance Conditions

All of the required management plans had been developed and provided to DP&E for review and approval.

While compliance with aspects of the environmental performance conditions was found, one non-compliance and five administrative non-compliances were identified in relation to environmental performance conditions.

Oberon Quarries was required to, within six months from the date of the consent, provide and install “Intersection Advance” (G1-207) warning signage on the eastbound approach to the intersection of Duckmaloi Road and Titania Road. No signage had been provided at the intersection. This issue was raised as a non-compliance.

The following issues were raised as administrative non-compliances:

- While noise monitoring had been conducted for the project, the monitoring had not always been conducted on a three monthly basis. Records showed a five month gap in noise monitoring between March and August 2016.
- A Water Quality Management Plan had been prepared for the project, which was required to be submitted to the Secretary by 31/05/126. Records showed the Water Quality Management Plan was submitted three days late on 2/05/2016.
- Oberon Quarries are required to take all reasonable measures to ensure that laden trucks have appropriate signage, including a contact phone number, so they can be easily identified by road users. While Oberon Quarry trucks had required information displayed, some subcontractor trucks did not have Oberon Quarry site details displayed.
- Oberon Quarries are required to lodge a Rehabilitation Bond within 6 months of approval of the Landscape and Rehabilitation Management Plan. While it was reported that DP&E had been advised

the rehabilitation bond was being prepared, the bond had not been submitted within the 6 month timeframe.

- While an Annual Review had been compiled and submitted for 2015, the Annual review did not include reporting on waste management and minimisation.

One opportunity was also raised in relation to management of erosion and sediment controls. While a description of the erosion and sediment controls structures was included in the water management plan, an erosion and sediment control plan, identifying the type and location of erosion and sediment control structures on the site had not been developed.

Schedule 4 – Additional Procedures

Conditions of Approval under Schedule 4 Additional Procedures had not been triggered.

Schedule 5 –Environmental Management, Reporting and Auditing

Processes had been implemented to comply with environmental management requirements. An Environmental Management Strategy had been documented and implemented, management plans prepared, an annual review process implemented and a community consultative committee established.

An administrative non-compliance was identified in relation to environmental reporting. Condition 10 required the independent environmental audit to be commissioned within a year of the date of the consent (due by 14/09/16). The independent audit had not been commissioned until December 2016.

An administrative non-compliance was also raised in relation to reporting on water management. The Water Management Plan required water use, including the extraction of water from Racecourse Creek and management of water consumption to be reported in the Oberon Quarry Annual Review. However, while water take was discussed in the annual review, details of water usage or management of water consumption were not included.

3.3 Environmental Protection Licence (EPL 4442)

An EPL had been issued for the operations, which places requirements on the site for the management of air, noise, water, and complaints. The site had complied with requirements for monitoring of air, and complaints management and reporting processes have been implemented and met.

Review of the NSW EPA public register found that one non-compliance had been raised in the 2016-2017 monitoring period due to a broken dust bottle. This issue is addressed through the NSW EPA non-compliance process and hence has not been raised again in this report.

An EPA Annual Return had been submitted for the 2015-2016 period in compliance with the licence requirements.

3.4 Blast Management Plan

The audit found that the site was in compliance with requirements of the Blast Management Plan. One opportunity was raised in relation to blast monitoring. While blast monitoring had been conducted at the nearest residence, records did not clearly identify the specific blast monitoring location. The specific location should be identified to ensure consistency in the monitoring program.

3.5 Air Quality Management Plan

The audit found that the site was in compliance with requirements of the Air Quality Management Plan.

3.6 Water Management Plan

The audit found that the site was in compliance with requirements of the Water Management Plan.

3.7 Landscape Management Plan

Quarrying operations have been conducted within the existing disturbed area, and hence requirements for conducting preclearance surveys and inspections of trees had not been triggered.

Rehabilitation Strategy for the next three years focusses on on-going development of the quarrying operations and management of weed and feral species. At the time of audit, only minor landscaping had been undertaken.

A rehabilitation bond was required to be lodged within 6 months of approval of the LRMP (approved May 2016). While it was reported that DP&E had been notified of the preparation of a rehabilitation bond, the bond had not been submitted at the time of audit.

3.8 Noise Management Plan

Attended noise monitoring had been conducted during operational periods of the quarry. While attended noise monitoring was conducted, it was not always conducted on a three monthly basis. Records showed a 5 month gap in noise monitoring between March and August 2016.

3.9 Pollution Incident Response Plan

The audit found that the site was in compliance with requirements of the Pollution Incident Response Plan.

3.10 Transport Management Plan

The audit found that the site was in compliance with requirements of the Transport Management Plan.

3.11 Environmental Management Strategy

An environmental management strategy had been developed and implemented for the site. The audit found that the site was in general compliance with requirements of the environmental management strategy.

One administrative non-compliance was in relation to environmental inspections. While evidence was sighted to show that environmental issues were recorded in the Quarry Manager's site diary, records only showed what was deficient, not what was inspected and areas of compliance, or actions taken to address the issues identified. The environmental management strategy requires inspections to be documented within the monitoring checklist to capture and track all actions.

3.12 Statement of Commitments

Requirements for compliance with the commitments in relation to hours of operation, identified in Appendix 2 of the development consent, noise, blasting, air quality, surface water, groundwater, traffic and transport, flora and fauna and bushfire management were identified in Oberon Quarries management plans. However, the quarry had not documented how the site would ensure compliance with the commitments related to Aboriginal archaeology, waste management and Greenhouse Gas and energy mitigation and management measures.

3.13 Areas of Non-compliance

Issue No.	Condition	Requirement	Issue sighted
N-01	19	Within 6 months from the date of this consent the Applicant shall provide and install "Intersection Advance" (G1-207) warning signage on the eastbound approach to the intersection of Duckmaloi Road and Titania Road.	Intersection Advance" (G1-207) warning signage had not been installed on the eastbound approach to the intersection of Duckmaloi Road and Titania Road.

3.14 Areas of Administrative Non-compliance

Issue No.	Condition	Requirement	Issue sighted
A-01	4	The Applicant shall: (a) implement best practice management to minimise the operational and road transportation noise of the development; (b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4); (c) carry out noise monitoring (at least every 3 months, unless otherwise approved by the Secretary) to determine whether the development is complying with the relevant conditions of this consent; and (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary	Noise monitoring was not conducted at least every 3 months. Monitoring conducted in March 2016, August 2016 and October 2016.
A-02	16	The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared by suitably qualified person/s approved by the Secretary; (b) be prepared in consultation with the EPA and DPI-Water; (c) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	The Water Management Plan had not been submitted within the required timeframes. Water Quality Management Plan Extension provided by the Secretary for the WQMP to be provided by 31/05/16. Submitted on 2/06/16.
A-03	18	The Applicant shall ensure that: (a) all reasonable measures are taken such that laden trucks have appropriate signage, including a contact phone number, so they can be easily identified by road users;	While signage was displayed on Oberon Quarries trucks, some subcontractor trucks on site on the day of audit did not have signage displaying Oberon Quarry or the contact phone number.

A-04	25	Within 6 months of the approval of the Landscape and Rehabilitation Management Plan, the Applicant shall lodge a Rehabilitation Bond with the Department to ensure that the rehabilitation of the site is implemented in accordance with the performance and completion criteria set out in the plan and relevant conditions of this consent.	While the rehabilitation bond was due in November 2016, the bond had not been submitted at the time of audit.
A-05	28	The Applicant shall: (d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Waste management and minimisation had not been included in the Annual Review for 2015.
A-06	Schedule 5 10	Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development.	The initial audit of the development had not been conducted within 12 months of the date of the consent. Audit due 12/09/16, conducted 12/01/17.
A-07	Water Management Plan 4.3	Water use including the extraction from Racecourse Creek and management of water consumption will be reported in the Oberon Quarry Annual Review.	While Section 7.1.1 of the Annual Review discusses water take, it does not identify volumes extracted from Racecourse Creek.
A-08	Environmental Management Strategy Section 5.2	As a minimum, environmental inspections will be undertaken monthly to assist in environmental management of the quarry and determine compliance with legislation, standards, codes and other external requirements, the project approval and EPL. Outcomes of inspections shall be documented within the monitoring checklist to capture and track all actions.	While diary entries showed that environmental issues had been identified on site, the monitoring checklist had not been utilised to record the outcome of inspections and to track actions through to completion.
A-09	Statement of Commitments Aboriginal Archaeology	Oberon Quarries should ensure that all parties involved in the project are aware that it is an offence under Section 86 of the NPW Act to harm or desecrate an Aboriginal object unless that harm or desecration is the subject of an AHIP.	While the statement of commitments relating to aboriginal archaeology displayed in the site office, it is not clear how the Section 86 requirements are communicated to all parties involved in the project. This information was not specifically included in the site induction.

3.15 Observations

Issue No.	Condition	Requirement	Issue sighted
O-01	16	The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. (d) This plan must include a Surface Water Management Plan, that includes: • a detailed description of the surface water management system on site including the: • erosion and sediment controls	While controls had been implemented, an erosion and sediment control plan, identifying the types and locations of erosion and sediment control structures (e.g. rock weirs, localised sediment and erosion controls) were not specifically identified / documented.
O-02	28	The Applicant shall: (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council; (b) minimise the waste generated by the development; (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of.	While processes had been implemented for the management of waste, the site had not documented how waste will be managed on site.
O-03	Blast Management Plan CI 6.2	Blast monitoring will be undertaken at the nearest private residence and/or other sensitive locations (as required) to verify compliance with the relevant criteria.	While blast monitoring had been conducted at the nearest residence, a standardised location for monitoring has not been nominated.

O-04	Statement of Commitments 5.11.1	There are a number of mitigation and management measures proposed to be implemented for the ongoing operations. Improving Transport Diesel Use efficiency • Limiting the length of transport routes • Fuel efficient haul trucks • Maximising payloads • Reducing idling times Improving on-site diesel use efficiency • Scheduling activities so that equipment and vehicle operation is optimised. • Fuel efficient equipment • Blast strategies to improve extraction efficiency • Working machines to their upper design performance Haul Truck Options • Limiting the length of material haul routes • Optimising ramp gradients • Fuel efficient haul trucks • Maximising payloads • Improving rolling resistance of haul roads • Reducing idling times • Improving Electrical efficiency of processing equipment • Reducing reject percentage • High efficiency motors • Variable speed drives • Optimising motor size to load • Optimising basalt throughput.	While strategies for the minimising of greenhouse gas emissions and energy mitigation and management measures have been implemented on site, these strategies have not been identified in management plans provided.
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3.16 Areas of compliance

All other relevant conditions audited were found to be either compliant or not applicable. Refer to the audit checklist provided as an attachment for full details of compliance.

4 CONCLUSIONS

On the basis of the findings of this audit, it is considered that Oberon Quarries has complied with the requirements of the approval conditions and requirements of the environmental management plans for activities carried out to date. One non-compliance was identified, along with nine administrative non-compliances. Four observations were also raised for consideration. Oberon Quarries should ensure that actions are identified and implemented to address the findings contained within this audit to enable compliance with the development obligations and ensure environmental impacts of the developments are appropriately managed.

ATTACHMENTS

- ✓ Auditor CV
- ✓ Audit Checklists

CIRCULATION

- ✓ Umwelt (Australia)(Pty Ltd
- ✓ AQUAS Pty Ltd



CV – James Hart

CURRENT POSITION

Senior Project Manager



QUALIFICATIONS

Newcastle University, Graduate Diploma in Occupational Health and Safety, 2003
Newcastle University, Graduate Diploma in Environmental Science, 1997
Newcastle University, Bachelor of Science (Chemistry), 1981
Exemplar Global - Lead Quality, OHS, Environmental Auditor No. 12105

Major Projects

- ✓ Lead Work Health and Safety Auditor – Audit Panel for ACT Government Procurement and Capital Works
- ✓ Lead Quality, Safety, Environmental and Risk Auditor – Sydney Trains SEQAR Audit Panel
- ✓ Lead Quality, Safety, Environmental and Risk Auditor – NSW TrainLink
- ✓ Lead WHS Auditor - TfNSW Lead Auditor Support Resource Panel
- ✓ Lead Quality, Safety, Environmental Auditor – Transgrid Audit Panel
- ✓ Quality, safety and environmental representative for the
- ✓ Lead Quality, WHS and Environmental Auditor – Roads and Maritime Services Audit Panel
- ✓ Lead Quality, WHS and Environmental Auditor – SAI Global Assurance Services
- ✓ Independent Certifier's Safety Manager – North West Rail Link - Tunnels & Station Civil Works
- ✓ Independent Verifier's audit and compliance consultant – Hexham Relief Roads Project
- ✓ Independent Certifier's Safety Manager – Westconnex project.

Relevant Experience

James is an Exemplar Global certified Lead Management Systems Auditor and has been certified to audit quality, environmental and OHS Management systems, as well as integrated management systems. He has conducted over 300 audits for SAI Global (certification, surveillance and recertification) covering OHS, Quality and Environmental management systems in Australia, the United Kingdom and Europe.

James is the a lead auditor on the audit panels for ACT Government, Transgrid, Sydney Trains, South Australian Rail Commissioner, Department of Defence WHS Panel and NSW Roads and Maritime Services. James is also the Independent Certifier's Safety Review Manager for the NWRL, Sydney Light Rail, Westconnex and the Northconnex projects.

James has experience in conducting quality, environmental and occupational health and safety system and compliance audits across a range of industries, including building construction, road construction, rail, heavy industrial, light industrial and commercial developments. Audits have included all aspects of the management process, including design, construction, commissioning, operations and maintenance. Services provided include the assessment of project documentation against legislative and project requirements, and verification of implementation of project requirements. Examples include:

- ✓ Assessment of contractor documentation for prequalification with NSW Roads and Maritime Services;
- ✓ Participation in design reviews for projects on behalf of TfNSW (e.g. RLA Audit Assignment "CP13-30 Design Management - Schofield Road Underpass and Urban & landscape design).
- ✓ Lead Environmental auditor – 3rd Party Environmental audits on behalf of Gladstone Ports Corporation for the Western Basin Dredging and Disposal project.
- ✓ Lead Environmental auditor – 3rd Party Environmental audits on behalf of Gladstone Ports Corporation for the WICET dredging project.
- ✓ Environmental auditor – Independent audit of the Mackas Sands Sand Extraction, Lot 218 and Lot 220, Salt Ash on behalf of the NSW Department of Planning and Infrastructure.
- ✓ Environmental auditor – New Bridge over Sportmans Creek at Lawrence, on behalf of RMS.

- ✓ Lead WHS and Environmental audit, NSW TrainLink internal audit program 2014-2015.
- ✓ Quality, safety and environmental auditor – Mayfield Intermodal Remediation project.
- ✓ Quality, safety and environmental auditor – Kooragang Island Waste Emplacement Facility remediation project.

James had also undertaken WHS and environmental inspections on behalf of clients to monitor implementation of WHS and environmental controls on worksites. Project where inspection services have been provided include:

- ✓ Gerringong Upgrade – Mt Pleasant to Toolijooa Road Project, NSW RMS;
- ✓ Napiac Upgrade project, NSW RMS;
- ✓ Hunter Expressway project, NSW RMS;
- ✓ Five Islands project, NSW RMS;
- ✓ NIER building construction project, University of Newcastle.

This wide range of experience has provided James with a broad skill range of auditing skills in the quality, OHS and environmental management sectors.

Experience History

2011 – Present: AUSTRALIAN QUALITY ASSURANCE & SUPERINTENDENCE (AQUAS)

Senior Consultant / SEQR Auditor

- ✓ Certified independent environmental audit for the Western Basin Dredging and Disposal project, and the WICET Coal Berth Dredging project in Gladstone Queensland.
- ✓ Independent audits of the Mackas Sands development to assess compliance with the Department of Planning and Environment's conditions of approval
- ✓ Lead Quality, Safety, Environmental and Risk Auditor – Sydney Trains SEQR Audit Panel
- ✓ Independent audit of Mackas Sands Sand Extraction, Lot 218 and Lot 220, Salt Ash on behalf of the NSW Department of Planning and Infrastructure.
- ✓ HSE audits of various construction projects on behalf of Transgrid.
- ✓ QHSE audits on behalf of the South Australian Department of Transport, Environment and Infrastructure.
- ✓ Environmental and Health and safety audits of road construction projects on behalf of NSW Roads and Marine Services;
- ✓ Health Safety and Environmental audits on behalf of the project verifier for the Hunter Express and Kempsey bypass projects.
- ✓ Development of OHS management system for Williams River Steel to enable certification to AS4801:2001 and Federal Safety commissioner accreditation.
- ✓ QHSE audits of projects associated with the rehabilitation of lands associated with the former BHP site in Newcastle, NSW.
- ✓ QHSE Audits of rail bridge replacement projects on behalf of Transfield Services Limited.
- ✓ Environmental audit of the Curragh North Coal Mine to assess compliance with the requirements of the EPBC conditions of approval.

2008-2010: JAMES HART CONSULTING

- ✓ Provided Quality, Environmental, and OHS auditing services to UK certification authorities.
- ✓ Conducted preliminary document review (gap analysis), certification, surveillance and recertification audits were undertaken both within the UK and Europe, and were conducted against the requirements of ISO 9001:2008, ISO 14001:2004, ISO 14001:2004RC, and OHSAS 18001:2007.
- ✓ Provided auditor verification services, verifying auditors on behalf of SAI Global throughout Europe.

2000-2004; May 2007 - Nov 2008: GHD PTY LTD

Senior Environmental Chemist

- ✓ RTA Audit Panel for conducting OH&S and environmental audits of RTA projects.
- ✓ Department of Planning approved Environmental Auditor for the Sandgate Rail Separation project.
- ✓ Co-ordination of environmental projects, and occupational hygiene and hazardous materials surveys.
- ✓ OHS, Quality and EMS coordinator for the office, with responsibility for ensuring that quality and environmental management procedures and practices were implemented and maintained.

- ✓ Management of a range of environmental monitoring projects including site contamination assessments, and quarterly monitoring programs for landfill sites.

Sep 2007 – May 2008: SAI GLOBAL

Management Systems Auditor

- ✓ Conducted Quality, OHS and Environmental management systems audits for companies certified by SAI Global against the requirements of ISO 9001:2000, ISO 14001:2004, AS/NZS 4801:2001, and OHSAS 18001. Audits conducted included preliminary document review (gap analysis), certification, surveillance and recertification audits.

Mar 2004 – Sep 2006: URS Australia

Senior Environmental Chemist

- ✓ Conducted occupational health and safety and environmental due diligence and compliance audits and inspections for clients.
- ✓ NSW Roads and Traffic Authority (RTA) panel for conducting OH&S and environmental audits.
- ✓ Audit panel as a Lead Health Safety and Environmental Auditor to conduct HSE audits of gas and electrical projects for AGL Energy Ltd.
- ✓ Department of Planning approved auditor responsible for conducting annual environmental compliance audits of Port Waratah Coal Services – Kooragang Stage Three Expansion for compliance with the department of Planning's conditions of consent.
- ✓ Co-ordination of environmental noise monitoring projects for URS in NSW
- ✓ Verifiers Environmental and OHS representative for the Nabitac Upgrade project, a major road construction project on the mid north coast of NSW.
- ✓ OHS Advisor and representative for the Newcastle Office, with responsibility for the implementation of the OHS program and coordination of OHS initiatives in the Office.

1994 – 2000: METFORD LABORATORIES

Senior Environmental Chemist

- ✓ Co-ordination of sampling programs for environmental and occupational hygiene purposes.
- ✓ Management of dust monitoring programs for various mines in the Hunter Valley.
- ✓ Management of water (surface and groundwater) monitoring programs for various mines and industry in the Hunter Valley.
- ✓ Sampling and analysis of soils, waters, and airborne contaminants.
- ✓ Management of environmental noise monitoring programs and workplace surveys for occupational noise.

1989- 2004: GENKEM PTY LTD

Plant Chemist

- ✓ Management of the laboratory operations for the site.
- ✓ Investigations into the use of metal coagulants and polyacrylamide flocculants for the clarification of process and waste waters from the mining and food processing.
- ✓ Responsible for ensuring EPA licence requirements for the site were met.

2004 – 1989: CSR WOOD PANELS

Plant Chemist

- ✓ Responsible for supervising a group of seven concerned with materials testing, press plate preparation, process material additions, effluent treatment and waste board recovery.
- ✓ Led and assisted in several investigations aimed at improving product quality, and technical investigations relating to new product development.

1977- 1982: BHP LABORATORIES

Chemistry Degree Trainee

- ✓ Employed as a Chemistry Degree Trainee and later as a chemist in the Newcastle Steelworks laboratory.
- ✓ Analysis of raw materials and products associated with the steel making process.

5 Audit Checklist

Audit Checklist

CONDITIONS OF APPROVAL – SSD-6333

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Schedule 3– Administrative Controls					
Obligation to Minimise Harm to the Environment					
1.	1	In addition to meeting the specific performance measures and criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Audit findings demonstrate the project has been carried out in general accordance with the project requirements.	C	
Terms of Approval					
2.	2	The Applicant shall carry out the development: (a) generally in accordance with the EIS; (b) in accordance with the Development Layout and Statement of Commitments; and (c) in accordance with the conditions of this consent. <i>Notes:</i> • <i>The Development Layout is shown in the figures in Appendix 1.</i>	Audit findings demonstrate the project has been carried out in general accordance with the requirements of the EIS.	C	
3.	3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.		Note	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
4.	4	The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent; (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; or (c) the implementation of any actions or measures contained in these documents.	The audit results show that the applicant had complied with the requirements of the Secretary.	C	
Limits of Approval					
5.	6	The Applicant shall not extract extractive materials below a level of 1125 m AHD.	Survey data sighted. Showed extraction to 1154.5m AHD.	C	
6.	7	Quarrying operations may take place on site until 30 August 2045	Current year 2017	Note	
7.	8	The Applicant shall not transport more than 400,000 tonnes of quarry products from the site in any calendar year.	Total tonnage for 2016 – 370800.93 Tonnes	C	
8.	9	The Applicant shall not transport more than 3,000 tonnes of quarry products from the site on any day.	Records reviewed for March 2016 (greatest monthly tonnes transported). No daily quantity greater than 3000T. Maximum quantity 2985.83T on 16/03/16. Reported that the tonnes despatched are monitored daily to ensure that daily limits are not exceeded.	C	
9.	10	Within 6 months of the date of this consent, or as otherwise agreed by the Secretary, the Applicant shall surrender the previous development consent	Surrendered 2/12/2015	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Structural Adequacy					
10.	13	The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.	No new buildings or structures erected.	NT	
Demolition					
11.	13	The Applicant shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	No demolition work had been conducted	NT	
Protection of Public Infrastructure					
12.	14	The Applicant shall: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development. Note: This condition does not apply to damage to roads caused as a result of general road usage.	No impact on public infrastructure	NT	
Operation of Plant and Equipment					
13.	15	The Applicant shall ensure that all the plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Plant and equipment maintenance records available. Cat 769D Dump Truck, Cat 345 and Cat 375, Hitachi 400 Excavator service records verified.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
GENERAL EXTRACTION AND PROCESSING PROVISIONS					
Identification of Approved Extraction Limits					
14.	17	By 30 November 2015, unless otherwise agreed with the Secretary, the Applicant shall: (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	Survey record available. Completed 29/11/15.	C	
15.	18	While quarrying operations are being carried out, the Applicant shall ensure that these boundaries are clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.	Pegs placed on boundary by surveyor to clearly identify limit of extraction	C	
Development of Contributions					
16.	19	The Applicant shall pay Council road maintenance contributions for the maintenance/repair of public roads. The contribution shall be: (a) paid at a rate of \$0.482 per tonne of extractive materials hauled from the site; (b) paid every month based on the material transported in the preceding month; and (c) indexed annually to changes in the Consumer Price Index (All Groups). <i>Notes: If the parties are not able to agree on any aspect of the road maintenance contributions, either party may refer the matter to the Secretary for resolution.</i>	Records sighted to show that monthly contributions had been paid to Oberon Council (September 2015 to September 2016)	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Schedule 3 - ENVIRONMENTAL PERFORMANCE CONDITIONS					
Noise					
17.	1	The Applicant shall comply with the operating hours set out in Table 1. <i>Note: The Applicant may carry out other activities e.g. maintenance, on the site provided that these activities are conducted in a manner that is inaudible at all privately-owned residences.</i>	Operating hours were identified in the site induction and understood by persons on site.	C	
18.	2	The following activities may be carried out on the site outside the hours specified in condition 1: (a) delivery or dispatch of materials as requested by Police or other authorities; and (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances, the Applicant shall notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.	No activities outside of normal working hours.	NT	
Noise Impact Assessment Criteria					
19.	3	The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 (Table 2: Noise criteria dB (A)) at any time on privately-owned land. Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria. However, these criteria do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria in Table 2, and the Applicant has advised the Department in writing of the terms of this agreement.	Noise monitoring data available. No exceedences of noise criteria as the result of quarrying operations. No complaints have been received. Letter sighted showing agreement from local landowners (J Hackfath and Anthony Alevras) stating they do not require noise monitoring and have no objections to Oberon Quarries seeking to modify the frequency of noise monitoring from at least every 3 months to 'on a complaints basis only'.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Operating Conditions					
20.	4	The Applicant shall: (a) implement best practice management to minimise the operational and road transportation noise of the development; (b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4); (c) carry out noise monitoring (at least every 3 months, unless otherwise approved by the Secretary) to determine whether the development is complying with the relevant conditions of this consent; and (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.	Noise monitoring data available on website. Autumn – March 2016 Winter – August 2016 Spring – October 2016 Submitted 14/03/16, approved 18/03/16 Noise monitoring not carried out at least every 3 months.	A	01
Noise Management Plan					
21.	5	The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (b) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions of this consent; (c) describe the proposed noise management system in detail; and (d) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2, and which evaluates and reports on the effectiveness of the noise management system on site.	Noise Management Plan prepared. March 2016. Noise monitoring undertaken in March, August and October 2016.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Blasting Impact Criteria					
22.	6	The Applicant shall ensure that blasting on site does not cause any exceedance of the criteria in Table 3. However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the limits in Table 3, and the Applicant has advised the Department in writing of the terms of this agreement.	Monitoring conducted by Orica Quarry Services. Blast results for 19/12/16 sighted, 7/11/16, 5/10/16, 23/08/16. All results were below the trigger levels set on the blast monitor of airblast - 100DBL and ground vibration - 0.51mm/s.	C	
Blasting Frequency					
23.	7	The Applicant may carry out a maximum of 2 blasts per week, unless an additional blast is required following a blast misfire. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site. <i>Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the quarry.</i>	4 shots in the period 23/08/16 to 19/12/16.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Operating Conditions					
24.	8	During blasting operations, the Applicant shall: (a) implement best management practice to: • protect the safety of people and livestock in areas surrounding blasting operations; • protect public or private infrastructure/property in the surrounding area from damage from blasting operations; and • minimise dust and fume emissions from blasting; (b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and (c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.	Blast management plan available and implemented. The following documentation was available for each blast: • Equipment Checklist • Blasting contractors checklist • Oberon Quarries Drilling and Blasting report • Drill and Blast Shot Plan • Quarry staff contacts list No incidents reported as a result of blasting	C	
Blast Management Plan					
25.	9	The Applicant shall prepare and implement a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions in conditions 7 and 8 above; (c) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent; (d) include community notification procedures for the blasting schedule; and (e) include a protocol for investigating and responding to complaints.	Blast Management plan prepared. 14/03/16, Reviewed 18/03/16. Further detail required by 30/05/16 Resubmitted 20/05/16. Approved 24/05/16.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Air Quality Impact Assessment Criteria					
26.	10	The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.	Dust mitigation measures had been used, including the use of water carts for dust suppression. Dust deposition monitoring was conducted, with monitoring results available for 4 sites (D1 to D4). Results show exceedances occurred in September 2015 and December 2015. Results were attributable to farming activities during the period.	C	
Operating Conditions					
27.	11	The Applicant shall: (a) implement best practice management to minimise the dust emissions of the development; (b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent; (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note under Table 4); (d) monitor and report on compliance with the relevant air quality conditions in this consent; (e) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site; and (f) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.	Water cart used to minimise dust generation within the quarry. Meteorological data provided from Borgs weather station Oberon. General controls for the management of air quality were identified in Section 5.1 of the air Quality Management Plan. No complaints received regarding dust emissions. During the site inspection, it was noted that there were no large areas of surface disturbance, and rehabilitation had commenced in some areas of the quarry.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Air Quality Management Plan					
28.	12	The Applicant shall prepare and implement an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (b) describe the measures that would be implemented to ensure compliance with the air quality criteria and operating conditions of this consent; (c) describe the proposed air quality management system; (d) include an air quality monitoring program that: • is capable of evaluating the performance of the development; • includes a protocol for determining any exceedances of the relevant conditions of consent; • effectively supports the air quality management system; and • evaluates and reports on the adequacy of the air quality management system.	Submitted 14/03/16, reviewed 18/03/16- required further detail. Resubmitted 20/05/16 and approved 24/05/16.	C	
Meteorological Monitoring					
29.	13	For the life of the development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	Meteorological data provided from Borgs weather station Oberon.	C	
SOIL AND WATER					
Water Supply					
30.	14	The Applicant shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary. <i>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.</i>	No water extracted. Water used on site is collected in the main pit and used on site.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Water Pollution					
31.	15	Unless an EPL authorises otherwise, the Applicant shall comply with Section 120 of the POEO Act.	Environmental Protection licence No 4442 issued for site	Note	
Water management Plan					
32.	16	The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared by suitably qualified person/s approved by the Secretary; (b) be prepared in consultation with the EPA and DPI-Water; (c) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (d) include a: (i) Site Water Balance that includes: • details of: ➤ sources and security of water supply; ➤ water use and management on site; ➤ any off-site water transfers; and ➤ reporting procedures. • measures that would be implemented to minimise clean water use on site; (ii) Surface Water Management Plan, that includes: • detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development; • a detailed description of the surface water management system on site including the: - clean water diversion system; - erosion and sediment controls; - dirty water management system; and - water storages; and • a program to monitor and report on: - any surface water discharges;	Water Quality Management Plan Extension provided by the Secretary for the WQMP to be provided by 31/05/16. Submitted on 2/06/16. Reviewed 1/07/16 – further information required. Resubmitted 29/07/16 and approved on 2/08/16. Water quality monitoring conducted. Surface and groundwater results do not show any adverse impact on water quality. Section 3.2.2 of the WMP describes the erosion and sediment control measures implemented for the site. While controls had been implemented, an erosion and sediment control plan, identifying the types and locations of erosion and sediment control structures was not available specifically identified/ documented.	A O	02 01
Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non- compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
		the effectiveness of the water management system; maintaining sufficient dirty water storage capacity to avoid discharges of sediment-laden water; and surface water flows and quality in local watercourses; (iii) Groundwater Management Plan, that includes: • baseline data on groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores that could be potentially affected by the development; • a program to monitor and report on groundwater inflows to the quarry pit and the impacts of the development on surrounding aquifers and privately-owned groundwater bores; and • an analysis of the monitoring results to predict long-term water levels within the quarry void; and (iv) Surface and Ground Water Contingency Strategy, that includes: • a protocol for the investigation, notification and mitigation of identified impacts on surface water flows and quality in water bodies and/or groundwater levels, yield and quality in local aquifers and privately-owned groundwater bores that could be potentially affected by the development; and • the procedures that would be followed if any unforeseen impacts are detected during the development.			
Transport					
Monitoring of Product Transport					
33.	17	The Applicant shall keep accurate records of all truck movements to and from the site (hourly, daily, and weekly, monthly and annually) and publish a summary of records on its website every 6 months.	Published on website. Data available September 2015 to December 2016 Daily records of truck movements maintained.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Operating Conditions					
34.	18	The Applicant shall ensure that: (a) all reasonable measures are taken such that laden trucks have appropriate signage, including a contact phone number, so they can be easily identified by road users; (b) all laden trucks entering or exiting the site have their loads covered; (c) all laden trucks exiting the site are cleaned of material that may fall on the road, before leaving the site; (d) during the periods 6 am to 7 am and 6 pm to 10 pm, a maximum of 4 laden vehicles per hour shall leave the site; and (e) no trucks queue at the entrance to the site before 6 am.	During site inspection, noted that some trucks did not have Oberon quarry signage on side of tray. It was reported that all Oberon Quarry trucks have signage displayed, while contractors used on an infrequent basis were not always branded. Reported that trucks are loaded the evening prior and do not return for loading before 7am. Quarry closes at 6pm daily. No loading is undertaken after 6pm. Drivers sign a code of conduct which includes acknowledgement of restrictions on truck queues and noise, covering of loads, etc. Noted that the CoC had been signed in Dec2016 and January 2017.	A	03
Further Road Maintenance and Contributions					
35.	19	Within 6 months from the date of this consent the Applicant shall provide and install "Intersection Advance" (G1-207) warning signage on the eastbound approach to the intersection of Duckmaloi Road and Titania Road.	Quarry was not aware if this requirement had been implemented	N	01

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
36.	20	Within two weeks of receiving a written request from Council, or as otherwise agreed by Council, the Applicant shall: (a) provide Council with sufficient 14/7 mm sealing aggregate for the intersections of Shooters Hill and Edith Roads; Edith and Titania Roads; and Titania and Duckmaloi Roads; and (b) provide Council with sufficient DGB 20 road base to reconstruct the pavement at the intersection of Edith and Titania Roads to a depth of 200 mm. Notes: • The minimum required quantities of materials for each intersection listed in 20(a) and 20(b) are shown in Appendix 5. • If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.	No requests have been received.	NT	
Transport Management Plan					
37.	21	The Applicant shall prepare and implement a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (b) include a Drivers' Code of Conduct to minimise the impacts of development-related trucks on local residences and road users; and (c) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct.	Transport Management Plan prepared for the project. Submitted 14/03/16. Final 18 March 2016 Drivers code of conduct included in Appendix 1.	C	
LANDSCAPE AND REHABILITATION					
Rehabilitation Objectives					
38.	22	The Applicant shall rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy set out in the EIS and the conceptual final landform shown in Appendix 3 and must comply with the objectives in Table 5.		Note	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Progressive Rehabilitation					
39.	23	The Applicant shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation. <i>Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.</i>	The Rehabilitation Strategy for the next 3 years focusses on on-going development of the quarrying operations and management of weed and feral species. Noted that during the site inspection areas of rehabilitation were sighted.	C	
Landscape and Rehabilitation Management Plan					
40.	24	The Applicant shall prepare and implement a Landscape and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (b) provide details of the conceptual final landform and associated land uses for the site; (c) describe the short, medium and long-term measures that would be implemented to ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent; (d) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following the 3 years covered by the initial approval of the plan) including the procedures to be implemented for: • maximising the salvage of environmental resources within the approved disturbance area for beneficial reuse; • protecting vegetation and fauna habitat outside the approved disturbance area on-site; • minimising the impacts on native fauna; • landscaping the site to minimise visual and lighting impacts; • reviewing improved pasture species and application rates;	Landscape and Rehabilitation Management Plan prepared for the project. Submitted 14/03/16. Reviewed 18/03/16. Further information required by 30/05/16. Resubmitted 20/05/16. Approved 24/05/16	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
		- controlling weeds and feral pests; - controlling erosion; - controlling access; and - bushfire management; (e) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; (f) identify the potential risks to the successful rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate these risks; and (g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.			
Rehabilitation Bond					
41.	25	Within 6 months of the approval of the Landscape and Rehabilitation Management Plan, the Applicant shall lodge a Rehabilitation Bond with the Department to ensure that the rehabilitation of the site is implemented in accordance with the performance and completion criteria set out in the plan and relevant conditions of this consent. The sum of the bond shall be determined by: (a) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and (b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary. <i>Notes:</i> <i>If capital and other expenditure required by the Landscape and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.</i> <i>If the rehabilitation of the site is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.</i>	Due November 2016. DP&E was notified that a Rehabilitation bond was being prepared, but had not been submitted at the time of audit.	A	04

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
42.	26	Within 3 months of each Independent Environmental Audit (see condition 10 of Schedule 5), the Applicant shall review, and if necessary revise, the sum of the Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the: (a) effects of inflation; (b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and (c) performance of the implementation of rehabilitation of the site to date.	This is the initial Independent Environmental Audit	NT	
Visual					
43.	27	The Applicant shall implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary.	Addressed in the Landscape and Rehabilitation Plan (Section 5.3.3). The location of the quarry minimises the potential visual and lighting offsite impact.	C	
Waste					
44.	28	The Applicant shall: (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council; (b) minimise the waste generated by the development; (c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and (d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Site processes for the management of waste have not been documented in management plans. Pump-out system installed for sewage management. Waste management not included in the 2015 Annual Review (14/09/15 to 31/12/15).	O A	02 05
45.	29	Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.	Waste not received at the site	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Liquid Storage					
46.	30	The Applicant shall ensure that all tanks and similar facilities for storage of liquids (other than for water) are protected by appropriate bunding, which must exceed 110% of the stored volume of the liquid.	Storage tanks sighted had been appropriately bunded (storage volume of bunding not verified).	C	
Dangerous Goods					
47.	31	The Applicant shall ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	WHS Inventory of Safety Data Sheets available – 16/12/16.	C	
Bushfire					
48.	32	The Applicant shall: (a) ensure that the development is suitably equipped to respond to any fires on site; and (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	Emergency Management Plan prepared which includes two qualified staff on site. Emergency Management Plan sent to applicable authorities.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Schedule 4 –Additional Procedures					
NOTIFICATION OF LANDOWNERS					
49.	1	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in Schedule 3, the Applicant shall notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and (b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant shall send a copy of the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned).	No exceedances have been reported which require notification to landowners.	NT	
INDEPENDENT REVIEW					
50.	2	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant shall: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and • if the development is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	No independent review has been requested	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Schedule 5- Environmental Management, Reporting and Auditing					
ENVIRONMENTAL MANAGEMENT STRATEGY					
51.	1	The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent; (b) provide the strategic framework for environmental management of the development; (c) identify the statutory approvals that apply to the development; (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; (e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the development; • receive, record, handle and respond to complaints; • resolve any disputes that may arise during the course of the development; • respond to any non-compliance; • respond to emergencies; and (f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and A clear plan depicting all the monitoring to be carried out under the conditions of this consent	Environmental Management Strategy Submitted 14/03/16. Reviewed 18/03/16 required further information by 30/05/16. Resubmitted 20/05/16 approved 24/05/16. Updated to include reference to the Emergency Management Plan and resubmitted 13/12/16. Approved 20/12/16.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Management Plan Requirements					
	2	The Applicant shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data; (b) a description of: • statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; and • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; (d) a program to monitor and report on the: • impacts and environmental performance of the development; and • effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant performance of the development over time; (g) a protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; - and (h) a protocol impact assessment criteria as quickly as possible; (f) a program to investigate and implement ways to improve the environmental for periodic review of the plan. <i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i>	Management plans as required by the conditions of consent have been developed and have been approved by the department.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Application of Existing Management Plans					
52.	3	Prior to the approval of management plans under this consent, the Applicant shall manage development undertaken pursuant to this consent in accordance with any equivalent or similar management plan/s required under development consent DA 92/164.		Note	
Staged Submission of Strategies, Plans or Programs					
53.	4	With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis. <i>Note: If the submission of any strategy, plan or program is to be staged; then the Applicant must ensure that the existing strategy, plan or program clearly describes the specific stage to which the strategy, plan or program</i>		Note	
Revision of Strategies, Plans and Programs					
54.	5	Within 3 months of the submission of an: (a) incident report under condition 7 below; (b) annual review under condition 9 below; (c) audit report under condition 10 below; and (d) any modifications to this consent, the Applicant shall review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary. <i>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.</i>	No environmental incidents have occurred. Annual review for September to December 2015 submitted in March 2016. Plans had been developed in March 2016.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Adaptive Management					
55.	6	The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.	No reported exceedances of criteria or performance measures	NT	
REPORTING					
Incident Reporting					
56.	7	The Applicant shall immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	No incidents have occurred.	NT	
Regular Reporting					
57.	8	The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Environmental performance monitoring data is available on the company website EPL report provides surface and groundwater monitoring data and blast monitoring data. Noise reports and Product Transport Summary attached separately.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
ANNUAL REVIEW					
58.	9	By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year; (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this consent; • monitoring results of previous years; and • relevant predictions in the EIS; (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance. By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year; (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this consent; • monitoring results of previous years; and • relevant predictions in the EIS; (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the development; (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies;	Annual review completed and submitted 31/03/16	C	
Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			

		and (f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development. (d) identify any trends in the monitoring data over the life of the development; (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.			
INDEPENDENT ENVIRONMENTAL AUDIT					
59.	10	Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the development and whether it is complying with the relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals); Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and (e) Recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment,	Initial independent environmental audit conducted 12/01/2017. Due prior to 14/09/16.	A	06
Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			

		strategy, plan or program required under the abovementioned approvals. Note: This audit team requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and (e) Recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals. Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.			
60.	11	Within 6 weeks of completion of this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	This s the initial independent environmental audit of the project	NT	

ACCESS TO INFORMATION

61.	12	Within 6 months of the date of this consent, the Applicant shall: (a) make the following information publicly available on its website: • the documents listed in condition 2 of Schedule 2; • current statutory approvals for the development; • all approved strategies, plans and programs required under the conditions of this consent; • a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; • a complaints register, updated monthly; • the annual reviews of the development; • any independent environmental audit, and the Applicant's response to the recommendations in any audit; and • any other matter required by the Secretary; and (b) keep this information up-to-date, to the satisfaction of the Secretary.	The following information was available on the company website: • Development Consent conditions; • EPL Licence; • Pollution Incident Response Management Plan; • Noise Management Plan; • Blast Management Plan; • Air Quality Management Plan; • Water Management Plan; • Traffic Management Plan; • Landscape and Rehabilitation Management Plan; • Environmental Management Strategy; • Noise Monitoring results – July 2015, Aug 2015, Mar 2016, Oct 2016. • Annual Review 2015; • EPL returns for years 2012-2016 inclusive.	C	
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AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
ENVIRONMENTAL PROTECTION LICENCE 4442					
62.	A.1.1	Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. Extractive Activities Land-based extractive activity > 100000 - 500000 T extracted, processed or stored	Total tonnage for 2016 – 370800.93 Tonnes	C	
63.	M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) Produced in a legible form to any authorised officer of the EPA who asks to see them.	Records were available on site in hard and electronic format	C	
64.	M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Sampling records included required information	C	
65.	P.1.1	Dust monitoring conducted for 4 sites from D1 to D4	Records available for the 4 sites as required	C	
66.	M2.3	Water monitoring conducted monthly at Point 5 and 6 for: Oil and Grease / PH / Total suspended solids	Licence returns include records of water quality monitoring at the required sites.	C	
67.	M4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Complaints register maintained. No complaints had been received for the development	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
68.	M4.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Complaints register form includes facility for required information. Updated at time of audit	C	
69.	M5.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Telephone complaints line available.	C	
70.	M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Communicated on Website	C	
71.	M5.3	The preceding two conditions do not apply until 3 months after: a) the date of the issue of this licence or b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.		Note	
Reporting Conditions					
Annual Return Documents					
72.	R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	Annual returns available for 2012, 2013, 2014, 2015, 2016.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
73.	R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. <i>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</i>	Annual returns available for 2012, 2013, 2014, 2015, 2016.	C	
74.	R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. <i>Note: An application to transfer a licence must be made in the approved form for this purpose.</i>	Licence has not been transferred	NT	
75.	R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Licence has not been surrendered	NT	
76.	R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Annual report for 2016 sighted. Due to be submitted 60 days from 11/01/17. Annual Return for 2015-2016 submitted 9/03/16. Submitted by Umwelt on behalf of Oberon Quarries Email from EPA sighted.	C	
77.	R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA	Copy available on site and on website	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
78.	R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Signed by Neil Hargraves – Director	C	
79.	R1.8	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.		Note	
80.	R2.1	Notifications must be made by telephoning the Environment Line service on 131 555. <i>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</i>		Note	
81.	R3.2	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment(whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	No requested for a written report of an event have been received.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
82.	R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	No requested for a written report of an event have been received.	NT	
83.	R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	No requested for a written report of an event have been received.	NT	
84.	G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Copy available on site. Displayed in office and available in project files.	C	
85.	G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Licence was readily available on site.	C	
86.	G1.3	The licence must be available for inspection by any employee or agent of the license working at the premises.	Licence was readily available on site.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
BLAST MANAGEMENT PLAN					
Regulatory Requirements					
Development Consent					
Statement of Commitments					
87.	2.2	The Statement of Commitments relevant to the BMP, and where they are addressed in this document, is detailed in Table 2.2.		Note	
Blasting Criteria					
88.	4.0	The airblast overpressure level from blasting operations must not exceed[1]: • 115 decibel (dB) (Lin Peak) for more than five per cent of the total number of blasts over each reporting period • 120 dB (Lin Peak) at any time. The ground vibration peak particle velocity from blasting operations must not exceed: • 5 millimetres per second (mm/s) for more than five per cent of the total number of blasts over each reporting period • 10 mm/s at any time • at any point within one metre of any affected residential boundary or other noise sensitive area in the vicinity of the plant.	Monitoring conducted by Orica Quarry Services. Blast results for 19/12/16 sighted, 7/11/16, 5/10/16, 23/08/16. All results were below the trigger levels set on the blast monitor of airblast - 100DBL and ground vibration - 0.51mm/s.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Blast Management Controls					
89.	6.2	Control measures that have been considered as a standard part of the operation of the quarry and incorporated include: • All relevant quarry personnel will be trained on the environmental obligations in relation to blasting controls. • The surrounding landowners and Council will be notified prior to undertaking a blast. • The date, location of blast holes and quantity of explosive used each day will be documented. • Blasts will be designed to comply with overpressure and vibration criteria. • Monitoring will be undertaken at the nearest private residence and/or other sensitive locations (as required) to verify compliance with the relevant criteria. • The maximum number of holes to be detonated in a blast is 150. • Sufficient distance will be maintained between the blast hole and the quarry face. • Appropriate delays will be used. • All blasts will be monitored and recorded. • Blast monitoring data will be used on an ongoing basis to further refine the blast design and management. • Blast design and blast management procedures will be periodically reviewed to evaluate performance and identify corrective action, if required. • Blasting will be undertaken between 9.00 am and 5.00 pm, Monday to Saturday inclusive, except under apparent temperature inversions conditions when blasting shall only occur between 11.00 am and 1.00 pm Monday to Saturday. No blasting is undertaken on Sundays or public holidays, without approval of the Secretary. • Oberon Quarries will undertake consultation with residents whose properties are adjacent to the development, with a view to determining the most appropriate blasting times for the development. The applicant shall, in accordance with the requirements of the council, give notice of proposed blasting times. • Not blast more than twice a week unless an additional blast is required following a blast misfire. • Design all blasts to minimise airblast overpressure and vibration using the	Blasting Contractor – Orica engaged to design and conduct blast monitoring. Blast monitoring conducted at the nearest residence (although it does not specifically identify the location). Records of blasting maintained including: Blasting contractors checklist; Oberon Quarries Drilling and Blasting Report; Meteorological data; Blast records show compliance with overpressure and vibration criteria; Monitoring conducted at nearest residence; Record for 19/12/16 showed 101 holes; Records of notification to Council and EPA sighted for 19/12/16. Monitoring results showed blast criteria had not been exceeded.	O	03
Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			Page 48

		NONEL system of equivalent. • Design all blasts based on the results of monitored blasts and modelled predictions in Table 3.1. This will minimise airblast overpressure and vibration such that any one blast has less than a five per cent probability of exceeding airblast overpressure and vibration goals as set by the Environment Protection Authority (EPA) for affected property. • EPL noise limits of 115 dB/120 dB are likely to be exceeded. • Undertake detailed designs for each blast in order to maximise the blast efficiency, minimise dust, fumes, ground vibration and airblast, the potential for flyrock and to ensure compliance with site specific blasting conditions. • Oberon Quarries undertake a pre-blast meteorological assessment in order to confirm the applicability of blasting during the proposed blasting times. The pre-blast meteorological assessment will inform the likelihood of potential blast impacts as a result of forecasted adverse wind inversion weather conditions. • Monitor blasts as quarrying progresses utilising the adaptive management techniques described in Section 8.2.1, so that blast prediction site laws can be further refined and future blast designs can be optimised based on more detailed site information. By adopting this approach, in conjunction with the adoption of improved blasting products and methods, as they are introduced, it is anticipated that blast emissions criteria can be met without imposing any significant constraints on blast designs throughout the operation of Oberon Quarries. Oberon Quarries will design all blasts to comply with the project specific vibration and airblast criteria and to protect public and private infrastructure and property from any damage as a result of flyrock. Future updates of this plan will include any additional management requirements, taking into account the results of blast monitoring undertaken. • The blasting site design will be regularly reviewed using site-specific blast monitoring data. This process will provide Oberon Quarries with flexibility to design blasts to best meet production requirements while complying with relevant criteria for residential receivers. • All blast configurations and delays used will be thoroughly checked by the Quarry Manager before the blasts are detonated.			
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AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
90.	6.3	Blast fume development and migration will be observed and managed. With regard to Blast Fume Management, the following management controls include: • use of appropriately qualified personnel. This includes an assessment of whether the contractor is appropriately trained to undertake the drill and blast works • use of appropriate blast design as approved by the site drill and blast coordinator or his or her delegate • appropriate dewatering of drill hole prior to loading • minimisation of 'sleep time' between loading and blasting, where practical • prior to blasting, a visual weather assessment of meteorological conditions will be undertaken by the Quarry Manager to confirm that weather conditions are not conducive to fume migration • in the event that blast fume generated by the blast, an investigation into the causes of the blast fume will be undertaken (refer to Section 6.2).	Blast monitoring records available. Specialist blasting organisation engaged to undertake blasting on site.	C	
Blast Monitoring					
91.	7.0	Oberon Quarry will monitor blasts as quarrying progresses in accordance with the existing blast monitoring system so that blast performance and design can be further refined and future blast designs can be optimised based on more detailed site information. Blast monitoring for airblast and vibration will continue to be undertaken at the locations shown in Figure 3.1	Blast observed by Managing Director	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Reporting					
External Reporting					
92.	8.1	A summary of blast monitoring results will be provided in the Oberon Quarry Annual Review in accordance with Condition 9 of Schedule 5 of the Development Consent.	Summary provided in Section 6.3. 2 blasts conducted during the reporting period.	C	
93.	8.2	Exceedances of blast criteria will be classified as environmental incidents and will be managed in accordance with the Oberon Quarry Environmental Management Strategy (EMS) which includes a procedure for the management of environmental incidents and community complaints. In accordance with this procedure, all environmental incidents will be investigated to a level commensurate to their risk level by the Oberon Quarry Manager in consultation with environmental personnel from Oberon Quarries. Additional controls will be implemented where required, based on the outcomes of the investigation. All environmental incidents/exceedances will be reported annually in the Annual Review.	All blast results have been below the blast limit of 115dB (Linear Peak) and ground vibration of 5 mm/s.	NT	
94.	8.2.1	In accordance with Condition 6 of Schedule 5 of the Development Consent, Oberon Quarries will assess and manage blast related risks to ensure compliance with the criteria outlined in Section 4.0.	Results show that Oberon Quarries have managed blast related risks to ensure compliance	C	
95.	8.3	Complaints relating to blasting at Oberon Quarry are to be managed in accordance with the requirements of the Oberon Quarry EMS. A summary of complaints will be available to regulatory authorities on request, published on the Oberon Quarry website and provided in the Annual Review.	No complaints have been received	NT	
Review and Improvement					
96.	9.0	Ongoing monitoring and review on the performance and implementation of this BMP will be undertaken in accordance with Oberon Quarry Environmental Management Strategy.	No significant issues which have required review of the BMP.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
AIR QUALITY MANAGEMENT PLAN					
Regulatory Requirements					
Development Consent					
97.	2.2	The statement of commitments relevant to the AQMP, and where they are addressed in this document, is detailed in Table 2.2.		Note	
Dust Concentration					
98.	3.1.1	From the available monitoring data, the following background concentrations have been applied to the Project: • annual average TSP of 90 µg/m ³ • 24-hour average PM ₁₀ of 50 µg/m ³ • annual average PM ₁₀ of 30 µg/m ³ • annual average dust deposition of 4 g/m ² /month.		Note	
Air Quality Monitoring					
99.	6.0	Air quality monitoring requirements for the operation are provided in Conditions 11 (b) and 12 (d) of Schedule 3 of the Development Consent. Air quality monitoring will be undertaken in accordance with Condition 10 of the Development Consent and in accordance with the requirements of EPL 4442. This includes the requirement to measure the dust generated by the development in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (EPA 2007).	Air quality monitoring has been conducted in accordance with the approved Air Quality Management Plan and EPL. Dust deposition monitoring conducted at 4 locations in accordance with Environmental Protection Licence. TSP and PM ₁₀ has been conducted at this stage. The AQMP requires TSP and PM ₁₀ if a complaint regarding dust is received.	C	
100.	6.2	Oberon Quarries will continue to implement the existing air quality monitoring program which comprises monthly monitoring of dust deposition levels at four locations (refer to Figure 6.1) as an indicator of overall air quality performance of quarry operations.	Dust deposition monitoring conducted monthly at 4 locations	C	

Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required	Page 52
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AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Reporting					
External Reporting					
101.	7.1	A summary of air quality monitoring results will be provided in the Oberon Quarry Annual Review. The following information will be reported in the Annual Review in accordance with Condition 9 of Schedule 5 of the Development Consent.	Summary of dust deposition monitoring included in section 6.2 of the Annual Review.	C	
102.	7.2	Exceedances of air quality criteria should they occur, will be classified as environmental incidents and will be managed in accordance with the Oberon Quarry Environmental Management Strategy (EMS) which includes a procedure for the management of environmental incidents and community complaints.	One dust deposition recording greater than 4g/m ² /mth which was attributed to activities not undertaken by Oberon Quarries	C	
103.	7.2.1	In accordance with Condition 6 of Schedule 5 of the Development Consent, Oberon Quarries will assess and manage air quality related risks to ensure compliance with the criteria outlined in Section 4.0.	Monthly dust deposition results obtained and reviewed.	C	
104.	7.3	Complaints relating to air quality from Oberon Quarry are to be managed in accordance with the requirements of the Oberon Quarry EMS. A summary of will be available to regulatory authorities on request, published on the Oberon Quarry website and provided in the Annual Review.	No dust related complaints had been received	NT	
105.	8.0	Ongoing monitoring and review on the performance and implementation of this AQMP will be undertaken in accordance with Oberon Quarry EMS.	AQMP approved in May 2016. No issues have arisen which would trigger a review of the AQMP.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
WATER MANAGEMENT PLAN					
Regulatory Requirements					
Development Consent					
106.	2.2	The Statement of Commitments relevant to the WMP, and where they are addressed in this document, is detailed in Table 2.2.		Note	
Water Management Systems					
107.	3.3	Surface water monitoring is required to be undertaken monthly as per Condition M2.3 of EPL 4442. In accordance with EPL Condition M2.3 and Development Consent (SSD_6333), water quality in Racecourse Creek will continue to be monitored both upstream and downstream of the quarry at two sites (refer to Figure 3.2) unless otherwise agreed with DP&E and EPA: W1 – upstream of the quarry W2 – downstream of the quarry.	Surface water quality monitoring records available to show that monthly monitoring has occurred at the upstream and downstream locations.	C	
108.	3.4	Monitoring results will be compared against historical data (refer to Section 3.1) to determine any potential trends in surface water quality and as such potential impacts on surface water resources. The recorded trends in surface water quality will be reported in the Oberon Quarry Annual Review. If water monitoring indicates water quality is trending outside of the range of values recorded in Racecourse Creek since 1996, the cause of these changes to water quality will be explored and reported on.	Surface water results included in Section 7.1 of the WMP. While some results were recorded which were not consistent with historical data, these results were attributed to non-quarry related activities. No trends have been identified.	C	
109.	4.3	Water use including the extraction from Racecourse Creek and management of water consumption will be reported in the Oberon Quarry Annual Review. Monitoring results from W1 and W2 will be compared against historical data (refer to Section 3.1) to determine any potential trends in surface water quality and as such potential impacts. This monitoring program is subject to change if an EPL variation is granted (refer to Section 3.3). The recorded trends in surface water quality will be reported in the Oberon Quarry Annual Review (refer to Section 6.1).	Section 7.1.1 of the Annual Review discusses water take, but does not identify volumes extracted from Racecourse Creek. It was reported that all water was sourced from within the quarry area. No extraction of water occurred.	A	07

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
110.	4.4	Any opportunities to reduce clean water used on site will be reported in the Annual Review.	All water was sourced from with the quarry area	NT	
111.	5.2	Groundwater will be analysed for pH and conductivity. Monitoring results will be compared against historical data (refer to Section 5.1) to determine any potential trends in groundwater quality and as such potential impacts on groundwater resources. The recorded trends in groundwater quality will be reported in the Oberon Quarry Annual Review (refer to Section 6.1).	Groundwater monitoring included in Section 7.2 of the Annual Review. No significant trends were identified	C	
Reporting					
External Reporting					
112.	6.1	A summary of surface and groundwater monitoring results will be provided in the Oberon Quarry Annual Review. The following information will be reported in the Annual Review in accordance with Condition 9 of Schedule 5 of the Development Consent.	Included in Section 7 of the Annual Review	C	
113.	6.2	Surface and groundwater trends will be monitored over the life of the Project. If a monitoring result is obtained outside of the trigger levels outlined in Sections 3.4 and 5.3, the result will be treated as environmental incident and will be managed in accordance with the Oberon Quarry Environmental Management Strategy (EMS) which includes a procedure for the management of environmental incidents and community complaints.	Surface and ground water monitoring undertaken and reported. No trends or results outside of the trigger levels have been identified	C	
114.	6.3	Complaints relating to water quality from Oberon Quarry are to be managed in accordance with the requirements of the Oberon Quarry EMS. A summary of complaints will be available to regulatory authorities on request, published on the Oberon Quarry website and provided in the Annual Review.	No complaints have been received	NT	
115.	6.4	Oberon Quarries will develop a PIRMP. This document will detail the procedures for notification of pollution incidents resulting in or having the potential to cause material harm to the environment.	Pollution Incident Response Management Plan prepared (March 2015)	Y	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
116.	7.0	In the event of unforeseen impacts associated with surface water or groundwater at Oberon Quarry, the following protocol will be implemented: • conduct a preliminary review of the nature of the impact, including – any relevant monitoring data – current quarry activities and land use practices • commission an investigation into the impact to confirm cause and effect and consider relevant options for amelioration of impact(s) as appropriate • prepare an action plan in consultation with the appropriate regulatory agency • mitigate causal factors where possible • implement additional monitoring as necessary to measure the effectiveness of the controls implemented.	No unforeseen impacts associated with surface water or groundwater have been identified.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Review and Improvements					
117.	8.0	Ongoing monitoring and review on the performance and implementation of this WMP will be undertaken in accordance with Oberon Quarry EMS. In accordance with Condition 5 of Schedule 5, Oberon Quarries shall review, and if necessary revise, the strategies, plans, and programs required under Development Consent to the satisfaction of Secretary, within three months of the submission of an: (a) incident report under condition 7 below; (b) annual review under condition 9 below; (c) audit report under condition 10 below; and (d) any modifications of this consent, the Applicant shall review the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary. Oberon Quarry Manager and Oberon Quarries environmental personnel will review and if necessary, revise this WMP and resubmit to DP&E every year or earlier if required. Any changes made to the WMP as a result of the review will be made in consultation with relevant stakeholders. A copy of the revised WMP will be supplied to the Secretary for approval. The WMP will reflect changes in environmental requirements, technology and operational procedures. Updated versions of the approved WMP will be made publicly available on the Oberon Quarries website. Continuous improvement will also occur through independent review as a result of the three-yearly compliance audit, which is required in accordance with Condition 10 of Schedule 5 of the Development Consent.	No water quality incidents had been reported.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
LANDSCAPE AND REHABILITATION MANAGEMENT PLAN					
Regulatory Requirements					
Development Consent					
118.	2.2	The Statement of Commitments relevant to the NMP, and where they are addressed in this document, is detailed in Table 2.2.		Note	
Rehabilitation Objectives and Criteria					
	4.2	Rehabilitation and closure criteria will be utilised to demonstrate achievement of rehabilitation objectives. The rehabilitation undertaken on the site will be signed off by a suitably qualified expert to the satisfaction of the Secretary. The preliminary closure and rehabilitation criteria for the Quarry are outlined in Table 4.2. The preliminary rehabilitation and closure criteria will be reviewed and revised throughout the life of the quarry and used as the basis for further refinement following the commencement of rehabilitation activities; consideration of the results of rehabilitation monitoring programs; and consideration of any stakeholder feedback	No significant rehabilitation had occurred.	NT	
119.	4.3	A detailed Quarry Closure Plan will be completed approximately three years prior to closure. In preparation of this Closure Plan, Oberon Quarries will investigate the potential for other sustainable and economically productive post-closure land uses in consideration of the local and regional land use strategies that may have further evolved towards the end of the quarry life. Oberon Quarries will consult with relevant stakeholders including Oberon Council and the NSW DP&E in regards to the suitability of the proposed final land use as part of the development of the Quarry Closure Plan.		NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Rehabilitation and Landscape Management Plan					
120.	5.0	Oberon Quarries is committed to implementing reasonable and feasible rehabilitation and biodiversity measures. A range of short, medium and long-term management controls will be implemented throughout the life of the operation to achieve ongoing mitigation of potential impacts on remnant vegetation and habitat disturbance. These specific management controls are detailed further in this section. In the first instance, to mitigate impacts to potential sensitive areas, where practicable, impacts on these areas will be avoided. Impacts will be avoided through the use of existing access tracks and planning of disturbance activities to avoid treed areas. However, where impacts cannot be avoided, the following sections detail the process to be implemented to manage potential impacts to identified ecological values. Progressive rehabilitation and revegetation of the post-quarry area will be conducted over the life of the operations and as quarrying operations on the second bench allow. The objective is to create a stable final landform within the quarry pit consisting of self-sustaining vegetation communities characteristic of the pre quarry environment. With regard to clearance activities, vegetation clearing works will be required as a result of the continued operations at Oberon Quarry. All clearing activities will be undertaken in accordance with the procedure identified in Section 5.1.	The Rehabilitation Strategy for the next 3 years focusses on on-going development of the quarrying operations and management of weed and feral species. Noted that during the site inspection areas of rehabilitation were sighted.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
121.	5.1.1	The clearing of vegetation will be undertaken in accordance with the following procedure: • all non-habitat trees will be cleared first, taking care to avoid all marked habitat trees • within one to two days following the clearing of non-habitat trees, habitat trees will be cleared in the presence of a suitably qualified person. Before clearing, the trunk of the hollow-bearing tree will be shaken vigorously with heavy machinery then shaking will be paused for 30 seconds to allow any fauna present to escape, prior to felling of the tree. The machinery operator will then push the tree over as slowly as possible, so as to minimise the intensity of impact when hitting the ground • once the tree has been felled, the qualified person will inspect the tree (particularly tree hollows) for signs of any trapped or injured fauna. Where necessary, a spotlight will be used to inspect deep hollows • any injured fauna will be carefully captured by the qualified and experienced person, and taken to a wildlife carer or veterinary clinic • cleared vegetation is proposed to be either mulched or placed on rehabilitation areas to assist in habitat re-establishment • minimising the extent of vegetation clearance to that associated with the next blast area.	No clearing had occurred to date	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
122.	5.2.1	A weed control program will be implemented to limit the spread and colonisation of noxious and environmental weeds at the Oberon Quarry, and includes: • regular inspections of the Quarry area to clarify any potential weed infestations • the implementation of weed management measures as required including hand removal, mechanical removal and application of approved herbicides (in accordance with the Pesticides Act 1999) in authorised areas when favourable conditions prevail • control of noxious weeds in accordance with the relevant legislation • monitoring and inspections of areas to assess the effectiveness of the weed control program and to understand any requirement for further work • ongoing consultation with the relevant authorities, as required, regarding weed listings, weed occurrence and management technologies. Chemicals to be used on site for the purposes of weed control will be evaluated by review of their Material Safety Data Sheet and chemical label to determine their registration for control of target species, as well as the safety and environmental requirements during their use. Chemical spraying will be undertaken in accordance with the Pesticides Act 1999. A summary of the weed management activities undertaken on site will be reported in the Annual Review.	Provided to the Quarry by the Land owner. Identified what weeds were on site and potential chemicals to control the weeds. Note: Plan requires regular inspections of the site for weeds. Reported that inspection are conducted by the Landowner – Barry Lang. Weed monitoring form completed 11/01/17. Annual review includes commentary on weed management	C	
123.		Ongoing feral animal control program will include inspections for the presence of significant populations of feral fauna species. Feral animal control programs will be completed as required. These programs typically consist of feral animal baiting. The details of feral animal sightings, control actions and the effectiveness of these control strategies will be reported in the Annual Review.	No baiting had been required at this stage. Potential for foxes to be in the area.	C	
124.	5.2.3	The erosion and sediment control measures that will be implemented to minimise risks associated with potential erosion and sediment impacts will be undertaken in accordance with the Oberon Quarry Water Management Plan.	Section 3.2.2 of the WMP describes the erosion and sediment control measures implemented for the site. Appropriate erosion and sediment controls had been implemented on site.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
125.	5.2.4	As part of ongoing management of the site the following will be undertaken: - the extraction area will be fenced and vehicular access to the extraction area will be restricted for appropriate vehicles only - existing quarry site boundary fencing will be maintained - the entrance gate to the site will be locked at night to prevent access during non-operational periods and opened by the Quarry Manager or delegate at 5.30 am.	Fencing and gates were provided and maintained. Gates were reported to be locked at night (locks were provided on gate).	C	
126.	5.3.1	Where feasible, the salvage and relocation of hollow logs, fallen timber and boulders will be undertaken to augment habitat complexity within any areas to be rehabilitated (if this area has low occurrences of such habitat resources). The purpose of this will be to increase habitat complexity in these areas, to make them more habitable for native species. Habitat features suitable for salvage will be identified and marked in the field as part of pre-clearance surveys. The procedure for salvaging and reinstating habitat features is as follows: - salvage hollow bearing trees identified as part of the pre-clearance surveys, where practical and safe to do so - hollow bearing trees can be stockpiled in unused areas, if necessary, until able to be reinstated - identify suitable areas to reinstate hollow bearing trees - carefully reinstate hollow bearing trees to identified area - hollow logs can be placed in small piles to increase habitat complexity, while others can be placed individually in post-quarrying rehabilitation areas.	No clearing had occurred	NT	
127.	5.3.2	Vegetation clearance associated with the Oberon Quarry will be undertaken in accordance with Condition 24 (d) of DA SSD_6333. Pre-clearance surveys will be undertaken prior to any vegetation being cleared during construction activities (refer to Section 5.1). The disturbance area will be demarcated for the duration of the Project to ensure that only areas within the approved maximum disturbance area.	No clearing had occurred	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
128.	5.3.3	In accordance with Condition 27 of Schedule 3 of the Development Consent, Oberon Quarry will implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development. Where practical, this may include: • minimising night lighting impacts on the surrounding community by ensuring that lighting plants are positioned such that lighting is directed towards work areas and not towards private residences • all buildings and infrastructure potentially visible to the public to be coloured in suitable natural tones • progressive rehabilitation of disturbed areas to reduce visual impacts.	Quarry is in a remote location and is unlikely to result in visual or lighting impact on the surrounding community.	NT	
129.	5.3.4	Rehabilitation will be reviewed and updated as necessary at least 2 years prior to any planned or notified closure of the quarry. Progressive rehabilitation, both completed and planned works, will be reported in the Annual Review. Planning details for final landform and decommissioning will be submitted to planning and other relevant stakeholders closer to the end of the life of the quarry operations. Pasture species to be planted and sowing rates as specified by the land holder are provided in Table 5.1. Maintenance of rehabilitated areas will be undertaken until a stable vegetative cover is achieved. If pasture establishment is unsuccessful, improved pasture species and application rates will be reviewed as necessary in consultation with the land holder and relevant stakeholders.		NT	
130.	6.0	During the next three years, the primary rehabilitation activities within Oberon Quarry will involve ongoing development of quarrying areas and control of weed and feral species. The objective will be to undertake pre-disturbance activities that aim to minimise the ecological impacts of the quarrying operation as well as commence rehabilitation as soon as practical behind the quarrying activities so as to minimise the extent of disturbance on site.		Note	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Rehabilitation Monitoring					
131.	7.1	This monitoring will be undertaken every two years, however, where results are showing negligible change, the frequency of monitoring may be reduced in consultation with the DP&E. The monitoring approach will involve surveys at permanent reference plots. Photo monitoring points will be established within each of the permanent reference plots, to enable a visual assessment of changes over time. The monitoring surveys will typically assess and systematically record the following vegetation characteristics: • floristic composition (including cover and abundance of species) and structure • general health of vegetation • evidence of natural regeneration • occurrence and abundance of weed species • presence of threatened or other significant species • signs of disturbance, either by stock, feral animals or humans • any observable impacts of the Quarry, such as the effectiveness of fencing and weed control actions.	Initial inspections due in 12 months.	NT	

132.	7.2	Annual inspections of rehabilitated areas (or other frequency as agreed with the DP&E) will be undertaken over the life of the quarrying operations to assess: • soil conditions and erosion (i.e. stability) • drainage and sediment control structures • runoff water quality • germination rates • plant health • weed infestation. This will be done by visual inspection and photographing of rehabilitation areas. Water quality of runoff from the quarry disturbance area will be monitored in accordance with procedures set out in the Oberon Quarry Water Management Plan. Outcomes of the rehabilitation inspections will be recorded and any required management actions that are identified as part of the inspection, are to be implemented within one month of issue identification. Where necessary, rehabilitation and revegetation procedures will be amended accordingly with the aim of continually improving standards. The results of the rehabilitation inspections will be compared with the rehabilitation objectives and performance indicators. Dependent upon the outcomes of the rehabilitation inspection as outlined above, the scope of the rehabilitation care and maintenance phase may include the following: • re-seeding/planting of rehabilitation areas that may have failed • weed and feral animal control • fire management • additional watering requirements for dry areas • thinning of colonising species to reduce competition, if required • erosion control works • maintenance fertilising • repair of fence lines, access tracks and other general related land management activities. It is envisaged that this program will be continued as required until it can be demonstrated that the rehabilitation of Oberon Quarry has satisfied the closure criteria.	No areas of permanent rehabilitation have been completed.	NT	
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AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
133.	7.3	In the event that threatened species are identified at Oberon Quarry the monitoring program will incorporate surveys to adequately assess and monitor these species.	No threatened species have been identified	NT	
134.	7.4	Oberon Quarries will record the details of each rehabilitation and revegetation campaign so that they are available for later interpretation of rehabilitation monitoring results. This will allow the continual improvement of rehabilitation and revegetation standards on site. Amongst the key monitoring parameters to be included in the program are the following: • landform design details • drainage design details • substrate characterisation • site preparation techniques (e.g. topsoil and source, time of sowing, soil ameliorants used, etc.) • revegetation methodologies (e.g. cover crop and rate, seed viability) • weather conditions • photographic records • initial follow-up care and maintenance works.		NT	
135.	7.5	Preliminary closure criteria for Oberon Quarry are provided in Section 4.2. Rehabilitation monitoring against completion criteria will be undertaken progressively during rehabilitation of site areas. Refinement of closure criteria will be undertaken through the development of a Quarry Closure Plan, which will be developed three years from closure. The quarry currently has development consent to operate until 2045.		NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Reporting					
External Reporting					
136.		A summary of rehabilitation monitoring results will be provided in the Oberon Quarry Annual Review. The following information will be reported in the Annual Review in accordance with Condition 9 of Schedule 5 of the Development Consent. By the end of March each year Oberon Quarries shall review the environmental performance of the development to the satisfaction of the Secretary. The requirements of the review are detailed in Table 2.1. In addition, in accordance with Protection of the Environment Legislation Amendment Act 2011 (Amendment Act) and Condition 12 of Schedule 5 of the Development Consent, Oberon Quarries will also publish rehabilitation monitoring results on the Oberon Quarries website (http://www.oberonquarries.com.au).	Annual review for 2015 sighted.	C	
137.	8.2	Incidents that have caused, or threaten to cause material harm to the environment will be reported to the Department, Environment Protection Authority (EPA) and relevant stakeholders immediately once Oberon Quarries becomes aware of the incident in accordance with Oberon Quarry's Pollution Incident Response Management Plan (PIRMP). Reporting for material harm incidents will be undertaken in accordance with Condition 7 of Schedule 5 of the Development Consent. For any other environmental incidents associated with Oberon Quarry operations, Oberon Quarries will notify the DP&E and any other relevant stakeholders as soon as practicable after Oberon Quarries become aware of the incident. Within 7 days of the incident, Oberon Quarries will provide the DG and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	No incidents that have caused, or threaten to cause material harm to the environment have occurred on site.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
138.	8.3	In accordance with Condition 6 of Schedule 5 of the Development Consent, Oberon Quarries will assess and manage biodiversity and rehabilitation related risks to ensure compliance with the criteria outlined in Section 4.0. Where a non-compliance relating to biodiversity and rehabilitation impact has occurred, Oberon Quarries, at the earliest opportunity will: • take all reasonable and feasible steps to ensure the exceedance ceases and does not reoccur • 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 • implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary. Contingency measures that will be implemented while reasonable and feasible options are being explored include demarcating affected areas to prevent further access, implementing additional sediment and erosion controls including use of straw bales, geotextile and rock gabions to minimise potential for further disturbance.	No no-compliances related to biodiversity and rehabilitation impact have been identified.	NT	
139.		Complaints relating to biodiversity or rehabilitation from Oberon Quarry are to be managed in accordance with the requirements of the Oberon Quarry Environment Management Strategy (EMS). A summary of complaints will be available to regulatory authorities on request, published on the Oberon Quarry website and provided in the Annual Review.	No complaints relating to biodiversity or rehabilitation have been received.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
140.	9.0	Ongoing monitoring and review on the performance and implementation of this L&RMP will be undertaken in accordance with Oberon Quarry EMS. In accordance with Condition 5 of Schedule 5, Oberon Quarries shall review, and if necessary revise, the strategies, plans, and programs required under Development Consent to the satisfaction of Secretary, within 3 months of the submission of an: (a) incident report under condition 7 below; (b) annual review under condition 9 below; (c) audit report under condition 10 below; and (d) any modifications of this consent, the Applicant shall review the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary. Oberon Quarry Manager and Oberon Quarries environmental personnel will review and if necessary, revise this L&RMP and resubmit to DP&E every year or earlier if required. Any changes made to the L&RMP as a result of the review will be made in consultation with relevant stakeholders. A copy of the revised L&RMP will be supplied to the Secretary for approval. The L&RMP will reflect changes in environmental requirements, technology and operational procedures. Updated versions of the approved L&RMP will be made publicly available on the Oberon Quarries website (http://oberonquarries.com.au/).	No events have occurred which have triggered review of the LRMP.	NT	
Risks and Corrective Actions					
141.	10.2	The Quarry Manager will utilise the results of the monitoring activities to identify any corrective actions required to meet the objectives and targets. The indicative triggers and corrective actions outlined in Table 10.3 that have been identified would be subject to review based on the adaptive management	No results have been encountered which require corrective actions to be identified and implemented.	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
NOISE MANAGEMENT PLAN					
161.	5.1	Oberon Quarries will operate in accordance with the operating hours defined in Table 5.1	No activities outside of normal working hours.	C	
5.2 General controls					
162.		Where practical have aural reversing alarms on mobile plant been muffled?	Noise Management Plan Section 5.2 makes commitment to muffling reversing alarms. Mobile plant operating within the quarry, which is located within the quarry void. During the site visit, reversing alarms were not considered intrusive. No noise complaints have been received.	C	
163.		Are regular inspections of site plant and equipment undertaken to ensure ongoing compliance with manufacturers noise specifications	Daily prestart plant inspections completed.	C	
164.		Has noise awareness training been provided to workers	Persons had been trained in the noise management plan Records available for completion of training.	C	
165.		Has mobile plant and equipment been located to minimise potential noise impact on surrounding receivers	Mobile plant operating within the quarry, which is located within the quarry void.	C	
166.		Has a new crushing plant that has a SWL 6dB less than existing equipment and a screening plant with a SWL 3dB less than existing equipment been installed?	A new crushing plant has not been installed	NT	
167.		Are truck speeds limited to 40kph on internal haul roads	60 kph on entry road.	C	
168.		Is the use of compression brakes prohibited on haul roads and Oberon Quarry Road	Drivers are trained in the NMP, which includes this requirement.	C	

Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required	Page 70
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AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
169.		Is drilling for blasting only undertaken between 7am and 6pm 5 days per week?		C	
170.		Are truck movements limited to 4 laden trucks per hour 6am-7am, 6pm – 10pm?	Records of truck movements available. Shows truck movements limited as per requirement.	C	
171.		Has noise monitoring been conducted following the installation of the new crusher screen?	A new crushing plant has not been installed	NT	
172.		Is a community complaints line maintained for reporting of noise complaints?	No complaints have been received	NT	
173.	6.1	Has quarterly attended noise monitoring been conducted?	Monitoring reports available for July 2015, March 2016, August 2016, October 2016. Not always conducted quarterly.	A	01
174.	6.1	Is the information required by Section 6.1 recorded for each noise survey?	Included in noise monitoring reports	C	
175.	6.1.1	Are assessable meteorological conditions records to determine the validity of noise data?	Meteorological data accessed from station in Oberon.	C	
176.		Has the noise been assessed against noise criteria in Schedule 3 of the development consent?	Section 4.0 – Assessment of Compliance	C	
177.		Has an independent review of noise impacts been requested by a landowner? Was the review conducted?	No independent review requested	NT	
178.	7.1	Is a summary of noise monitoring data included in the Oberon Quarry Annual Review?	Included in Section 6.1 of the Annual Review	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
179.	7.2	Have exceedances of noise criteria been treated as environmental incidents and managed in accordance with the Oberon Quarry environmental management strategy?	No exceedances as the result of quarrying operations had been identified	NT	
180.	7.2	Have additional controls been implemented based on the outcomes of the investigations?	No exceedances as the result of quarrying operations had been identified	NT	
181.	7.2	Has Oberon Quarry notified affected landowners and provided regular monitoring results to each of the parties until the results show the operation is complying with the relevant criteria?	No exceedances as the result of quarrying operations had been identified	NT	
182.	7.3	Is a summary of complaints available to authorities on request?	No complaints	NT	
183.	8.0	Has Oberon Quarry reviewed and revised the strategies, plans and programs within 3 months of the submission of an: Incident report; Annual review under condition 9; Audit report under condition 10 Any modifications to the consent?	Annual review completed and submitted – March 2016 Noise Management Plan finalised March 2016	C	
184.		Have revisions been submitted within 4 weeks of the review to the secretary for approval?	Plans had not been finalised prior to submission of the initial annual review for 2015. Plans finalised March – December 2016	NT	
185.		Has the NMP been reviewed and revised at least yearly and resubmitted to DP&E?	Noise Management Plan – Final approved March 2016. Due for review March 2017.	NT	
186.		Where changes to the NMP have occurred, has the updated NMP been submitted to the Secretary for approval?	No changes have occurred	NT	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
POLLUTION INCIDENT RESPONSE PLAN					
187.		Are SDS available for chemicals available on site?	Hazardous chemicals register including SDS available.	C	
188.		Is the diesel storage area roofed and bunded (110% capacity)?	Diesel stored in a covered bunded location. Capacity not verified.	C	
189.		Is waste oil and hydraulic oil stored in an appropriate location (Workshop, administration shed)?	All oil sighted was appropriately stored.	C	
190.		Is spill response equipment available at suitable locations?	Spill equipment was available in the Workshop and at storage locations	C	
191.		Have any environmental incidents occurred on site and is so have authorities been notified in accordance with the PIRMP?	No incidents have been reported	NT	
192.	6.2	Have staff been made aware of reporting requirements and been trained in incident response (e.g. spill management)?	Included in company induction	Y	
193.	6.2	Has the PIRMP been tested and reviewed every 12 months? Within one month of a pollution incident?	PIRMP prepared in March 2015. Document reviewed March 2016. Updated Plan May 2016.		
194.	6.2	Are records of testing maintained including: The manner in which the test was undertaken Dates when the plan was tested Person(s) carrying out the testing Date and description of any update or amendment to the plan?		NT	
195.		Is the PIRMP available in written form on site and made publically available?	Available on the company website.	C	

Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required	Page 73
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AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
TRANSPORT MANAGEMENT PLAN					
196.		Are persons provided training in the requirements of the transport management plan? Records including name of personnel trained, contents of training, date and trainer's name?	Induction includes requirements of the Transport Management Plan. Specific induction and training provided to truck drivers	C	
197.					
198.	4.1	Do trucks have Oberon Quarry signage so road users can identify the truck and find the contact number on the Oberon Quarry website?	Oberon Quarry on side of trucks sighted	C	
199.		Are trucks entering and exiting the site covered?	All trucks sighted were covered. Requirement included in truck driver induction	C	
200.		Laden trucks will travel on hardstand areas If trucks travel off hardstand areas, an inspection will be undertaken to ensure the truck is free of material that may fall on the public road system?	Trucks sighted were on hardstand area. No evidence of tracking of material offsite was sighted	C	
201.		During the period 6am – 7am and 6pm to 10pm, a maximum of 4 laden trucks per hour shall leave the site	Records reviewed showed 4 or fewer trucks leaving the site before 7am. no trucks after approximately 4pm.	C	
202.		Trucks should not arrive before 5.30am and preferably 6am. Truck drivers arriving early will park close to the gate and turn off the engine	Requirement communicated to truck drivers.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
203.		Drivers will ensure they: Do not use engine brakes on local streets; Drive in a manner that minimises vehicle noise and emissions Use designated heavy vehicle bypass routes though Oberon; Park only in nominated areas Avoid blocking intersections and local roads Drive in a manner and speed appropriate for the changing conditions	Driver's code of conduct required to be agreed and signed which includes requirements	C	
204.		Have any driver complaints been received? Have they been investigated and acted on in accordance with the Driver's code?	No complaints received	NT	
205.	5.1	Are truck departure times recorded directly from the weighbridge?	Date, time, product, weight recorded.	C	
206.		Is a summary of truck movements and times associated with quarry product been published on the Oberon Quarries website every 6 months?	Records September 2015 to December 2016 published – includes monthly summaries.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
ENVIRONMENTAL MANAGEMENT STRATEGY					
207.	4.1.1	Has regular communication with surrounding residences been undertaken? Has the following information been notified: Proposed blasting schedule; Community complaints line and information located on Oberon Quarries website; Modifications to the development consent and/or relevant licences Any other activity which may affect the residence?	Records sighted for noise monitoring. Noted that closest receptors are quarry employees.	C	
208.	4.1.2	Is a complaints line available on communicated? Is a complaints register maintained and published on the website?	Complaints register available and published on website. Telephone contact on website and displayed on site line communicated on website	C	
209.	4.1.3	Has the dispute resolution process been required?		NT	
210.	4.2	Have Oberon Quarries staff and contractors been provided a structured induction which includes information as identified in Section 4.2?	Induction process has been implemented. Records of induction available.	C	
211.	4.3.1	Is refuelling restricted to the extraction areas with a spill kit, split fuel bund/ spill catch tray used?	Refuelling station provided at bowser.	C	
212.	5.2	Are monthly environmental inspections conducted and recorded on the monthly inspection checklist? Are issues identified promptly addressed?	Daily walks conducted by Quarry Manager with issues noted in his diary. Diary notes were verified – e.g. 1/02/2016 – Ponds Clear, no run-off from quarry, 1/08/16 – no spills, no run-off, water ponds clean. Monthly inspection checklists not used to record inspections. Does not show what was inspected or that issues were addressed	A	08

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
213.	5.3	Has any non-compliance with acceptance criteria been investigated and appropriate actions identified and implemented to prevent reoccurrence?	N/A	NT	
214.	6.1.2	Is reporting on environmental performance provided on the website?	Noise monitoring results provided. EPL reports provided on website include water, air and noise monitoring data.	C	
215.	6.1.3	Is an annual review prepared by the end of March each year?	Annual review completed and submitted to DPE. Available on website	C	
216.	6.2.1	Is an EPL annual return compiled and submitted within 60 days of the end of the reporting period??	EPL annual return for 2015-2016 received by EPA 9/03/16. Due by 10/03/16.	C	
217.	6.2.2	Where requested, has a written report been provided where the EPA or other government official suspects on reasonable grounds that an event has occurred?	No requests from EPA	NT	

Statement Of Commitments					
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Hours of Operations					
218.		Oberon Quarries' approved hours of operation are as per Condition 16 of DA92/164. and are dependent on the activity being undertaken; approved hours are detailed in Table 7.1. Hours of operation will not change as a result of the Project	Hours of operation comply with commitments in Table 7.1 Hours are included in induction Truck drivers cannot load prior to 7am. Work commence at 7am. Finish production at 3.30pm. Weighbridge system locked out before 5am and after 10pm. Records reviewed for November 2016 – Showed first load ~5.10 am with loading completed before 15.30.	C	
219.		In addition to the diversion drains and sedimentation ponds, Oberon Quarries will continue to implement localised sediment and erosion controls, as required, in accordance with <i>Managing Urban Stormwater - Soils and Construction</i> (Landcom. 2001) to reduce the impacts on the wale, quality in the quarry's dirty water management system.	Erosion and sediment controls have been maintained on site. No areas where erosion and sediment control were missing or deficient were identified during the audit.	C	
220.	5.2.3	Quarry operations will be undertaken between the hours of 5.00 am and 10.00 pm Monday to Friday and 5.00 am and 3.00 pm on Saturdays	Hours are included in induction Truck drivers cannot load prior to 7am. TBT at 6.30am to 4pm Work commence at 7am. Finish production at 3.30pm. Weighbridge system locked out before 5am and after 10pm. Records reviewed for November 2016 – Showed first load ~5.10 am with loading completed before 15.30.	C	

AQUAS Audit Ref No	Cond. No.	Condition	Finding and Recommendations	Compliance rating	Assessment Issue #
Noise Monitoring					
221.		Consideration of seasonal influences on noise impacts, to avoid and otherwise minimise noise impacts to sensitive receivers	Noise monitoring has been conducted in autumn, winter and spring to assess impacts on receivers.	C	
222.		Undertaking prescribed works within the approved hours of operation. Works outside of these hours include: - Emergency work to avoid loss of life, property and/or prevent environmental harm; and - Any other work as agreed through negotiation between Oberon Quarries and potentially noise affected receivers or as otherwise agreed by the EPA.	Hours are included in induction Truck drivers cannot load prior to 7am. TBT at 6.30am to 4pm Work commence at 7am. Finish production at 3.30pm. Weighbridge system locked out before 5am and after 10pm. Records reviewed for November 2016 – Showed first load ~5.10 am with loading completed before 15.30.	C	
223.		Where practical aural reversing alarms on mobile plant will be muffled	Noise Management Plan Section 5.2 makes commitment to muffling reversing alarms. Mobile plant operating within the quarry, which is located within the quarry void. During the site visit, reversing alarms were not considered intrusive. No noise complaints have been received.	C	
224.		regular inspections of all site plant and equipment to ensure ongoing compliance with manufacturer' noise specifications	Daily prestart inspections completed. Maintenance records available.	C	
225.		Provision of noise awareness training to site workers.	Persons had been trained in the noise management plan Records available for completion of training.	C	
226.		Positioning of mobile plant and equipment been located to minimise potential noise impact on surrounding receivers	Mobile plant operating within the quarry, which is located within the quarry void.	C	

Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required	Page 79
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227.		Implementing noise attenuation controls, where feasible, on mobile and stationary equipment that is potentially generating noise levels above that predicted and/or are generating noise complaints.	No noise complaints had been received. Noise monitoring results did not	C	
228.		Has a new crushing plant that has a SWL 6dB less than existing equipment and a screening plant with a SWL 3dB less than existing equipment been installed?	A new crushing plant has not been installed	NT	
229.		Limiting truck speeds to 40kph on internal haul roads	60 kph on entry road. Speeds limited to 40kph internally	C	
230.		Not permitting the use of compression brakes on internal haul roads and Oberon Quarry Road	Drivers are trained in the NMP, which includes this requirement.	C	
231.		Drilling for blasting will only be undertaken between 7am and 6pm 5 days per week?	Drilling and blasting within periods identified. E.g. Drilling and blasting report 19/12/16 – Time fired 1.17pm.	C	
232.		Restricting truck movements to a maximum of 4 laden trucks per hour 6am-7am, 6pm – 10pm (total 8 truck movements per hour)?	Records of truck movements available. Shows truck movements limited as per requirement.	C	
233.		Undertaking noise compliance monitoring and reporting (i.e. attended noise monitoring to assess compliance and assist with minimising impacts) once the new crusher screen Has been installed.	A new crushing plant has not been installed	NT	
234.		Minimising noise impacts at residential locations, unless there is an alternative agreement with the private resident.	No complaints have been received. Letter sighted showing agreement with residents (174 Shooters Hill Road) stating no objection to the quarry generating higher noise levels.	NT	

Blast Monitoring

235.		Control measures that have been considered as a standard part of the operation of the quarry and incorporated include: • All relevant quarry personnel will be trained on the environmental obligations in relation to blasting controls. • The surrounding landowners and Council will be notified	Blasting Contractor – Orica engaged to design and conduct blast monitoring. Blast monitoring conducted at the nearest residence (although it does not specifically identify the location).	C	
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		prior to undertaking a blast. • The date, location of blast holes and quantity of explosive used each day will be documented. • Blasts will be designed to comply with overpressure and vibration criteria. • Monitoring will be undertaken at the nearest private residence and/or other sensitive locations (as required) to verify compliance with the relevant criteria. • The maximum number of holes to be detonated in a blast is 150. • Sufficient distance will be maintained between the blast hole and the quarry face. • Appropriate delays will be used. • All blasts will be monitored and recorded. • Blast monitoring data will be used on an ongoing basis to further refine the blast design and management. • Blast design and blast management procedures will be periodically reviewed to evaluate performance and identify corrective action, if required. • Blasting will be undertaken between 9.00 am and 5.00 pm, Monday to Saturday inclusive, except under apparent temperature inversions conditions when blasting shall only occur between 11.00 am and 1.00 pm Monday to Saturday. No blasting is undertaken on Sundays or public holidays, without approval of the Secretary. • Oberon Quarries will undertake consultation with residents whose properties are adjacent to the development, with a view to determining the most appropriate blasting times for the development. The applicant shall, in accordance with the requirements of the council, give notice of proposed blasting times. • Not blast more than twice a week unless an additional blast is required following a blast misfire. • Design all blasts to minimise airblast overpressure and vibration using the NONEL system of equivalent. • Design all blasts based on the results of monitored blasts and modelled predictions in Table 3.1. This will minimise	Records of blasting maintained including: Blasting contractors checklist; Oberon Quarries Drilling and Blasting Report; Meteorological data; Blast records show compliance with overpressure and vibration criteria; Monitoring conducted at nearest residence; Record for 19/12/16 showed 101 holes; Records of notification to Council and EPA sighted for 19/12/16. Monitoring results showed blast criteria had not been exceeded.		
Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			Page 81

		airblast overpressure and vibration such that any one blast has less than a five per cent probability of exceeding airblast overpressure and vibration goals as set by the Environment Protection Authority (EPA) for affected property. • EPL noise limits of 115 dB/120 dB are likely to be exceeded. • Undertake detailed designs for each blast in order to maximise the blast efficiency, minimise dust, fumes, ground vibration and airblast, the potential for flyrock and to ensure compliance with site specific blasting conditions. • Oberon Quarries undertake a pre-blast meteorological assessment in order to confirm the applicability of blasting during the proposed blasting times. The pre-blast meteorological assessment will inform the likelihood of potential blast impacts as a result of forecasted adverse wind inversion weather conditions. • Monitor blasts as quarrying progresses utilising the adaptive management techniques described in Section 8.2.1, so that blast prediction site laws can be further refined and future blast designs can be optimised based on more detailed site information. By adopting this approach, in conjunction with the adoption of improved blasting products and methods, as they are introduced, it is anticipated that blast emissions criteria can be met without imposing any significant constraints on blast designs throughout the operation of Oberon Quarries. Oberon Quarries will design all blasts to comply with the project specific vibration and airblast criteria and to protect public and private infrastructure and property from any damage as a result of flyrock. Future updates of this plan will include any additional management requirements, taking into account the results of blast monitoring undertaken. • The blasting site design will be regularly reviewed using site-specific blast monitoring data. This process will provide Oberon Quarries with flexibility to design blasts to best meet production requirements while complying with relevant			
Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non-compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			

		criteria for residential receivers. • All blast configurations and delays used will be thoroughly checked by the Quarry Manager before the blasts are detonated.			
Air Quality					
236.		• regular watering of unsealed haul roads within the extraction and processing areas and working areas • mist sprays on conveyors discharging to product stockpiles • limiting vehicles speeds on unsealed surfaces to 40 km/h • progressive stabilisation/rehabilitation of exposed areas no longer needed for operational purposes • rehabilitating the final landform surface as soon as practical • minimisation of the total disturbed/working areas at any one time • implementing temporary stabilisation measures (e.g. cover crops or mulch) on disturbed areas as soon as practical, if rehabilitation is not to be undertaken within the coming three months • where practical/possible conduct drilling and blasting during suitable meteorological conditions (i.e. not during high winds) • drill holes will be capped with stemming to restrict the upward emission of dust • undertaking preventative maintenance on all dust suppression plant and equipment • truck wheel wash facility will be maintained and fully functional • covering of all laden trucks leaving the site • monitoring of depositional dust levels and analysis of the data for trends (refer to Figure 6.1 for locations).	Requirements for air quality management in the statement of commitments are addressed in the AQMP Section 5.1. Water carts were available on site. No significant rehabilitation has been undertaken on site, with work being undertaken within previously disturbed areas. Contract driller engaged. Verification of appropriate of controls and weather condition by quarry manager prior to blasting. Dust deposition monitoring conducted on a monthly basis. Results do not show an adverse impact.	C	

Surface Water					
237.		Surface water monitoring will continue in accordance with Condition 26 of DA92/164 and per Condition M2.3 of EPL 4442. Surface water quality is monitored at two sites on Racecourse Creek (refer to Figure 6.1): W1 – upstream of the quarry W2 – downstream of the quarry.	Records were available to show that monthly sampling and analysis had been undertaken for surface water from the two locations. Noted that the EPA were in discussion with the site to identify a discharge point for monitoring of surface water discharge (if it occurs) from the site.	C	
Groundwater					
238.		Groundwater will continue to be monitored in accordance with Condition 26 of DA 921164. Oberon Quarries undertakes groundwater monitoring to determine any potential impacts as a Result of quarry operations. Groundwater is monitored for pH and conductivity at a spring-fed dam (GW1) at Langley heights', downslope of the quarry on Racecourse Hill.	Records were available to demonstrate that groundwater monitoring had continued to be conducted on a monthly basis. No adverse impacts had been detected.	C	
Traffic and Transport					
239.		In accordance with existing consent requirements, Oberon Quarries pays and will continue to pay Oberon Council a tonnage based and indexed road maintenance contribution for wear and tear on roads	Records sighted to verify Oberon Quarries paid road maintenance contribution to Council.	C	

Flora and Fauna					
240.		- installing survey pegs to mark the extent of extraction; - create a stable final landform within the quarry pit consisting of self-sustaining vegetation communities characteristic of the pre quarry environment; - progressively conduct rehabilitation and revegetation if the post quarry area over the life of the operations and as quarrying operations of the second bench allow - minimising the extent of vegetation clearance to that associated with the next blast area - identifying the weed management controls for the Project Area, i.e. types of weeds known to be present, required control methods and frequencies, as well as monitoring frequencies	Section 5.3 of the LRMP. Survey pegs had been installed on site. Not applicable at time of audit Rehabilitation Strategy for the next 3 years focusses on on-going development of the quarrying operations and management of weed and feral species. At the time of audit, only minor landscaping had been undertaken. Works had been conducted within the existing quarry footprint. Identified what weeds were on site and potential chemicals to control the weeds. Note: Plan requires regular inspections of the site for weeds. Reported that inspection are conducted by the Landowner. Weed monitoring form completed 11/01/17. Annual review includes commentary on weed management.	C	
Aboriginal Archaeology					
241.		Oberon Quarries should ensure that all parties involved in the project are aware that it is an offence under Section 86 of the NPW Act to harm or desecrate an Aboriginal object unless that harm or desecration is the subject of an AHIP;	Extract from the development consent relating to the management of archaeological finds was displayed in the site office. However, while this information is displayed, it is not clear how the Section 86 requirements are communicated to all parties involved in the project. This information was not specifically included in the site induction.	A	09
242.		Oberon Quarries will submit an ASIR form to correct the status of the site AHIMS #44-S-0060, which appears as valid on the AHIMS database, but was located within the approved extraction area	Submitted to OEH on 6/01/2017.	C	

243.		in the event that an Aboriginal object (or objects) is uncovered during the proposed works. ground disturbance will cease within 20 metres of the object(s) and OEH and the relevant Aboriginal parties will be contacted so that appropriate management strategies can be identified;		NT	
244.		In the unlikely event that a potential burial site or potential human skeletal material is exposed within the project area, the following procedure should be implemented: • As soon as the remains are exposed, work in the vicinity of the remains should halt immediately to allow assessment and management; • The relevant manager of the project will be informed and will contact local police, OEH and the Heritage Branch; • If the remains are suspected to be human, a physical or forensic anthropologist should inspect the remains in situ, and make a determination of whether the remains are human and if so, the likely ancestry (aboriginal or non-aboriginal) and antiquity (pre-contact, historic or forensic). • If the remains are identified as forensic then the area is deemed to be a crime scene; • If the remains are identified as aboriginal, the site is to be secured and OEH and relevant aboriginal parties are to be notified in writing; • If the remains are non-aboriginal (historical) remains, the site is to be secured and the heritage branch is to be contacted.		NT	

Greenhouse Gas and Energy

245.	5.11.1	There are a number of mitigation and management measures proposed to be implemented for the ongoing operations. Improving Transport Diesel Use efficiency • Limiting the length of transport routes • Fuel efficient haul trucks	Oberon Quarries had assessed processes to maximise diesel use efficiency including: • The road truck transport route is determined primarily by the final destination. Drivers monitor traffic congestion / delays while on route and adjust the route accordingly, should it result in reduced transport times	O	04
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		- Maximising payloads - Reducing idling times Improving on-site diesel use efficiency - Scheduling activities so that equipment and vehicle operation is optimised. - Fuel efficient equipment - Blast strategies to improve extraction efficiency - Working machines to their upper design performance Haul Truck Options - Limiting the length of material haul routes - Optimising ramp gradients - Fuel efficient haul trucks - Maximising payloads - Improving rolling resistance of haul roads - Reducing idling times Improving Electrical efficiency of processing equipment - Reducing reject percentage - High efficiency motors - Variable speed drives - Optimising motor size to load - Optimising basalt throughput.	- Loading of road trucks to its maximum legal payload is managed by via a weighing systems fitted to the front end loader and the on-site weighbridge. Trucks which are underweight are directed back to the loading area and material added as required. - Blasting operations are designed to produce a material size which his optimum for the crushing plant; - Plant is selected to match the production capacity of the quarry. The quarry manager oversees the operation of the quarry on a daily basis to ensure plant is being operated effectively and efficiently; - The haul route length is primarily determined by where the material is being sourced, relative to the crushing plant)noted haul routes are of short duration for the site); - Critical constraint at the quarry is the capacity of crushing plant. The optimum quarry fleet configuration is a maximum of 2 haul trucks and one excavator - Oberon Quarry has identified and secured a buyer for all reject material (i.e. 5mm minus material). The sale of this former reject / waste material has increased the resource recovery to 100% and has also resulted in significant energy efficiency gains (i.e. up to 25%). Strategies for the minimising of greenhouse gas emissions and energy mitigation and management measures have not been identified in management plans provided.		
Waste					
246.		The current site waste management practices will continue to be implemented for the life of the project	Requirements for the management of waste were not identified in management plans.	O	02
Bushfire					
247.	5.13.1	The Council approved Bushfire Management Plan for the site will continue to be implemented for the life of the project	Bushfire management is addressed in Section 5.2.5 of the LRMP.	C	

Independent Audit Report - Oberon Quarry January 2017.docx		Audit Compliance Codes: C: Compliant; N: Non-compliance; A: Administrative non- compliance; O: Observation; NV: not verified; NT: Not Triggerred; Note: No assessment of compliance required			Page 87
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