

ANNUAL REVIEW - CORAKI QUARRY

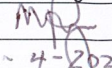
1 JANUARY 2019 TO 31 DECEMBER 2019

Prepared for:
Quarry Solutions Pty Ltd

Date: April 2020

File Ref: 1837.630.007 R1

Table 1 – Annual Review

Name of operation	Coraki Quarry Project
Name of operator	Quarry Solutions Pty Ltd
Development consent / project approval #	SSD 7036 (Mod 3)
Holder of development consent / project approval	Quarry Solutions Pty Ltd
Licensed Area (property description)	Lot 401 DP633427, Lots 402 and 403 DP 802985; Lot 408 DP 1166287; Lot A DP397946; Lot A DP389418; Lot 3 DP701197; Lot 2 DP954593; Lot 1 DP954592; Lot 1 DP310756; Lot 1 DP1165893; and Lot 1 DP1225621
Holder of Environmental Protection License (EPL)	Quarry Solutions Pty Ltd
EPL number and Anniversary Date	EPL 3397 13 th June 2019
Water licence #	N/A
Name of holder of water licence	N/A
Annual Review start date	1 January 2019
Annual Review end date	31 December 2019
<p>I, Murray Payne, certify that this audit report is a true and accurate record of the compliance status of Coraki Quarry for the period 1st January 2019 to 31st December 2019 and that I am authorised to make this statement on behalf of Quarry Solutions Pty Ltd.</p> <p><i>Note.</i></p> <p>a) <i>The Annual Review is an 'environmental audit' for the purposes of section 122 B (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.</i></p> <p>b) <i>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).</i></p>	
Name of authorised reporting officer	Murray Payne
Title of authorised reporting officer	Area Manager – Northern Rivers
Signature of authorised reporting officer	
Date	8-4-2020

Document Control

Project/ Report Details

<i>Document Title:</i>	Coraki Quarry 2019 Annual Review
<i>Principal Author:</i>	Jim Lawler
<i>Client:</i>	Quarry Solutions Pty Ltd
<i>Ref. No.</i>	1837.630.007 R1

Document Status

<i>Issue</i>	<i>Description</i>	<i>Date</i>	<i>Author</i>	<i>Reviewer</i>
0	Coraki Quarry 2019 Annual Review	March 2020	R. McKay	J. Lawler / Murray Payne
R1	Coraki Quarry 2019 Annual Review – response to Department comments	April 2020	J.Lawler	D.Doolan

Distribution Record

<i>Recipient</i>	
Quarry Solutions Pty Ltd	1E
NSW Department of Planning, Industry and Environment	1E
Director for Infrastructure and Environment - Richmond Valley Council	1E

Groundwork Plus ABN: 13 609 422 791

Queensland
6 Mayneview Street, Milton Qld 4064
PO Box 1779, Milton BC, Qld 4064
P: +61 7 3871 0411
F: +61 7 3367 3317

E: info@groundwork.com.au

South Australia
2/1 First Street, Nuriootpa SA 5355
PO Box 854, Nuriootpa SA 5355
P: +61 8 8562 4158

Copyright ©

These materials or parts of them may not be reproduced in any form, by any method, for any purpose except with written permission from Groundwork Plus.

Table of Contents

Statement of Compliance.....	5
Department of Planning, Industry and Environment Comments	6
1 Introduction.....	8
1.1 Key Site Personnel	8
2 Compliance Summary.....	9
2.1 Non-Compliances	9
3 Approvals.....	10
4 Operations Summary	11
4.1 Operational requirements	11
4.1.1 Hours of Operation.....	11
4.1.2 Transport Rates	11
4.2 Forecast Operations	11
5 Actions required from previous Annual Review.....	12
6 Environmental Performance	13
6.1 Water Quality.....	13
6.1.1 EIS Prediction	13
6.1.2 Actual	13
6.1.3 Comparison with Previous Years Data / Trends	13
6.2 Noise.....	14
6.2.1 EIS Prediction	14
6.2.2 Actuals	14
6.2.3 Comparison with Previous Years Data / Trends	14
6.3 Blasting.....	15
6.3.1 EIS Prediction	15
6.3.2 Actual	15
6.3.3 Comparison with Previous Years Data / Trends	16
6.4 Air Quality	17
6.4.1 EIS Prediction	17
6.4.2 Actuals	18
6.4.3 Comparison with Previous Years Data / Trends	18
6.4.4 Monitoring Trends	20
6.5 Biodiversity	21
6.5.1 EIS Prediction	21
6.5.2 Actual	21
6.5.3 Comparison with Previous Years Data / Trends	21
6.6 Cultural Heritage.....	21
6.6.1 EIS Prediction	21
6.6.2 Actual	21
6.6.3 Comparison with Previous Years Data / Trends	21
6.7 Management Plans.....	21
6.8 Visual Impacts	22

Table of Contents

6.8.1	EIS Prediction	22
6.8.2	Actual	22
6.8.3	Comparison with Previous Years Data / Trends	22
6.9	Hazardous Goods and Storage	23
6.9.1	EIS Prediction	23
6.9.2	Actual	23
6.9.3	Comparison with Previous Years Data / Trends	23
6.10	Waste Management.....	23
6.10.1	EIS Prediction.....	23
6.10.2	Actual.....	23
6.10.3	Comparison with Previous Years Data / Trends.....	24
6.11	Environmental Performance Summary.....	24
7	Rehabilitation	27
8	Community.....	28
8.1	Complaints.....	28
9	Independent Environmental Audit.....	29
10	Independent Traffic Audit.....	31
11	Incidents and non-compliances	32
12	Actions for next reporting period.....	34

TABLES

Table 1 – Annual Review	1
Table 2 – Statement of Compliance.....	5
Table 3 – Non-Compliances.....	5
Table 4 – Amendments	6
Table 5 – Production Summary.....	11
Table 6 – Actions from Previous Annual Review	12
Table 7 – Noise Monitoring Results	14
Table 8 – 2019 Blasting Results	15
Table 9a –Blasting Results Monitor 1	16
Table 9b –Blasting Results Monitor 2	16
Table 9c –Blasting Results Monitor 3.....	16
Table 9d –Blasting Results Monitor 4	17
Table 9e –Blasting Results Monitor 5	17
Table 10 – Annual Dust Deposition Monitoring Results.....	19
Table 11 –Annual Dust Deposition Summary (Total Insoluble Matter)	20
Table 12 – Environmental Performance Summary	25
Table 13 – Rehabilitation Status	27
Table 14 – IEA Recommended Actions Status.....	29
Table 15 – Other Incidents Or Non-compliance Matters	33

Table of Contents

DRAWINGS

Site Location Plan	<i>(Drawing No. 1837.DRG.007)</i>
Environmental Monitoring Locations	<i>(Drawing No. 1837.DRG.091R7)</i>

ATTACHMENTS

Attachment 1 – Audit Checklist
Attachment 2 – DGR Production Data
Attachment 3 – Waste Register
Attachment 4 – EPA Incident Report
Attachment 5 – March 2019 Noise Compliance Monitoring

Statement of Compliance

This annual review has been conducted to satisfy Schedule 5, Condition 9 of the Development Consent (DC) SSD_7036, whereby the annual environmental performance of the project is reviewed. The review period for this report is 1st January 2019 to 31 December 2019. A statement of compliance for the project is provided below in Table 2.

Table 2 – Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	
Development Consent (DC) SSD 7036 Mod 3	No

Table 3 – Non-Compliances

Relevant Approval	Cond. #	Conditions description	Compliance Status	Comment	Annual review section
SSD 7036 Mod 3	# 4	<p>4. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land.</p> <p>Table 3: Noise criteria dB(A)</p> <ul style="list-style-type: none"> • Day 35 dB(A) (LAeq(15 min)) • Evening 35 dB(A) (LAeq(15 min)) • Night 35 dB(A) (LAeq(15 min)) <p>Note: Receiver locations are shown on the figure in Appendix 3.</p> <p>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.</p> <p>However, the noise criteria in Table 3 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the EPA and the Secretary in writing of the terms of this agreement</p>	Non-compliant	<p>On 22nd March 19 a noise event exceeding condition 4 criteria was recorded.</p> <p>Notification of the incident was made to DPIE compliance and NSW EPA. Following the notification an incident investigation was carried out to determine the root cause. This resulted in subsequent corrective actions being implemented. Further noise verification monitoring confirmed operational noise levels have been restored to a compliant level.</p>	Section 2, 6.2, Attachment 1 and Attachment 5

The risk level has been deemed as low as the non-compliance has the:

- potential for moderate environmental consequences, but is unlikely to occur; or
- potential for low environmental consequences but is likely to occur.

Department of Planning, Industry and Environment Comments

The 2018 Annual Review was submitted to DPIE on 25th of March 2019. Written responses were received from the Department of Planning, Industry and Environment (DPIE) on the 17th of January 2019 and 24th May 2019 requesting additional information be included into the 2018 Annual Review. DPIE accepted the 2018 Annual Reporting on 7th July 2019. Table 4 below outlines the various amendments to each annual review submitted in previous years.

Table 4 – Amendments

DPIE Comment	Section
<i>Letter dated 3 April 2020</i>	
DPIE reviewed the 2019 Annual Report submitted to DPIE on 12 March 2020 and requested that the following information be amended or provided.	
<ul style="list-style-type: none"> Details of the volumes of the various wastes being managed. Waste volumes (a waste register) were to be included in future Annual Returns as was committed to by Quarry Solutions in its response letter to the then DPE dated 25 May 2018 in response to the 2018 IEA in reference to COA 3.37 	Section 6.10.2 and Attachment 3
<ul style="list-style-type: none"> Include a heading titled "Independent Audit" and provide details about implementation of the action plan as an outcome of the most recent independent audit (i.e. has everything been implemented as per the action plan); and identify when the next audit is scheduled; 	Section 9. Note Section 10 has also been added to address the requirement for an Independent Traffic Audit.
<ul style="list-style-type: none"> Include a heading "Incidents and Non-compliances" and provide details including the measured noise levels relating to the reported noise non-compliance as are identified in the Departments Annual Review Guideline; 	Section 11
<ul style="list-style-type: none"> Include in Section 8.1 Complaints, details of the dust complaint reported in the project complaints register for the 31 January 2019; 	Section 8
<ul style="list-style-type: none"> Update the Coraki Quarry website to comply with Schedule 5, Condition 12 of the Consent, to enable blasting, dust and noise data to be publicly available on its website. 	Website
<i>Letter dated 13 November 2019</i>	
Approval of updates to Environmental Management System (EMS) letter dated 13 th Nov 2019	
<ul style="list-style-type: none"> Following the determination of Modification 3 of the Coraki Quarry Consent on May 2019 a review of the of existing management plans were triggered. 	Section 3 and 6.7
<ul style="list-style-type: none"> Subsequent updated versions of the Environmental Management Strategy and Noise Management Plan were first submitted to DPIE on 20 June 2019. 	Section 3 and 6.7
<ul style="list-style-type: none"> DPIE approves these revised management plans in November 2019. 	Section 6.7
<i>Letter dated 7 July 2019</i>	
DPIE confirm the 2018 Annual Review resubmitted on 11 June 2019 generally satisfies the requirement of the approval.	N/A
<i>Letter dated 24 May 2019</i>	
Requirements in Annual Return Response letter dated 24 May 2019	
<ul style="list-style-type: none"> Table 8 has 2017 dates, amend to 2018 dates and update corresponding monitoring information. 	Section 6.3.2, Table 8
<ul style="list-style-type: none"> Production data provided to DRG is to be included in the Annual Review (Schedule 2, Condition 14). Please append this data to the Report and provide evidence confirming that the data was provided to DRG. 	Attachment 1
<ul style="list-style-type: none"> Evidence of payment of the Conservation and Rehabilitation Bond (\$186,024.60) to the Department as stated in paragraph 3 of Section 2.1 Non-Compliances. 	Previously reported
<ul style="list-style-type: none"> Table 12 in the report summarises all the Environmental Performance categories exception Waste – please include waste summary in this table. 	Section 6.11, Table 12
<i>Letter dated 17 January 2019</i>	
Requirement in Annual Return Response letter - dated 30 May 2017	
<ul style="list-style-type: none"> A comparison of the EIS predictions with the Report findings as requested in item (g) the previous DPE letter as required by Schedule 5, Condition 9(b) of the consent. 	Section 5.11, Table 11
<u>Schedule 5, Condition 9 (Annual Review) of the approval requires</u>	Section 5.11, Table 11

<ul style="list-style-type: none"> • Discussion about the trends in the monitoring data; • Discussion about any differences between predicted and actual impacts. 	
<p><u>Annual Review- 11 Incidents and non-compliances</u></p> <ul style="list-style-type: none"> • The statement of non-compliance does not include the identified noise non-compliance provided in Table 6 (previously Table 7) of the report. • All future non-compliances that occur during the reporting period should be included in Table 2 (previously Table 3), Table of non-compliances in the Report. Comment should also be provided to confirm where non-compliances have been reported to relevant agencies in accordance with approvals. 	<p>Table 3 does include the identified non-compliance as this was inserted during the first revision.</p>
<p><u>Annual Review- 12 Activities to be completed in the next reporting period</u></p> <ul style="list-style-type: none"> • Section 3.2 of the Report identifies maintenance of the earth batters (acoustic). Further details of timeframes of the maintenance activities planned for the acoustic earth batters is required. 	<p>Section 3.2</p>
<p><u>Schedule 4, Condition 1 (Notification of Landowners) of the approval</u></p> <ul style="list-style-type: none"> • Landowners affected by exceedances are required to be notified within 7 days. The Department notes that landowners were not notified of the noise exceedance in September 2017. This is a non-compliance. It should also be included in Table 2 (previously Table 3) and addressed in section 11 of the Report. 	<p>Section 5.2 and Table 3.</p>
<p><u>Schedule 5, Condition 12 (Access to Information) of the approval</u></p> <ul style="list-style-type: none"> • The Department acknowledges monthly traffic and production data, and Complaints Register have been published on the company's website. The Department checked the Quarry Solutions website on the 11 January 2018 and notes that the complaints register needs updating 	<p>Noted. This requirement will be addressed in the 2018 review.</p>

1 Introduction

Quarry Solutions Pty Ltd (Quarry Solutions) operate the Coraki Quarry, a hard rock quarry located at Petersons Quarry Road, Coraki, New South Wales. Refer to Drawing No. 1837.DRG.007.

A Development Consent (DC) (number SSD_7036) and Environment Protection Licence (EPL) No. 3397 have been issued for the Coraki and Petersons Quarry. This review has been conducted and prepared in accordance with the NSW Department of Planning and Environments *Annual Review Guideline October 2015* in order to satisfy the requirements of Schedule 5, Condition 9 of the modified Development Consent for the Coraki Quarry Project.

Schedule 5, Condition 9 states:

Annual Review

By the end of March each year, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:

(a) describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;

(b) include a comprehensive review of the monitoring results 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;*
- the monitoring results of previous years; and*
- the relevant predictions in the documents listed in condition 2(a) of Schedule 2;*

(c) identify any noncompliance over the last year, and describe what actions were (or are being) taken to ensure compliance;

(d) identify any trends in the monitoring data over the life of the 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.

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

1.1 Key Site Personnel

The details of key site personnel that have been involved in the management of the quarry operations over the reporting period are provided as follows;

Brett Conlan – Quarry Production Manager

M: 0428 586 281

T: 02 6671 2300

E: brett.conlan@quarrysolutions.com.au

Murray Payne – Area Manager - Northern Rivers

M: 0427 978 964

T: 07 5671 9601

E: murray.payne@quarrysolutions.com.au

Both personnel have held these roles throughout the reporting period of this Annual Review.

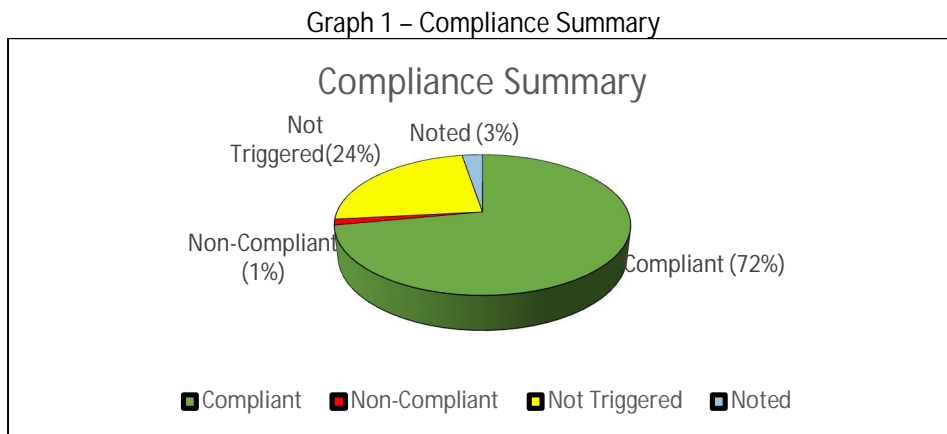
2 Compliance Summary

On 14th February 2019, a site audit was undertaken to determine compliance status with the conditions of approval. The audit was attended by the sites Quarry Production Manager, Brett Conlan, Northern Rivers Area Manager, Murray Payne and Rowan McKay (site auditor). Refer to Attachment 1 – Audit Checklist.

The compliance status of each of the conditions of Development Consent were determined using the following descriptions:

Status	Description
Compliant	Sufficient evidence is available to verify that all elements of the consent condition have been satisfied during the reporting period.
Non-compliant	One or more specific elements of the consent condition have not been met during the reporting period.
Not triggered	A consent condition has not been triggered within the reporting period therefore no data is available for review and reporting.

In total, seventy-seven (75) conditions were assessed during the audit, 54 were compliant, 1 was non-compliant, 18 were Not triggered and 2 were noted. The graph below provides a visual interpretation of audit findings.



2.1 Non-Compliances

- 1) Schedule 3, condition 4 requires that noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land. Monitoring conducted in March identified exceedances of the prescribed criteria.

3 Approvals

The following approvals are those held by Quarry solutions Pty Ltd and are relevant to the operation of the Coraki Quarry during the 2019 calendar year.

- Development Consent SSD 7036 (modification 3) issued by the New South Wales Minister for Planning on 13th May 2019. SSD 7036 Mod 2 was superseded within the reporting period however was in affect for the first 5 months of the reporting period.
- Environmental Protection Licence (EPL) No. 3397. A notice of variation of licence 3397 was issued to Quarry Solutions Pty Ltd 13 June 2019.

4 Operations Summary

The site is approved to undertake extraction, processing and storage of 1,000,000 Tonnes per annum in any calendar year. A production summary is provided in Table 5 below. The activities which occurred on site during the reporting period include are consistent with the approved activities. Production data submitted to Department Planning Industry & Environment, Resources & Geoscience (DPIE resources) for the 2019 reporting period is attached for reference (refer *Attachment 2 – Production Data 2019*).

Table 5 – Production Summary

Material	Approved Limit	2017 Reporting Period	2018 Reporting period	Current Reporting period (2019)	2020 Forecast
Quarrying products (e.g. rock)	1 million tonnes	589,874.68 t (1 st Jan – 31 st Dec 2017)	995, 438 t (1 st Jan - 31 st Dec 2018)	990,642 t	1,000,000 t

4.1 Operational requirements

4.1.1 Hours of Operation

Schedule 3 (Noise) of the development consent, outlines the permitted operating hours and extended operating hours. Quarry Solutions have previously obtained written agreements from affected landowners and currently operate under the extended hours which are, Monday to Saturday 6am to 7pm and activities are not permitted on Sundays and Public Holidays.

4.1.2 Transport Rates

Permitted transport rates are outlined in Condition 9 Schedule 2 of the development consent which states that no more than 31 laden trucks per hour or up to 231 laden trucks per day (Mon- Fri) and 105 laden trucks per day (Saturday) are permitted to be dispatched. The weighbridge software currently used, allows up to 31 tucks per hour to be dispatched. If this limit is reached in a given hour or day, the weighbridge will stop recording data until the next hour commences and therefore the truck cannot leave the quarry site once the limits are reached.

4.2 Forecast Operations

Activities to be undertaken in the next reporting period will be similar to those from last year’s annual report and will include the following:

Extractive activities such as:

- drilling and blasting exposed underlying rock to a manageable size or extraction of less competent or fractured rock using mechanical equipment (e.g. hydraulic excavator or bulldozer with ripper attachment);
- loading won material from the extraction face by front end loader or excavator into rear dump trucks for cartage to the processing plant;
- processing of won material through the processing plant;
- stockpiling of material in overhead storage bins/silos for either blending to produce road base using a pugmill or stockpiled on ground in the stockpile area by either front end load, rear dump truck or plant;
- loading of products into road registered trucks using front-end loader for transport off site.

Maintenance of vegetated earth batters (acoustic) including weed management. Visual inspections (including after rain events) will be conducted by the Quarry Manager on a weekly basis during the warmer months and monthly during colder months. The condition of the batters will be assessed and where necessary, weed removal, weed spraying, grass trimming and or replanting of areas requiring additional vegetation will be undertaken. Any maintenance works will be recorded in the next reporting period. Local contractor engaged to spray weeds approximately 4 times last year.

Vehicles and equipment typically used on Site include but are not limited to; excavators, front end loaders, rear dump trucks, water cart, screening plant, crushing plants, blending plants, pug mill, drill rigs, body trucks, light vehicles and road registered trucks, subcontractor delivery and service trucks.

5 Actions required from previous Annual Review

Refer to Table 6 – Actions from Previous Annual Review.

Table 6 – Actions from Previous Annual Review

Action from previous Annual Review	Requested by	Action taken by operator
<ul style="list-style-type: none"> • Placement of mobile tank on hardstand and within a bunded area; • Decommissioning of current fuel storage area 	Recommendation from previous years review (section 8.)	<p>Mobile tank has been removed from site. A licensed contractor now undertakes refuelling of plant and equipment during maintenance hours.</p> <p>Fuel storage area has been decommissioned including storage tank. However, the tank will remain on-site and will not be removed. Tank valves have been locked and all site personnel are aware the tank is no longer operational.</p>
Removal of obsolete intermediate bulk containers (IBC).	Recommendation from previous years review (section 8.)	Completed
Installation of foam dust suppression system to main plant.	Recommendation from previous years review (section 8.)	Completed
Installation of additional pump sprays in primary tip hopper.	Recommendation from previous years review (section 8.)	Completed
Upgrade of water cart to increase capacity.	Recommendation from previous years review (section 8.)	Completed

6 Environmental Performance

6.1 Water Quality

6.1.1 EIS Prediction

A surface water assessment was undertaken during the EIS process to determine potential impacts to Seelems Creek and Richmond River as a result of flow from the site. The assessment considered the following physio-chemical indicators and numerical criteria (trigger values) from the New South Wales Water Quality and River Flow Objectives (OEH 2015), for uncontrolled streams within the Richmond River Catchment. These values were adopted and are reflected in Schedule 3, Condition L2.4 of Environmental Protection Licence (EPL) 3397.

Total Nitrogen (N) (mg/L)	Total P (mg/L)	DO (%sat)		Turbidity (NTU)	pH		Conductivity (ms/cm)
		Lower	Upper		Lower	Upper	
350	25	85	110	6-50	6.5	8.5	125-2200

Water quality testing undertaken on site indicated that the dissolved oxygen (DO), turbidity and pH indicators were not in accordance with the prescribed trigger values stated above and therefore, a recommendation was made for surface water from the quarry to be captured and treated before discharging from the site.

As a result, a surface water management strategy was prepared and outlined a system of dirty water collection drains that convey surface water runoff to respective sedimentation basins. The sedimentation basins were sized in accordance with Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book) and Volume 2E (Mines & Quarries). The sedimentation basins have been sized to capture the 90th percentile 5 day rainfall event for their respective catchments.

Groundwater assessments were also conducted and determined that it is unlikely the site will encounter or impact groundwater. Surface water monitoring in accordance with the anticipated requirements of the EPL, will indicate any potential for impact through changes to water quality results.

6.1.2 Actual

A Water Management Plan (WMP) has been prepared to satisfy the requirements of Schedule 3, Conditions 21 of the Development Consent. The WMP provides information required to demonstrate that activities conducted at the quarry will be in accordance with the relevant conditions of Development Consent and EPL 3397.

Quarry Solutions have advised that the site has not released any water since the use commenced under the Development Consent. Quarry Solutions have also advised that groundwater has not been intersected during the extraction activities to date. Therefore, environmental performance and comparison of EIS predictions against actuals cannot be undertaken during this reporting period.

6.1.3 Comparison with Previous Years Data / Trends

Given that no water discharge has occurred during the reporting period a comparison cannot be drawn with previous years.

6.2 Noise

6.2.1 EIS Prediction

As part of the Environmental Impact Statement (EIS) for the now approved Coraki quarry, a noise assessment (including noise modelling at sensitive receptors) of the potential noise impacts that may occur was conducted. The relevant noise criteria for the assessment of noise impacts was taken from the NSW Industrial Noise Policy which are established by means of a comparison between a 'Rating Background Level ("RBL") plus 5 dB(A) 'Intrusiveness Criterion' and 'Amenity Criteria' levels, with the lower level being adopted as the basis for deriving project specific noise levels. Noise datalogger measurements determined that RBLs measured at Noise Datalogger Locations 1 and 2 were 30 dB(A) for the 7am to 6pm period. For the early morning 6am to 7am and early evening 6pm to 7pm periods the minimum RBL of 30 dB(A) was adopted for assessment of intrusive noise criteria in accordance with the NSW Industrial Noise Policy. This is consistent with the 7am to 6pm RBL. On this basis, the relevant 'Intrusiveness Criterion' level for assessment of noise from the proposed quarrying activities to be L_{Aeq} 35 dB(A). This criterion was adopted during the EIS approval process and is reflected in Schedule 3, Condition 4, Table 3 of the Development Consent.

Table 3: Noise criteria dB(A)

Receiver	Day dB(A) ($L_{Aeq}(15 \text{ min})$)	Evening dB(A) ($L_{Aeq}(15 \text{ min})$)	Night dB(A) ($L_{Aeq}(15 \text{ min})$)
All privately-owned residences	35	35	35

Note: Receiver locations are shown on the figure in Appendix 3.

6.2.2 Actuals

Since the commencement of activities, noise monitoring has been undertaken on a quarterly basis with results for the reporting period shown in Table 7 below. Results have generally been consistent with those determined and predicted during assessments undertaken for the EIS. During the reporting period. During March validation monitoring (Q1 2019) a noise event was recorded at residences R2 and R3 which was reported by the Quarry Manager to the EPA and the Department as an incident event. Refer to Drawing No. 1837.DRG.091A Environmental Monitoring Locations. It must be noted, that no community noise complaints were received directly by the site during the reporting period.

Table 7 – Noise Monitoring Results

Monitoring Event	Compliance Status	Action Taken
22 March 2019	Non-compliance detected at R2 and R3 locations during monitoring event. All other locations where compliant.	Incident notification reported to relevant authorities following receipt of noise monitoring results. Further information about the timing of incident reporting has been provided to DPIE and EPA. Corrective actions identified in incident report have been closed out.
18 June 2019	Noise monitoring was compliant at all residences (noting that the relevant landowner agreements are in place).	No further action required
2 October 2019	Noise monitoring was compliant at all residences (noting that the relevant landowner agreements are in place).	No further action required
11 December 2018	Noise monitoring was compliant at all residences (noting that the relevant landowner agreements are in place).	No further action required

6.2.3 Comparison with Previous Years Data / Trends

Since the commencement of noise monitoring in December 2016, non-compliances have occurred from time to time. One non-compliance event occurred in 2019 which is outlined in Table 7 above. When such an event occurs, subsequent corrective actions have been carried out to ensure that operations maintain compliance with the required criteria. In comparison with previous years the non-compliance events are less frequent, however have occurred in similar locations over time being R2 and R3. It is understood that further consultation has occurred with the nearby residents and that the

relevant land-owner agreements remain in place with respect to noise impacts. Quarterly noise compliance reports are undertaken and are available on the Quarry Solutions website.

6.3 Blasting

6.3.1 EIS Prediction

An assessment of potential vibration impacts was undertaken during the EIS process to identify recommended blast parameters which should be implemented to control vibration within approved and acceptable levels. The closest properties were identified and the distance measured from the proposed extraction limit boundary to the closest residential property.

The assessment concluded, that blasting activities would not introduce any significant risks or impacts to surrounding properties and that blasting is expected to comply with the anticipated licence requirements and ANZECC guidelines which state, that in relation to airblast overpressure, 100% of blasts must be less than 120 dBL and 95% of the blasts must be less than 115 dB(Lin Peak), which reflects the requirements of AS2187.2-2006. With respect to ground vibration, the maximum level is to be 10mm/s and 95% of blast must be less than 5mm/s.

Table 4: Blasting criteria

Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Any residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

The recommendations made in the EIS have been adopted and are reflected in Schedule 3, Condition 8, Table 4 of the Development Consent.

6.3.2 Actual

Quarry Solutions have engaged the services of a drill and blast contractor to undertake blasting activities on their behalf. The table below outlines the results from blasts that were undertaken in the reporting period. Blasting results have complied with the criteria outlined in Schedule 3, Condition 8, Table 4.

Table 8 – 2019 Blasting Results

Date	Monitor 1		Monitor 2		Monitor 3		Monitor 4		Monitor 5	
	Airblast O/P dB (L)	Ground vibration mm/s	Airblast O/P dB (L)	Ground vibration mm/s	Airblast O/P dB (L)	Ground vibration mm/s	Airblast O/P dB (L)	Ground vibration mm/s	Airblast O/P dB (L)	Ground vibration mm/s
16 / 01 / 2019	105.5	0.648	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T
06 / 02 / 2019	97.79	1.066	102.9	0.825	98.84	1.032	N/T	N/T	N/T	N/T
22 / 02 / 2019	110.6	2.06	114.6	1.024	N/T	N/T	N/T	N/T	N/T	N/T
19 / 03 / 2019	<88	0.89	113.7	0.93	114.6	0.69	N/T	N/T	N/T	N/T
03 / 04 / 2019	105.9	0.804	107.5	0.739	113.1	0.539	N/T	N/T	N/T	N/T
26 / 04 / 2019	91.42	1.41	108.4	2.30	N/T	N/T	N/T	N/T	N/T	N/T
07 / 05 / 2019	<88	1.074	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T
20 / 05 / 2019	<88	0.916	114.6	0.793	110.9	0.539	N/T	N/T	N/T	N/T
13 / 06 / 2019	<88	0.781	N/T	N/T	97.5	0.568	N/T	N/T	N/T	N/T
10 / 07 / 2019	<88	1.589	N/T	N/T	94	0.568	N/T	N/T	N/T	N/T
02 / 08 / 2019	<88	0.749	<88	0.810	105.5	0.524	N/T	N/T	N/T	N/T
11 / 09 / 2019	N/T	N/T	N/T	N/T	<88	2.09	110.6	0.28	N/T	N/T
30 / 09 / 2019	N/T	N/T	100.6	0.574	112.3	0.635	N/T	N/T	111.5	0.220
18 / 10 / 2019	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T	N/T
02 / 12 / 2019	N/T	N/T	N/T	N/T	113.9	0.524	N/T	N/T	N/T	N/T

*NT – not triggered.

6.3.3 Comparison with Previous Years Data / Trends

An annual summary of monitoring conducted from November 2016 to December 2019 is provided in Table 9 below. Results show that no exceedances have occurred since the commencement of blasting activities.

Table 9a –Blasting Results Monitor 1

Year		No. of blasts in year	Min. value	Max. value	100 percentile limit	95 percentile limit
2016	Overpressure	3	<88	115	<120	<115
	Ground Vibration		0.999	2.3	<10	<5
2017	Overpressure	13	NT	114	<120	<115
	Ground Vibration		NT	3.799	<10	<5
2018	Overpressure	14	88	113.1	<120	<115
	Ground Vibration		0.582	1.04	<10	<5
2019	Overpressure	11	< 88	110.5	<120	<115
	Ground Vibration		0.648	1.589	<10	<5

NT – not triggered.

Table 9b –Blasting Results Monitor 2

Year		No. of blasts in year	Min. value	Max. value	100 percentile limit	95 percentile limit
2016	Overpressure	3	NT	114	<120	<115
	Ground Vibration		NT	1.024	<10	<5
2017	Overpressure	11	NT	113.1	<120	<115
	Ground Vibration		NT	2.331	<10	<5
2018	Overpressure	1	110.2	110.2	<120	<115
	Ground Vibration		0.66	0.66	<10	<5
2019	Overpressure	8	< 88	114.6	<120	<115
	Ground Vibration		0.574	2.30	<10	<5

NT – not triggered.

Table 9c –Blasting Results Monitor 3

Year		No. of blasts in year	Min. value	Max. value	100 percentile limit	95 percentile limit
2016	Overpressure	3	NT	96.88	<120	<115
	Ground Vibration		NT	0.762	<10	<5
2017	Overpressure	6	NT	112.6	<120	<115
	Ground Vibration		NT	0.914	<10	<5
2018	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2019	Overpressure	10	< 88	113.9	<120	<115
	Ground Vibration		0.524	2.09	<10	<5

NT – not triggered.

Table 9d –Blasting Results Monitor 4

Year		No. of blasts in year	Min. value	Max. value	100 percentile limit	95 percentile limit
2016	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2017	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2018	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2019	Overpressure	1	110.6	110.6	<120	<115
	Ground Vibration		0.28	0.28	<10	<5

NT – not triggered

Table 9e –Blasting Results Monitor 5

Year		No. of blasts in year	Min. value	Max. value	100 percentile limit	95 percentile limit
2016	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2017	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2018	Overpressure	0	-	-	-	-
	Ground Vibration		-	-	-	-
2019	Overpressure	1	111.5	111.5	<120	<115
	Ground Vibration		0.220	0.220	<10	<5

NT – not triggered.

6.4 Air Quality

6.4.1 EIS Prediction

Air quality assessments and emission predictions were conducted during the EIS process. To enable assessment of dust concentrations and deposition rates from the proposed quarrying operations, detailed dispersion modelling was conducted using the CALMET / CALPUFF modelling system. The model-predicted dust concentrations and deposition rates were added to ambient concentrations (presented in the EIS) to assess the cumulative dust exposure at surrounding receptors. The modelling and assessment conducted for the EIS outlined performance targets (provided below) and determined that compliance with these targets could be achieved:

- dust deposition of 4 g/m²-month when monitored in accordance with Australian Standard AS 3580.10.1 Methods for sampling and analysis of ambient air – Determination of particulates – Deposited matter – Gravimetric method; and
- an aerodynamic diameter of less than 10 µm (PM10) suspended in the atmosphere of 50 µg/m³ over a 24-hour averaging time when monitored in accordance with Australian Standard AS 3580.9.6 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM10 high volume sampler with size selective inlet – Gravimetric method.

The performance targets were adopted and are reflected in Schedule 3, Condition 12, Table 5 of the Development Consent.

Table 5: Air quality criteria

Pollutant	Averaging Period	Criterion	
Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³	
Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³	
^c Deposited dust	Annual	b 2 g/m ² /month	a,d 4 g/m ² /month

Notes for Table 5:

- a. Cumulative impact (i.e. increase in concentrations due to the development plus background concentrations due to all other sources).
- b. Incremental impact (i.e. incremental increase in concentrations due to the development with zero allowable exceedances of the criteria over the life of the development).
- c. Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1.2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.
- d. Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed to by the Secretary.
- e. "Reasonable and feasible avoidance and mitigation measures" includes, but is not limited to, the operational requirements in conditions 14 and 15 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.

6.4.2 Actuals

During the reporting period, dust deposition monitoring was undertaken monthly at four (4) locations. Refer to Drawing No. 1837.DRG.091A Environmental Monitoring Locations. The annual dust deposition monitoring results for the reporting period are provided in Table 10. The data suggests that compliance has been maintained during the reporting period.

6.4.3 Comparison with Previous Years Data / Trends

The Air Quality data collected within the reporting period shows comparative levels of compliance with previous years of air quality monitoring. During the reporting period been slight elevations in minimum background air quality readings based on lower than average rainfall and bushfires occurring within the region. This has contributed to higher average background level readings at PDG2 than previous years. Average incremental changes indicate that measures being adopted at the site are effective.

Table 10 – Annual Dust Deposition Monitoring Results

Analyte	5 Dec 18 – 7 Jan 19	7 Jan – 6 Feb	6 Feb – 11 Mar	11 Mar – 10 Apr	10 Apr – 10 May	10 May – 11 June	11 June – 10 Jul	10 Jul – 9 Aug	9 Aug – 11 Sep	11 Sep – 10 Oct	10 Oct – 11 Nov	11 Nov – 11 Dec	11 Dec – 10 Jan 20
PDG1													
Ash Content	2.8	3.7	1.4	3.7	2.6	1.1	0.5	0.8	2.0	2.1	3.2	4.1	0.7
Combustible Matter	0.5	0.4	0.2	0.4	0.6	0.2	0.2	0.0	0.3	0.1	0.3	0.5	0.2
Total Insoluble Matter	3.3	4.1	1.6	4.1	3.2	1.3	0.7	0.8	2.0	2.2	3.5	4.6	0.9
PDG2 (background)													
Ash Content	1.4	2.0	2.0	2.4	2.9	1.4	N/A	1.0	2.2	4.1	4.0	3.6	2
Combustible Matter	0.5	0.9	0.4	0.5	0.8	0.5	N/A	0.5	0.1	0.3	0.3	0.4	0.1
Total Insoluble Matter	1.9	2.9	2.4	2.9	3.7	1.9	N/A	1.5	2.3	4.4	4.3	4.0	2.1
1.3PDG3													
Ash Content	1.3	0.7	0.8	1.3	1.1	2.2	0.5	1.4	2.7	1.5	2.2	2.2	0.9
Combustible Matter	0.7	0.1	0.1	1.0	1.1	0.8	0.3	0.6	0.6	0.3	0.3	0.7	0.3
Total Insoluble Matter	2.0	0.8	0.9	2.3	2.2	3.0	0.8	2.0	3.3	1.8	2.5	2.9	1.2
PDG4 (background)													
Ash Content	1.1	0.6	1.3	1.5	0.8	1.6	0.4	0.9	1.6	0.8	2.0	1.6	0.9
Combustible Matter	0.6	0.0	0.1	0.3	0.2	0.3	0.4	0.1	0.4	0.1	0.1	0.4	1.4
Total Insoluble Matter	1.7	0.6	1.4	1.8	1.0	1.9	0.8	1.0	2.0	0.9	2.1	2.0	2.3

Units of measure - g/m2/month

6.4.4 Monitoring Trends

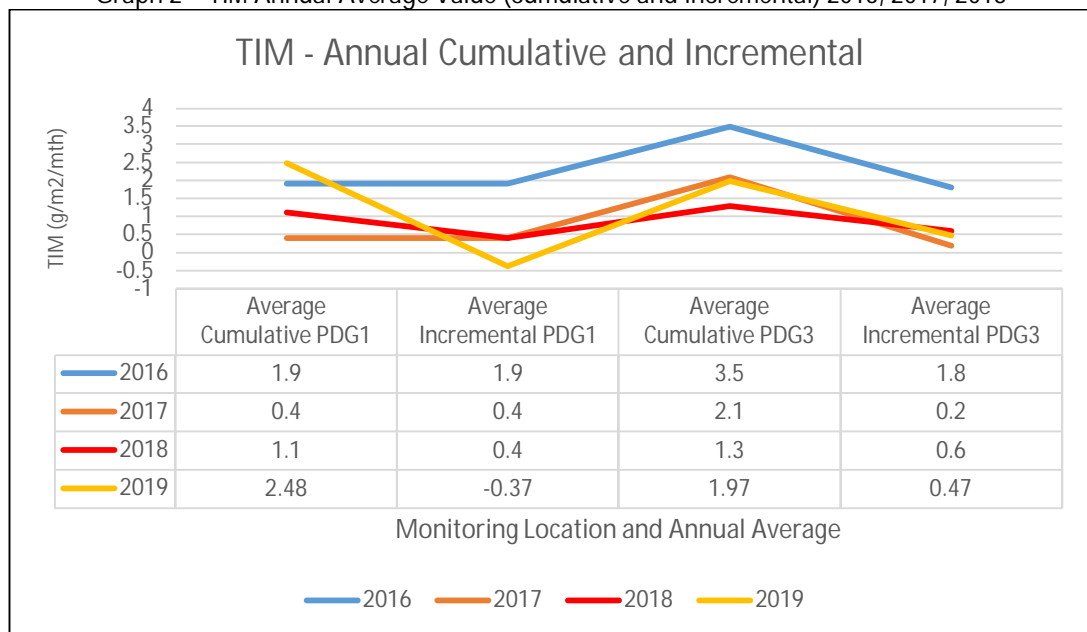
The following is a summary of Total Insoluble Matter (TIM) for monitoring undertaken since 2016. Annual average values were compliant with performance targets as per condition Schedule 3, Condition 12, Table 5 of the Development Consent.

Table 11 –Annual Dust Deposition Summary (Total Insoluble Matter)

Monitoring Location Point	No. of times measured during the year	Min. value	Max. value	Average value (cumulative)	Average value (incremental)	Average limit (cumulative)	Average limit (incremental)
PDG1 2016	3	1.2	2.6	1.9	0.4	4	2
PDG1 2017	12	0.2	8.5	1.9	0.4	4	2
PDG1 2018	11	0.5	1.8	1.1	<1	4	2
PDG1 2019	13	0.7	4.6	2.48	- 0.37	4	2
PDG2 2016 (background)	3	0.9	2	1.5	-	4	2
PDG2 2017 (background)	12	0.3	4.3	1.5	-	4	2
PDG2 2018 (background)	11	0.5	5.1	1.8	-	4	2
PDG2 2019	12	1.5	4.4	2.85	-		
PDG3 2016	3	1	5.6	3.5	2.1	4	2
PDG3 2017	12	0.5	4.5	1.8	0.2	4	2
PDG3 2018	11	0.2	2.5	1.3	0.6	4	2
PDG3 2019	13	0.8	3.3	1.97	0.47		
PDG4 2016 (background)	3	0.9	1.9	1.4	-	4	2
PDG4 2017 (background)	8	0.6	4.4	1.6	-	4	2
PDG4 2018 (background)	11	0.5	5.1	1.8	-	4	2
PDG4 2019 (background)	13	0.6	2.3	1.5	-	4	2

TIM - total particulates not soluble in waste

Graph 2 – TIM Annual Average Value (cumulative and incremental) 2016, 2017, 2018



6.5 Biodiversity

6.5.1 EIS Prediction

A preliminary assessment of ecological values through desktop analysis and field survey of the of the quarry area, was conducted during the EIS process. The assessment concluded that the area was unlikely to hold any notable value for flora or fauna species of significance. Recommendations for minimising the impact on ecological values provided in section 7.4.8 of the EIS, were adopted and are reflected in Schedule 3, Condition 33 of the Development Consent.

6.5.2 Actual

No clearing and or rehabilitation works have not been undertaken during the reporting period. As per the requirements of Schedule 3, Condition 33 of the Development Consent, a Biodiversity and Rehabilitation Management Plan has been prepared and submitted to the DP&E on 26 February 2018. Approval of this plan was given on 6 March 2018.

6.5.3 Comparison with Previous Years Data / Trends

In comparison to previous years of reporting no land clearing has been undertaken. Similarly, as the operational areas remain in use as part of the current activities' rehabilitation is yet to commence. It is anticipated that once the final level of the pit has been reached and extraction demand diminish areas will become available for rehabilitation to commence.

6.6 Cultural Heritage

6.6.1 EIS Prediction

Assessments conducted as part of the EIS process determined the site to be of low archaeological sensitivity and significance. During the assessment, no objects of Aboriginal Heritage where found however an unexpected finds procedure has been development as part of the Aboriginal Cultural Heritage Management Plan (ACHMP).

As per the requirements of condition Schedule 3, Condition 29 of the Development Consent, an ACHMP must be prepared and implemented. The ACHMP was submitted to the Department on 22 November 2017 and approved on 24 January 2018.

6.6.2 Actual

During the reporting period, no objects of Aboriginal Cultural Heritage were found. As per the requirements of condition Schedule 3, Condition 29 of the Development Consent, an Aboriginal Cultural Heritage Management Plan (ACHMP) has been prepared and implemented. The ACHMP was submitted to the DP&E on 22 November 2017 and approved on 24 January 2018.

6.6.3 Comparison with Previous Years Data / Trends

No cultural heritage items were found during the reporting period which is consistent with the previous reporting period.

6.7 Management Plans

During the reporting period the following documents were submitted for review and approval:

Submitted on the 20th June 2019 and Approved on the 13th of November 2019

- Environmental Management Strategy (condition 1 of Schedule 5);
- Noise Management Plan (condition 6 of Schedule 3);

6.8 Visual Impacts

6.8.1 EIS Prediction

An assessment of views from 6 representative locations around the site was undertaken as part of the EIS process, to determine the potential impact the quarry may have on visual amenity. The quarry is located in a predominately rural setting. The rural landscape has been largely cleared of vegetation. The surrounding rural land utilised primarily for cattle grazing is considered to provide vistas of moderate scenic quality. The Petersons Quarry has been in operation since 1916 and is part of the landscape.

6.8.2 Actual

Based on current operations visual screens are in place that also assist in noise management across the site. Photos have been provided to demonstrate the effectiveness of the mitigation of visual impacts from the site. Based on the photos provided the visual screens have well established vegetation which are similar to the surrounding agricultural landscape when viewed from areas surrounding the quarry.

Schedule 3, Condition 36 of the Development Consent, requires the installation and maintenance of vegetated acoustic bunds specified in Appendix 5 of the Development Consent. Photographs of the acoustic bunds are provided below and were taken during the site audit on the 14 February 2020. The bunds are compliant with the requirements of Appendix 5.

6.8.3 Comparison with Previous Years Data / Trends

The visual screens located around the extraction area are similar when compared to previous years. Vegetation was well established on these bunds prior in previous reporting periods and have been maintained through the current reporting period. Periodical weed spraying is occurring to manage opportunistic weeds that appear along these bunds. As the site did not develop to the full extent visual screens 1 and 5 are note required to be constructed.

Photograph 1 – Screen 2 area



Photograph 4 – Screen 5 area



Photograph 2 – Screen 3 area



Photograph 5 – Screen 6 area



Photograph 3 – Screen 4 area



6.9 Hazardous Goods and Storage

6.9.1 EIS Prediction

An assessment of hazardous goods (including its transportation) on the project site was conducted as part of the EIS process. The criteria for hazardous material storage quantities outlined in Table 3 of the SEPP 33 guideline (Department of Planning 2011a) was reviewed to determine which management strategies need to be implemented.

The review concluded that the quarry site is not considered potentially hazardous.

6.9.2 Actual

Previous onsite refuelling areas have been decommissioned and is now conducted by a licensed contractor. The areas used for refuelling are within a closed catchment with spill kits located within close proximity should a spill occur. Spill kits are regularly restocked as required. Oil and waste oil are stored within suitable drums or containers and kept in a bunded chemical container. The bund of the container is suitable for the volume of hydrocarbon being stored within the container. Staff are aware of the capacity of the bund and that this cannot be exceeded.

6.9.3 Comparison with Previous Years Data / Trends

Previous reporting period noted concerns with onsite fuel storage. Following a review of the site practises Quarry Solutions have reduced this risk through the outsourcing of refuelling activities to a local provider and removing the need for onsite storage of fuel. Oils are stored in drums or containers appropriate for the item (205l drums) and are stored in a bunded container. It is evident that improvements have been made at the site for the storage of hydrocarbons.

6.10 Waste Management

6.10.1 EIS Prediction

No predications for waste were provided in the EIS. It was determined that wastes generated by the quarry are unlikely to have a significant detrimental impact on the environment.

6.10.2 Actual

Schedule 3, Condition 37 of the Development Consent states:

The Applicant must:

- 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.*

Waste streams and management of them is as follows:

- General Solid Waste (putrescible) is serviced by Richmond Valley Council (normal kerbside bins, including recycling) and disposed lawfully.
- General Solid Waste (non-putrescible) is stored in skip bins and removed by licenced contractor Richmond Waste who lawfully dispose it at council facilities.
- Scrap metal is recycled by Lismore Metal recyclers.
- Site facilities have grey water and septic held in tanks underneath crib huts and pumped out by licensed contractor Richmond Waste who lawfully dispose of it at council facilities.
- Waste oil stored in 1000L pods and recycled by Summerland Waste Services at a listened facility.
- Used tyres are appropriately stockpiled and reused where possible to weigh down stockpile traps and used in haul road delineators.

It must be noted that minimal waste is generated on site (refer Attachment 3 – Waste Register) and no waste is generated from extraction activities. Waste management strategies will be reviewed during the Annual Review process in February each year.

6.10.3 Comparison with Previous Years Data / Trends

Quarry Solutions reported the waste volumes for the month of February 2018 to the DPIE in May 2018 as part of the proponent's response to the findings of the Independent Environmental Audit.

The data for February 2018 indicated waste generated included the following:

- 3 x Septic tank pump out
- 3 x 3m³ general waste bin services
- 1 x 12m³ general waste bin service
- 1 x 'pump station' service.

The waste register for 2019 (refer Attachment 3 – Waste Register) identifies that in February 2020 waste generated included the following:

- 2 x Septic tank pump out

Quarry Solutions have also advised that 2 x 3m³ skip bins of General Non-putrescible Waste get serviced weekly by a licenced waste contractor and the Richmond Valley Shire Council provide a General Putrescible Waste wheelie bin service.

It appears that waste generation and management remains consistent with previous years data.

6.11 Environmental Performance Summary

As per the requirements of the Departments annual review guideline, a summary of Environmental performance during the reporting period is provided in Table 12 below.

Attachment 1 outlines the compliance status of each condition of the approval applicable to the Development Consent.

Table 12 – Environmental Performance Summary

Aspect	Development consent (DC) /EIS prediction	Performance during the reporting period (2019)	Trend/key management implications	Management measures taken during reporting period (2019)
Water	DC – condition 19, 20, 21 EIS – section 7.8.4, 7.9	No water was discharged from site during the reporting period. Groundwater was not intersected during the reporting period.	N/A	<ul style="list-style-type: none"> • Inspection and maintenance of site ERSED controls. • Monitoring of site prior to and following rainfall events. • Survey control over the depth of excavations
Noise	DC – Schedule 3, condition 4. Appendix 4. EIS – 7.5.11	Exceedance of the prescribed noise limit occurred in the March 19. No complaints were received by the Site during the reporting period.	Subsequent monitoring has confirmed compliance for the remainder of the reporting period.	<ul style="list-style-type: none"> • Safe Operating Procedures have been reviewed following recorded noise exceedance. • Increased noise mitigation measures have been installed around the crushing plant. • Acoustic barriers are being maintained. • Nearby residents continue to be consulted. Noise agreements have been updated. • Weather station monitoring being undertaken;
Blasting	DC – Schedule 3, condition 8, 9, 10, 11. EIS section 7.7.1	Compliant. On average, 1.25 blast are conducted per month. No complaints have been received during the reporting period.	Blasting activities did not result in any significant risks or impacts to nearby residents during this reporting period and or last reporting period.	<ul style="list-style-type: none"> • Implementation of Blast Management Plan and SOP. • Pre-start meetings held and on a blast day, safety and firing procedures are discussed. • Blast notification board visible on entry sign.
Air Quality	DC – Schedule 3, condition 12, 13, 15, 16. Appendix 5. EIS – 7.6.7	Compliant Monthly dust monitoring was undertaken and no exceedances were recorded.	Annual performance targets are as follows: Cumulative impact: 4.0 g/m2/month (annual average) Incremental impact: 2.0 g/m2/month (annual average)	<ul style="list-style-type: none"> • Monthly dust monitoring was undertaken; • Maintenance of vegetated acoustic bunds; • Weather station monitoring being undertaken; • Water cart usage suited to wind conditions; • Daily prestart meeting with workforce discusses what the protocol should be followed should dust become an environmental or safety issue. • Surface binder (polo citrus) is applied to the site to suppress dust; • Site entry is sealed to prevent mud tracking and dust lift off.

Aspect	Development consent (DC) /EIS prediction	Performance during the reporting period (2019)	Trend/key management implications	Management measures taken during reporting period (2019)
Biodiversity	DC – Schedule 3, condition 31, 32, 33 EIS – 7.4.8	No clearing of vegetation or commencement of rehabilitation works was undertaken during the reporting period.	Nil as no rehabilitation works were undertaken during this reporting period and or last reporting period.	Remnant vegetation areas are fenced and or demarcated for protection.
Cultural Heritage	DC - Schedule 3, condition 29, 30 EIS – section 7.2.4	No objects of Aboriginal Cultural Heritage were found during the reporting period.	Nil as no objects of Aboriginal Cultural Heritage have been found over the project to date.	<ul style="list-style-type: none"> Site induction includes information in relation to cultural heritage management
Visual Impacts	DC – Schedule 3, condition 36. Appendix 5. EIS – section 7.10	Compliant. Vegetated acoustic bunds remain in place that have been installed in and maintain in accordance with Appendix 5 of the DC.	Nil. Bunds are well vegetated and have been established for a number of reporting periods.	<ul style="list-style-type: none"> Regular visual inspections take place Routine weed management is undertaken Community complaints register maintained
Hazardous Goods and Storage	DC – Schedule 3, condition 38, 39. EIS – section 7.14	Compliant. Fuel no longer stored onsite following outsourcing to contractor. Oils drums are stored in bunded container.	Hydrocarbon management has improved across the site since previous reporting period.	<ul style="list-style-type: none"> Decommissioning of previous fuel storage area. Quarry manager does routine inspections New bunded container purchased for oil storage
Waste	DC – Schedule 3, condition 37. EIS – section 7.14	Compliant. The site is serviced by appropriately licensed waste contractors. All waste receptacles comply with the relevant Australian Standards. All waste is reported to be disposed of at an appropriately licensed facility.	Nil.	<ul style="list-style-type: none"> Continuation of waste services with licensed contractor Opportunities for onsite reuse of waste tyres continually being explored

7 Rehabilitation

No rehabilitation works were undertaken on site during the reporting period, as activities are still being conducted in extractive areas.

Table 13 – Rehabilitation Status

Quarry Area Type	Previous Reporting Period (actual)	This Reporting Period (actual)	Next Reporting Period (forecast)
	Year X-1(ha)	Year X (ha)	Year X +1(ha)
A. Total Quarry footprint	32.3ha	32.3ha	32.3ha
B. Total active disturbance	32.3ha	32.3ha	32.3ha
C. Land being prepared for rehabilitation	Nil	Nil	Nil
D. Land under active rehabilitation	Nil	Nil	Nil
E. Completed rehabilitation	Nil	Nil	Nil

8 Community

Quarry Solutions contribute \$5000 per quarter to community organisations, groups or individuals in the Coraki and District with grants of \$100 to \$5000 available. Some community projects completed in the reporting period were as follows;

- Coraki Mixed Mob registration costs and uniforms for touch footy teams to participate in the Evans Head and Ballina competitions.
- Coraki Rural Transaction Centre to help with printing and distribution of the Coraki and District Newsletter.
- Editor of the Coraki and District News fund a promotion campaign aimed at putting the newsletter on a sustainable footing, to cover the costs of printing promotional material and mailing it out to over 200 businesses in the Mid Richmond.
- Establishment committee of the proposed new Coraki Chamber of Business providing seed funding for this initiative to cover administrative costs in setting up the Chamber.
- Coraki Tennis Club replacement of existing garden tap with a combination garden tap and water bubbler.
- Coraki Tennis Club replacement of rotted timber seating and back rest planks on grandstand with 3 rows of seating.
- Coraki Art Prize Committee sponsorship of the Best in Show Award.
- Printing expenses Coraki OP shop.
- Coraki bowls club replacement mower.
- Supply a Huntley Dopplex Ability portable system with accessories for use by the Community Nursing staff based at the Coraki Campbell Health One.
- Coraki Bowls Club - Supply meat raffles for Bush fire appeal.
- Purchase BBQ for community use based at the Rural transaction centre.
- Purchase chairs for community Rural transaction centre.

In addition to the above initiatives, Quarry Solutions employ local residents and engage local business to support the operations where possible.

8.1 Complaints

One complaint was received by the EPA in relation to the quarry (refer Attachment 4 – EPA Incident Report). Quarry Solutions received a copy of the EPA incident report from the EPA on 12 February 2019. The incident description from the EPA was:

A caller who requested to remain anonymous reported excessive dust pollution coming from Petersons Quarry and Coraki Quarry located at Petersons Quarry Road, Coraki NSW 2471, on 31/1/2019 at 2:00pm. The caller advises that the dust is seriously affecting both staff working inside the Quarry and the surrounding areas. The dust is coming from a crushing plant used to extract gravel and concrete from rocks. The wind is northerly. The caller has first hand information to the dust pollution. The caller declined to give personal details citing the caller's association with the Quarry. The caller advised that the dust pollution is an ongoing problem.

Quarry Solutions advised that a response was given to the EPA by reply email on the same day and that DPIE were included in the response. The response informed the EPA that monthly routine dust monitoring confirmed compliance with the dust criteria in the EPL and that dust management measures were occurring as per the requirements of the EPL. It is understood that no further issues were raised by the EPA or DPIE.

9 Independent Environmental Audit

Schedule 5, Condition 10 and 11 of the development consent states:

10. *Within two years of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:*

- a) *be conducted by 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;*
- 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; and*
- f) *be conducted and reported to the satisfaction of the Secretary.*

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

11. *Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the report.*

The most recent IEA was conducted by NGH Environmental in March – April 2018 and submitted to DPIE in May 2018. DPIE responded to the proponent and the IEA by letter dated 20 September 2018. Section 3.3 of the IEA included 'Table 2: Summary of recommendations and actions for non-compliance'. The proponent's response to the IEA set out those recommended actions and how those recommendations were to be implemented, which is replicated below in Table 14 for ease of reference with a column identifying whether those actions have been completed.

Table 14 – IEA Recommended Actions Status

<i>Condition/EPL reference</i>	<i>Audit recommendation</i>	<i>Quarry Solutions response</i>	<i>Status</i>
<i>COA2.2 (NC 2018/001)</i>	<i>Groundwork Plus are currently preparing a modification report for the change in location of the processing area.</i>	<i>The request for modification will be submitted for assessment.</i>	<i>Completed. The development consent was modified on 13 May 2019 to reflect the change in location of the processing area.</i>
<i>COA 3.4 (NC 2018/002)</i>	<i>Continue noise monitoring to test compliance with the COA</i>	<i>Routine noise monitoring will continue.</i>	<i>Ongoing Routine noise monitoring has continued in 2019.</i>
<i>COA 3.9 and 5.8 (ANC 2018/003)</i>	<i>All monitoring data should be made available on the company website. It is noted that the last data is now available.</i>	<i>The data is now available.</i>	<i>Completed Monitoring data is available on the Quarry Solutions website. However, DPIE by letter dated 3 April 2020 and subsequent email correspondence identified that the data was difficult to find and that modifications to the website should be done for legibility and ease of reference. The website will be updated in April 2020.</i>
<i>COA 2.9</i>	<i>Monthly checklist makes reference to '21' trucks per hour. It is recommended</i>	<i>The checklist has been updated (refer Attachment 2 – Checklist)</i>	<i>Completed.</i>

<i>Condition/EPL reference</i>	<i>Audit recommendation</i>	<i>Quarry Solutions response</i>	<i>Status</i>
	<i>that this be updated to be '31' as per Limits in Schedule 2 COA 9.</i>		This was done as part of the proponent's response to the IEA in May 2018.
<i>COA 3.37 (ANC 2018/004)</i>	<i>Prepare and maintain a waste register. Ensure waste is reported in all annual reviews.</i>	<i>A waste register has been prepared and will be maintained (refer Attachment 3 – Waste register). Waste was reported in the last annual review. Waste will be reported in future annual reviews.</i>	Completed This was done as part of the proponent's response to the IEA in May 2018. A copy of the 2019 waste register is attached to this annual review.
<i>COA 3.38 (NC 2018/005)</i>	<i>Ensure all hazardous liquids fuels and volatiles area stored in a bunded container.</i>	<i>All hazardous liquids, fuels and volatiles are stored in a bunded container. This will be maintained.</i>	Completed This was done as part of the proponent's response to the IEA in May 2018.
<i>COA 3.39 (ANC 2018/006)</i>	<i>Obtain and update to GHS compliant SDS' on site.</i>	<i>GHS complaint SDS are now held on site.</i>	Completed This was done as part of the proponent's response to the IEA in May 2018.
<i>EPL O4</i>	<i>Future testing of the Pollution Incident Response Management Plan (PIRMP) should be documented.</i>	<i>The checklist has been updated to address this (refer Attachment 2 – Checklist).</i>	Completed This was done as part of the proponent's response to the IEA in May 2018.
<i>EPL O5.9</i>	<i>Where basins are reinstated to maintain capacity within 5 days of rainfall, this should be documented.</i>	<i>The checklist has been updated to address this (refer Attachment 2 – Checklist).</i>	Completed This was done as part of the proponent's response to the IEA in May 2018.

The 2018 Annual Review which was submitted to DPIE in March 2019 and resubmitted in May 2019 incorporated the changes and matters raised by DPIE in relation to the 2018 IEA by NGH Environmental.

The next IEA is scheduled to occur in March 2021.

10 Independent Traffic Audit

Schedule 2, Condition 28 of the development consent states the following:

28. Within 6 months of commencement of transport operations, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission a suitably qualified person, whose appointment has been approved by the Secretary, to conduct an independent traffic audit of the development. This audit must:

- a) have the site verification component of the audit undertaken without prior notice to the Applicant;*
- b) assess the impact of the development on the performance of the road network;*
- c) investigate any incidents involving heavy vehicles associated with the development, including reviewing any community complaints;*
- d) assess the effectiveness of the Drivers Code of Conduct; and*
- e) recommend any necessary measures to reduce or mitigate any adverse (or potentially adverse) impacts.*

Within one month of receiving the audit report, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, with a response to any of the recommendations contained in the audit report, to the satisfaction of the Secretary.

The first Independent Traffic Audit (ITA) was completed by TTM Consulting Pty Ltd in March 2017. A response to the ITA was submitted by Groundwork Plus on behalf of the proponent to DPIE on 11 April 2017. DPIE provided feedback on the ITA by letter dated 7 July 2017. The revised ITA addressing the feedback from DPIE was submitted to DPIE in late July 2017. The 2018 IEA reviewed the matters raised in the ITA and noted no non-compliances.

The next ITA is due to occur in 2020. However, Quarry Solutions will request permission to delay the ITA until the 2021 calendar year as the traffic numbers are likely to reduce in 2020 with the conclusion of the Pacific Highway Upgrade Project and the COVID-19 emergency has implications for committing to this work at this time.

11 Incidents and non-compliances

This section of the Annual Review shall expand on the information outlined in Section 2, including the following:

- identify the date when the non-compliance occurred, if applicable;
- if relevant, identify the precise location where the non-compliance occurred (using maps or diagrams as appropriate);
- detail the cause of the non-compliance;
- detail what action has been, or will be, taken to mitigate any adverse effects of the non-compliance; and
- detail what action has been, or will be, taken to prevent a recurrence of the non-compliance.

22 March 2019 noise non-compliance

In Table 3, Section 2 and Section 6.2 of this Annual Review one non-compliance relating to noise on 22 March 2019 has been identified and is described as follows.

The non-compliance related to an exceedance of the permitted noise criteria pursuant to Schedule 3, Condition 4 of the development consent which occurred on the 22 March 2019 during routine quarterly noise monitoring. The March Noise Compliance Monitoring report prepared by MWA Environmental (which has previously been provided to DPIE, EPA and Council) (refer Attachment 5 – March 2019 Noise Compliance Monitoring) identified:

- Noise monitoring was undertaken between 7am and 12:00pm on 22 March 2019
- A single measurement at 7:50am at R2 recorded a level of 47.5 Leq – dB(A)
- The permitted noise level at R2 is 40 LAeq dB(A)
- A single measurement at 8:05am at R3 recorded a level of <45 Le – dB(A)
- The permitted noise level at R3 is 40 LAeq dB(A)
- The primary noise source contributing to the non-compliance was the processing plant

Notification of the incident was made to DPIE compliance and NSW EPA and surrounding land owners. Following the notification an incident investigation was carried out to investigate the non-compliance. Further noise monitoring in June and October 2019 confirmed operational noise had returned to compliant levels. Partly in response to the non-compliance the noise management plan was reviewed. A revised noise management plan was submitted to DPIE on 20 June 2019 and subsequently approved by DPIE by letter dated 13 November 2019. The development will continue to be operated in accordance with the noise management plan which appears to have addressed the potential risk on non-compliance.

12 February 2019 EPA dust complaint

In Section 8 of this Annual Review one incident relating to a complaint received by the EPA has been identified and is described as follows.

One complaint was received by the EPA in relation to the quarry (refer Attachment 4 – EPA Incident Report). Quarry Solutions received a copy of the EPA incident report from the EPA on 12 February 2019. The incident description from the EPA was:

A caller who requested to remain anonymous reported excessive dust pollution coming from Petersons Quarry and Coraki Quarry located at Petersons Quarry Road, Coraki NSW 2471, on 31/1/2019 at 2:00pm. The caller advises that the dust is seriously affecting both staff working inside the Quarry and the surrounding areas. The dust is coming from a crushing plant used to extract gravel and concrete from rocks. The wind is northerly. The caller has first hand information to the dust pollution. The caller declined to give personal details citing the caller's association with the Quarry. The caller advised that the dust pollution is an ongoing problem.

Quarry Solutions advised that a response was given to the EPA by reply email on the same day and that the DPIE was included in the response. The response informed the EPA that monthly routine dust monitoring confirmed compliance with the dust criteria in the EPL and that dust management measures were occurring as per the requirements of the EPL. It is understood that no further issues were raised by the EPA or DPIE.

This section of the Annual Review also addresses the following items provided in Table 15 below:

Table 15 – Other Incidents Or Non-compliance Matters

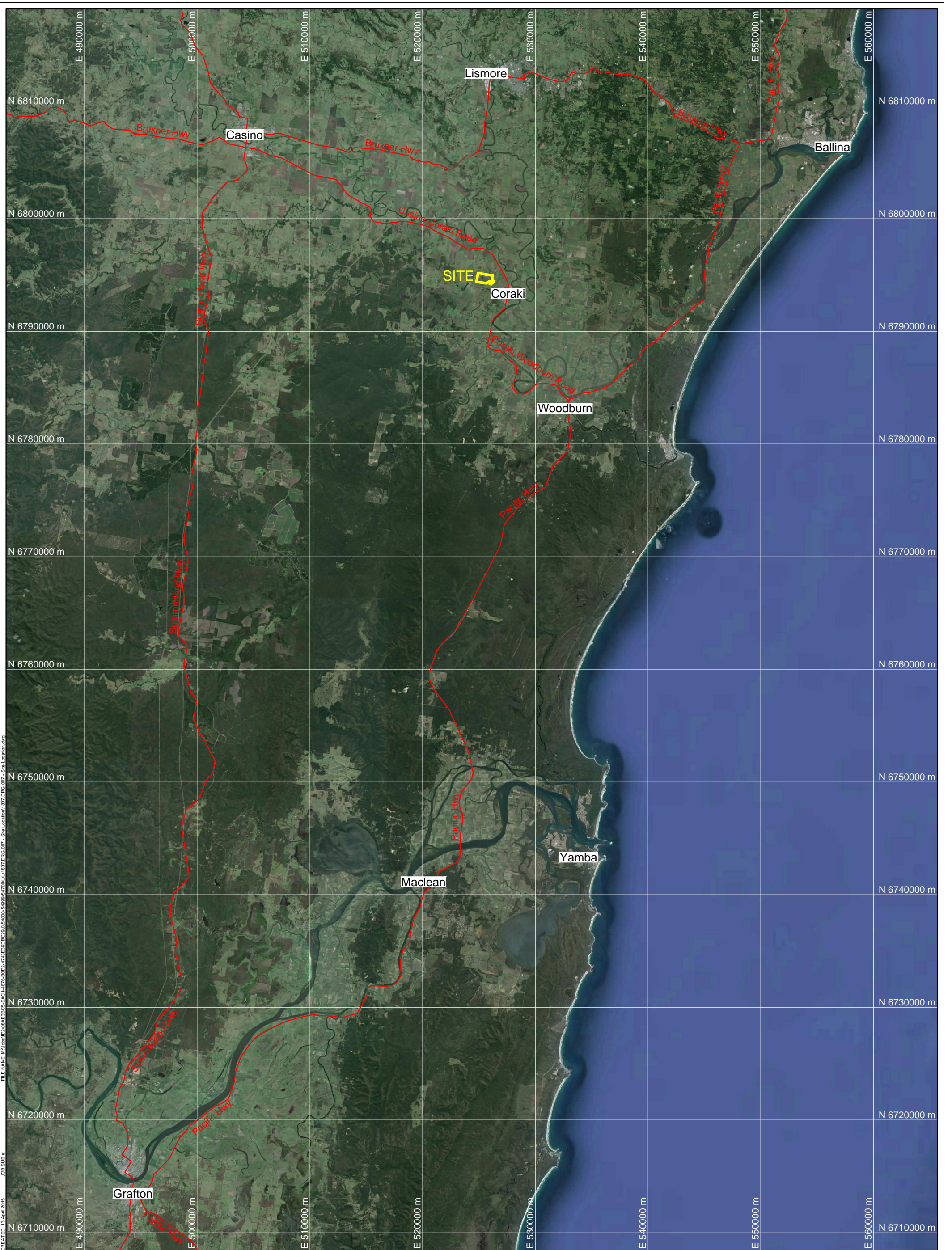
Matter	Comment
a description of any reportable incidents or exceedances;	As discussed above, one exceedance and one incident occurred in 2019.
a summary of any official cautions or warning letters, penalty notices or prosecution proceedings by any regulatory agency;	No official cautions, warning letters, penalty notice or prosecution proceedings by any regulator occurred during 2019 for the site.
a summary of the operator's response to any official cautions or warning letters, penalty notices or prosecution proceedings; and	The operator did not have to respond to any official cautions or warning letters, penalty notices or prosecution proceedings in 2019.
general commentary on any actions undertaken to prevent the recurrence of any reportable incidences or exceedances.	Refer above regarding the one exceedance and one incident in 2019.

12 Actions for next reporting period

Proposed actions to be undertaken in the 2020 reporting period include the following:

- Make a formal request to delay the next ITA until the 2021 calendar year.
- Review strategies plans and programs within 3 months of the Annual Review submission (ie before June 2020).
- Review strategies plans and programs in response to any incident as required by the development consent.
- Continue with toolbox talks to refresh staff understanding of the approval requirements.

drawings



REV	DESCRIPTION	DATE	BY
1	Revised site boundary	07/09/15	LT

Data Sources:
 Photography: Google, Image date: 2013-04-10
 Topography:
 Cadastre:
 Ecosystem:
 Other:

THESE DESIGNS AND PLANS ARE COPYRIGHT AND ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART OR TO BE USED ON ANY PROJECT WITHOUT THE WRITTEN PERMISSION OF GROUNDWORK PLUS. A.B.N. 80 829 145 906

Legend:

- Site Boundary
- Major Road

PROJECT: **Coraki Quarry**

CLIENT: **Quarry Solutions Pty Ltd**

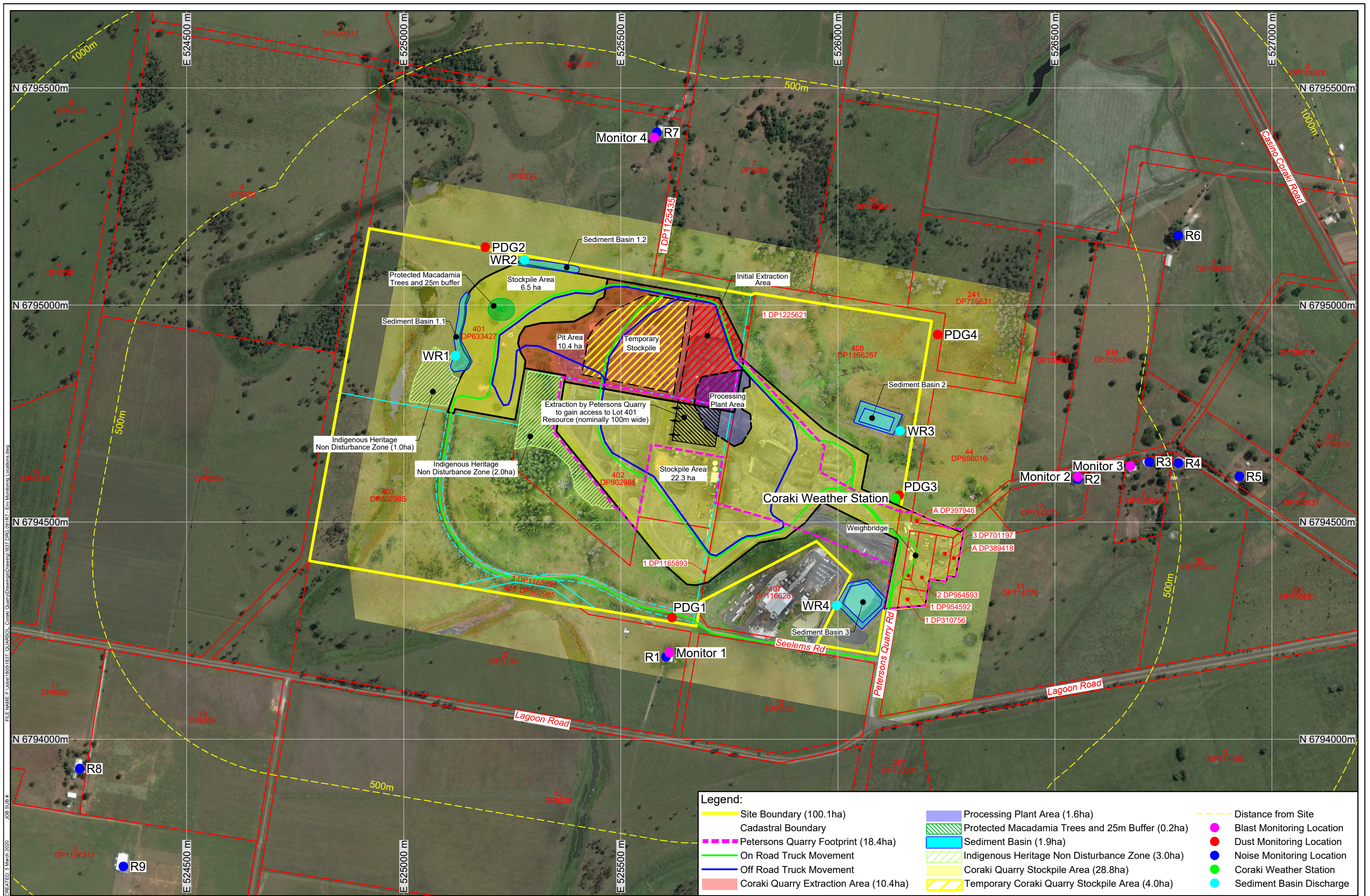
TITLE: **Site Location Plan**

SCALE: 1:300,000
 When Printed On A3

DRAWING NUMBER: **1837.DRG.007** REVISION: **1**

DATE: 7 September 2015 DRAWN: LT DATUM: HORIZONTAL / VERTICAL / ZONE
 PRINTED: 10 September 2015 CHECKED: JL MGA / / 56

PH: +61 7 3871 0411 www.groundwork.com.au



Legend:

- Site Boundary (100.1ha)
- Cadastral Boundary
- Petersons Quarry Footprint (18.4ha)
- On Road Truck Movement
- Off Road Truck Movement
- Coraki Quarry Extraction Area (10.4ha)
- Processing Plant Area (1.6ha)
- Sediment Basin (1.9ha)
- Indigenous Heritage Non Disturbance Zone (3.0ha)
- Coraki Quarry Stockpile Area (28.8ha)
- Temporary Coraki Quarry Stockpile Area (4.0ha)
- Distance from Site
- Blast Monitoring Location
- Dust Monitoring Location
- Noise Monitoring Location
- Coraki Weather Station
- Sediment Basin Discharge

REV	DESCRIPTION	DATE	BY
5	Extraction Area & Stockpile Area Amended	11/05/17	JS
6	Processing Plant Area Modified	29/10/19	JHV
7	Update Plan for EPA Request	05/03/20	MR

Data Sources:
 Photography: UAV Survey 2016-05-05; Google, Image date: 2014-12-18
 Topography: UAV Survey 2016-05-05
 Cadastre: Other:
 Other:

THESE DESIGNS AND PLANS ARE COPYRIGHT AND ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART OR TO BE USED ON ANY PROJECT WITHOUT THE WRITTEN PERMISSION OF GROUNDWORK PLUS. ADM. 89 828 145 908

Area of New Disturbance Associated with Coraki Quarry:
 Coraki Quarry Extraction Area (Including Temporary Coraki Quarry Stockpile Area) (9.9ha)
 Coraki Quarry Stockpile Area Outside of the Petersons Quarry Footprint (7.7ha + 6.5ha on Lot 401 = 14.2ha)
 Sediment Basin (1.9ha)



PROJECT: **Coraki Quarry**
 CLIENT: **Quarry Solutions Pty Ltd**

TITLE: **Environmental Monitoring Locations**

GROUNDWORK plus

SCALE: 1:8,000

DRAWING NUMBER: **1837.DRG.091** REVISION: **7**

DATE: 5 March 2020 DRAWN: JHV DATUM: HORIZONTAL / VERTICAL / ZONE
 PRINTED: 5 March 2020 CHECKED: DD MGA / AHD / 56

Attachment 1

Audit Checklist

Coraki Audit – February 2020 – Revised April 2020 in response to DPIE comments

Condition Number	Condition	Compliant Y/N/NA	Comments - evidence details
Obligation to minimise harm			
1	In addition to meeting the specific performance criteria established under this consent, the Applicant must 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.	Y	<p>Sighted Environmental Management Strategy and associated management plans.</p> <p>Quarry Manager (Brett Conlan) conducts daily site inspections respect to noise and dust generation, chemical storage, ERSED control effectiveness and mud tracking on public roads. Any aspects that are more than a see-and-fix are reporting in the site management system and corrective actions assigned to relevant staff, however most records are kept informally in site diary. This include site checks following periods of rainfall.</p> <p>A principle hazard checklist is completed once a week which covers key environmental aspects.</p> <p>Quarry Management System requires toolbox talks to be conducted on Environmental aspects. Workforce is encouraged to raise any concerns about HSE matters each day.</p> <p>New workers must undertake a site induction which provides an overview of the environmental requirement of the site. The quarry management system also has task specific environmental requirements that are required to be risk assessed prior to execution.</p>
Terms of Consent			
2	The Applicant must carry out the development: (a) generally in accordance with the EIS, SEE (MOD 1), SEE (MOD 2), SEE (MOD 3) and the Development Layout (b) in accordance with the Statement of Commitments and conditions of this consent.	Y	Site inspection and review of records held at site indicate that the development is generally being carried out in accordance with the relevant requirements. Quarry Manager has a poster

			including all environmental management obligation of the office wall.
3	If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this consent must prevail to the extent of any inconsistency.	Y	Noted
4	The Applicant must 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.	Noted	Noted. The main report details the level of communication between the applicant and the Department.
Lapsing of Consent			
5	If the development has not been physically commenced within 5 years of the date of this consent, then this development consent must lapse.	Not triggered	Operations began within the 5 years period.
Limits on Consent			
6	The Applicant may carry out quarrying operations for the development until 30 June 2023.	Noted	Noted
7	The Applicant must not extract materials outside of the Extraction Area, or stockpile materials outside of the Stockpile Area and Temporary Stockpile Area, as shown in Appendix 2; nor extract materials below 18 metres AHD.	Y	The site has been set out with survey markers. The sites is regularly flown with a survey drone and the disturbance limits are verified during this process.
8	The Applicant must not extract or process more than 1 million tonnes of quarry products in any calendar year.	Y	990,642 tonnes in total were recorded through the site's weighbridge during the reporting period.
Notification of emergencies, incidents and exceptions			
9	The Applicant must not dispatch from the development more than 31 laden trucks per hour or more than: (a) 231 laden trucks per day (Monday to Friday); and (b) 105 laden trucks per day (Saturday), unless operating in accordance with condition 2 of Schedule 3, in which case the Applicant may dispatch up to 273 laden trucks per day (Monday to Saturday).	Y	The sites weighbridge system (I-weigh) has preventive mechanisms installed to restrict trucks leaving site once the hourly rate is reached. Based on this the compliance has been maintain during the reporting period. Daily truck movements limits are also checked and verified. Quarry Solutions have advised that the daily truck movement limits have not been exceeded within the reporting period.
Structural Adequacy			
10	The Applicant must 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.	Y	No new demountable buildings have been installed within the reporting period. Certificates for existing buildings have been previously provided and

			reported on. All buildings on site are have been verified to meet the relevant standards to hold a temporary structure building approval.
Demolition			
11	The Applicant must ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	Not triggered	No demolition works have been carried out in the reporting period.
Protection of Public Infrastructure			
12	<p>Unless the Applicant and the applicable authority agree otherwise, the Applicant must:</p> <p>(c) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development;</p> <p>(d) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.</p> <p>Note: This condition does not apply to any damage to roads caused as a result of general road usage or otherwise addressed by contributions required of condition 17 of this consent.</p>	Y	Noted
Operation of Plant and Equipment			
13	<p>The Applicant must ensure that all the plant and equipment used at the site is:</p> <p>(a) maintained in a proper and efficient condition; and</p> <p>(b) operated in a proper and efficient manner.</p>	Y	The Quarry Management System requires all operators of plant and equipment to carry out prestart assessments using a site-specific app. This prompts the operator to flagging defects for required maintenance. Pro-active plant maintenance also occurs in accordance with manufacturer specifications and recommendations.
Production Data			
14	<p>The Applicant must:</p> <p>(a) provide annual quarry production data to DRG using the standard form for that purpose; and</p> <p>(b) include a copy of this data in the Annual Review (see condition 9 of Schedule 5).</p>	Noted	The production data is included in this report (<i>refer Attachment 2. DGR Production Data</i>).
Identification of Approved Extraction Limits			
15	<p>By 30 November 2017, or one month prior to commencement of extraction from Lot 1 DP1225621, whichever is earlier, unless otherwise agreed by the Secretary, the Applicant must:</p> <p>(a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction; and</p> <p>(b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.</p>	Y	Sighted survey plans prepared by Kennedy Surveying dated 26 Sep 2017 and email submission to the Department date 9 October 2017. Quarry Solutions has survey equipment which perform regular aerial surveys. Site boundaries are also verified during these flyovers.

16	While quarrying operations are being carried out, the Applicant must 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.	Y	Sighted markers around extraction pit area and survey plan Kennedy surveying DWG 16104A Rev 2 dated 27 Sep 16.
Contributions to Council			
17	The Applicant must pay to Council a contribution of \$1.12 per tonne of quarry products transported from the development for the maintenance of the local road network. The contribution must be paid quarterly and indexed in line with the provisions of the Richmond Valley Council Section 94 Heavy Haulage Plan 2013 or any subsequent relevant contributions plan adopted by Council. <small>Note: If the parties are unable to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.</small>	Y	Quarry Solution has advised that contributions are paid monthly to Richmond Valley Council and this is currently up to date.
Crown Roads			
18	The Applicant must obtain approval for the closure of the Crown road on the eastern boundary of Lot 401 DP 633427 prior to undertaking the development within the area of the road.	Y	Road closure was completed in March 2017. Sighted email notification to the department that this had occurred.
Compliance			
19	The Applicant must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	Y	The Quarry Management System requires all employees, contractors and subcontractors to be site inducted. The site induction material was sighted which contains relevant obligations under the approval. Ongoing toolbox talks are provided to the workforce in order to reinforce and build further upon induction material. A poster summarising the sites obligations under the planning consent is also displayed in a number of the site's offices. Other features of the quarry Management System include Safe Work Method Statements, internal incident reporting and monthly area inspection targets from staff and senior management.
Applicability of Guidelines			
20	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.	Y	Noted
21	However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such guidelines, protocol, Standard or policy, or a replacement of them.	Y	Noted
Schedule 3 – Environmental Performance Conditions			

Noise											
1	<p>The Applicant must comply with the operating hours set out in Table 1.</p> <p><i>Table 1: Operating Hours</i></p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <thead> <tr> <th style="width: 30%; padding: 5px;">Activity</th> <th style="padding: 5px;">Permissible Hours</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Quarrying operations including truck loading and dispatch</td> <td style="padding: 5px;">7 am to 6 pm Monday to Friday; 8 am to 1 pm Saturday; and At no time on Sundays or public holidays.</td> </tr> <tr> <td style="padding: 5px;">Blasting</td> <td style="padding: 5px;">9 am to 3 pm Monday to Friday; and At no time on Saturdays, Sundays or public holidays.</td> </tr> <tr> <td style="padding: 5px;">Maintenance activities</td> <td style="padding: 5px;">May be conducted at any time, provided that these activities are not audible at any privately-owned residence.</td> </tr> </tbody> </table>	Activity	Permissible Hours	Quarrying operations including truck loading and dispatch	7 am to 6 pm Monday to Friday; 8 am to 1 pm Saturday; and At no time on Sundays or public holidays.	Blasting	9 am to 3 pm Monday to Friday; and At no time on Saturdays, Sundays or public holidays.	Maintenance activities	May be conducted at any time, provided that these activities are not audible at any privately-owned residence.	Y	<p>As per condition 2 (below) agreements have been put in place with the nearby residents. The operational hours have therefore been updated in the Noise Management Plan approved by DPIE on 13/11/19.</p>
Activity	Permissible Hours										
Quarrying operations including truck loading and dispatch	7 am to 6 pm Monday to Friday; 8 am to 1 pm Saturday; and At no time on Sundays or public holidays.										
Blasting	9 am to 3 pm Monday to Friday; and At no time on Saturdays, Sundays or public holidays.										
Maintenance activities	May be conducted at any time, provided that these activities are not audible at any privately-owned residence.										
2	<p>The Applicant may operate under the extended operating hours set out in Table 2 only after obtaining written agreements with landowners R1 to R9 (as shown on the plan in Appendix 3), and after advising the EPA and the Secretary in writing of the terms of these agreements.</p> <p><i>Table 2: Extended Operating Hours</i></p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <thead> <tr> <th style="width: 30%; padding: 5px;">Activity</th> <th style="padding: 5px;">Permissible Hours</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Quarrying operations including truck loading and dispatch</td> <td style="padding: 5px;">6 am to 7 pm Monday to Friday; 6 am to 7 pm Saturday; and At no time on Sundays or public holidays.</td> </tr> <tr> <td style="padding: 5px;">Maintenance activities</td> <td style="padding: 5px;">May be conducted at any time.</td> </tr> </tbody> </table>	Activity	Permissible Hours	Quarrying operations including truck loading and dispatch	6 am to 7 pm Monday to Friday; 6 am to 7 pm Saturday; and At no time on Sundays or public holidays.	Maintenance activities	May be conducted at any time.	Y	<p>The applicant has obtained the required the relevant landowner agreements. Records are retained on file from 2016 and 2019. Also see above</p>		
Activity	Permissible Hours										
Quarrying operations including truck loading and dispatch	6 am to 7 pm Monday to Friday; 6 am to 7 pm Saturday; and At no time on Sundays or public holidays.										
Maintenance activities	May be conducted at any time.										
3	<p>The following activities may be carried out on the site at any time:</p> <p>(a) delivery or dispatch of materials as requested by Police or other authorities; and</p> <p>(b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.</p> <p>In such circumstances, the Applicant must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.</p>	NT	<p>Not triggered</p>								
Noise Impact Assessment Criteria											
4	<p>The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land.</p> <p><i>Table 3: Noise criteria dB(A)</i></p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 5px 0;"> <thead> <tr> <th style="width: 25%; padding: 5px;">Receiver</th> <th style="width: 25%; padding: 5px;">Day dB(A) (L_{Aeq}(15 min))</th> <th style="width: 25%; padding: 5px;">Evening dB(A) (L_{Aeq}(15 min))</th> <th style="width: 25%; padding: 5px;">Night dB(A) (L_{Aeq}(15 min))</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">All privately-owned residences</td> <td style="text-align: center; padding: 5px;">35</td> <td style="text-align: center; padding: 5px;">35</td> <td style="text-align: center; padding: 5px;">35</td> </tr> </tbody> </table> <p><i>Note: Receiver locations are shown on the figure in Appendix 3.</i></p> <p>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, the noise criteria in</p>	Receiver	Day dB(A) (L _{Aeq} (15 min))	Evening dB(A) (L _{Aeq} (15 min))	Night dB(A) (L _{Aeq} (15 min))	All privately-owned residences	35	35	35	Non compliance	<p>On 22nd March 19 a noise event exceeding condition 4 criteria was recorded. Notification of the incident was made to DPIE compliance and NSW EPA. Following the notification an incident investigation was carried out to determine the root cause. This resulted in subsequent corrective actions being implemented. Further noise verification monitoring confirmed operational noise levels have been restored to a compliant level.</p>
Receiver	Day dB(A) (L _{Aeq} (15 min))	Evening dB(A) (L _{Aeq} (15 min))	Night dB(A) (L _{Aeq} (15 min))								
All privately-owned residences	35	35	35								

	Table 3 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the EPA and the Secretary in writing of the terms of this agreement.		
Operating Conditions			
5	<p>The Applicant must:</p> <p>(a) implement best practice management to minimise the operational and road transportation noise of the development;</p> <p>(b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4);</p> <p>(c) after the commencement of quarrying operations at the development, carry out noise monitoring (at least every 3 months, or as otherwise agreed with the Secretary) to determine whether the development is complying with the relevant conditions of this consent; and</p> <p>(d) regularly assess noise monitoring data and modify and/or stop operations associated with the development to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>	N	<p>Noise monitoring carried out on 22nd March 2019 noted an exceedance of noise criteria that was reported on 30 April 2019. Quarry Solutions confirmed that the works were reviewed once non-conformance was identified.</p> <p>3-monthly noise monitoring has been undertaken throughout the reporting period. It is noted that the 3rd quarter monitoring event was agreed with the Secretary to commence several days later than scheduled due to conditions at the time.</p>
Noise Management Plan			
6	<p>The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary.</p> <p>The plan must:</p> <p>(a) be prepared in consultation with EPA;</p> <p>(b) be submitted to the Secretary within 6 months of the date of this consent, or prior to the commencement of operations, whichever is earlier, unless otherwise agreed by the Secretary;</p> <p>(c) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> • compliance with the noise criteria in this consent; • best practice management is being employed to minimise operational noise from the development; and • the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 4); <p>(d) describe the proposed noise management system, including the establishment of acoustic bunds (as shown on the plan in Appendix 5) and other noise controls; and</p> <p>(e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Tables 3, and which evaluates and reports on the effectiveness of the noise management system of the development.</p> <p>The Applicant must implement the approved management plan as approved by the Secretary.</p>	Y	<p>The determination of Modification 3 triggered a revision of the previously approved Noise Management Plan. A revised noise management plan covering the requirement of this condition was submitted to the Department on 20th June 2019. The Secretary approved the revised plan on 13th of November 2019.</p>
Noise Compliance Review			
7	<p>The Applicant must commission a Noise Compliance Review for the development within 3 months of commencement of operations or as otherwise agreed with the Secretary. The review must be undertaken to the satisfaction of the Secretary and:</p> <p>(a) be undertaken by a suitably qualified and experienced acoustic engineer during a period when the quarry is operating;</p> <p>(b) assess whether the development is complying with the noise limits in this consent;</p> <p>(c) include the details of the plant and equipment operating at the time of the review;</p> <p>(d) identify any additional measures to be implemented to ensure compliance; and</p> <p>(e) provide details of any complaints received in relation to noise generated by the development and the action taken in response to those complaints.</p>	Y	<p>Noise Compliance Monitoring has been conducted by MWA 4 times within the reporting period.</p>

	Within one month of receiving the Noise Compliance Review report, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the report to the Secretary, with a response to any recommendations contained in the report.														
Blasting Criteria															
8	<p>The Applicant must ensure that blasting associated with the development does not cause any exceedance of the criteria in Table 4.</p> <p><i>Table 4: Blasting criteria</i></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #cccccc;"> <th style="padding: 5px;">Receiver</th> <th style="padding: 5px;">Airblast overpressure (dB(Lin Peak))</th> <th style="padding: 5px;">Ground vibration (mm/s)</th> <th style="padding: 5px;">Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Any residence on privately-owned land</td> <td style="padding: 5px;">120</td> <td style="padding: 5px;">10</td> <td style="padding: 5px;">0%</td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;">115</td> <td style="padding: 5px;">5</td> <td style="padding: 5px;">5% of the total number of blasts over a period of 12 months</td> </tr> </tbody> </table> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 4, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Any residence on privately-owned land	120	10	0%		115	5	5% of the total number of blasts over a period of 12 months	Y	The Blasts carried out within the reporting period are compliant with the criteria of this condition.
Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance												
Any residence on privately-owned land	120	10	0%												
	115	5	5% of the total number of blasts over a period of 12 months												
Blasting Frequency															
9	<p>The Applicant may carry out a maximum of 2 blasts per calendar month, unless with the prior approval of the Secretary or unless an additional blast is required following a blast misfire. This condition does not apply to blasts required to ensure the safety of workers on site or other persons.</p> <p><small>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.</small></p>	Y	Quarry Solutions have advised that 14 blasts have occurred at the site during the reporting period. The frequency of blasts have not exceeded 2 per calendar month.												
Operating Conditions															
10	<p>During blasting operations, the Applicant must:</p> <p>(a) implement best practice management to:</p> <ul style="list-style-type: none"> • protect the safety of people and livestock in the areas surrounding blasting operations; • protect public or private infrastructure/property in the surrounding area from damage from blasting operations; • minimise the dust and fume emissions of blasting; <p>(b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule for the development;</p> <p>(c) obtain agreement with any private landowner affected by blast exclusion zones that are required to manage fly rock; and</p> <p>(d) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>	Y	<p>A Blast Management Plan has been developed in accordance with this condition and subsequently approved by DPIE on 24th Jan 2018.</p> <p>The licensed Blasting contractor undertaking the work follows a SMWS and Site Blasting Procedure that have has been designed in accordance with this condition.</p>												
Blast Management Plan															
11	<p>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval within 6 months of the date of this consent, or prior to the commencement of blasting, whichever is earlier, unless otherwise agreed by the Secretary;</p>	Y	The Blast Management Plan forms part of the Sites environmental management plan submitted to DPE												

<p>(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;</p> <p>(c) include measures to manage flyrock;</p> <p>(d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;</p> <p>(e) include community notification procedures for the blasting schedule; and</p> <p>(f) include a protocol for investigating and responding to complaints.</p> <p>The Applicant must implement the approved management plan as approved by the Secretary.</p>	<p>22 November 2017 and subsequently approved on 24 January 2018.</p>
--	---

Air Quality Impact Assessment Criteria

12	<p>The Applicant must 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 5 at any residence on privately-owned land.</p> <p><i>Table 5: Air quality criteria</i></p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr style="background-color: #cccccc;"> <th style="text-align: center; padding: 5px;"><i>Pollutant</i></th> <th style="text-align: center; padding: 5px;"><i>Averaging Period</i></th> <th colspan="2" style="text-align: center; padding: 5px;"><i>Criterion</i></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Particulate matter < 10 µm (PM₁₀)</td> <td style="text-align: center; padding: 5px;">Annual</td> <td colspan="2" style="text-align: center; padding: 5px;">a,d 30 µg/m³</td> </tr> <tr> <td style="padding: 5px;">Particulate matter < 10 µm (PM₁₀)</td> <td style="text-align: center; padding: 5px;">24 hour</td> <td colspan="2" style="text-align: center; padding: 5px;">b 50 µg/m³</td> </tr> <tr> <td style="padding: 5px;">Total suspended particulates (TSP)</td> <td style="text-align: center; padding: 5px;">Annual</td> <td colspan="2" style="text-align: center; padding: 5px;">a,d 90 µg/m³</td> </tr> <tr> <td style="padding: 5px;">c Deposited dust</td> <td style="text-align: center; padding: 5px;">Annual</td> <td style="text-align: center; padding: 5px;">b 2 g/m²/month</td> <td style="text-align: center; padding: 5px;">a,d 4 g/m²/month</td> </tr> </tbody> </table> <p>Notes for Table 5:</p> <p>a. Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).</p> <p>b. Incremental impact (ie incremental increase in concentrations due to the development with zero allowable exceedances of the criteria over the life of the development).</p> <p>c. Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.</p> <p>d. Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed to by the Secretary.</p> <p>e. "Reasonable and feasible avoidance and mitigation measures" includes, but is not limited to, the operational requirements in conditions 14 and 15 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.</p>	<i>Pollutant</i>	<i>Averaging Period</i>	<i>Criterion</i>		Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³		Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³		Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³		c Deposited dust	Annual	b 2 g/m ² /month	a,d 4 g/m ² /month	Y	<p>Depositional dust monitoring is undertaken on a monthly basis. Dust monitoring reports for monitoring period show that the annual average reading for depositional dust is below 4 g/ m² / month.</p>
<i>Pollutant</i>	<i>Averaging Period</i>	<i>Criterion</i>																					
Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³																					
Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³																					
Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³																					
c Deposited dust	Annual	b 2 g/m ² /month	a,d 4 g/m ² /month																				

Quarry-owned Land

13	<p>The Applicant must 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 5 at any occupied residence on quarry-owned land (including land owned by another quarry owner) unless:</p> <p>(a) the tenant has been notified of any health risks associated with such exceedances in accordance with the notification requirements under Schedule 4 of this consent; and</p> <p>(b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice; to the satisfaction of the Secretary.</p>	Not triggered	<p>There are no residences on quarry-owned land (including land owned by another quarry owner).</p>
----	---	---------------	---

Operating Conditions			
14	<p>The Applicant must:</p> <p>(a) implement best practice management to minimise the dust emissions of the development;</p> <p>(b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations associated with the development to ensure compliance with the air quality criteria in this consent;</p> <p>(c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see notes under Table 5);</p> <p>(d) monitor and report on compliance with the relevant air quality conditions in this consent; and</p> <p>(e) minimise the area of surface disturbance and undertake progressive rehabilitation of lands associated with the development, to the satisfaction of the Secretary.</p>	Y	<ul style="list-style-type: none"> • Water trucks are used on site and usage is increased in windy conditions • Polo citrus is a dust suppressant used on the crushing plant, earth bunds used for stormwater management and noise attenuation. • Sealed entry and exit road to quarry • Enclosed screens and transfer points • Conduct visual inspections • Conduct monthly inspection checklist
Air Quality Management Plan			
15	<p>The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval within 6 months of the date of this consent, or prior to the commencement of operations, whichever is earlier, unless otherwise agreed by the Secretary;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> • compliance with the relevant conditions of this consent; • best practice management is being employed; and • the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; <p>(c) describe the proposed air quality management system; and</p> <p>(d) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> • 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. <p>The Applicant must implement the approved management plan as approved by the Secretary.</p>	Y	<p>The AQMP was submitted to the Department of Planning and Environment on 22 November 2017 and approved on 24 January 2018.</p>
Meteorological Monitoring			
16	<p>For the life of the development, the Applicant must 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.</p>	Y	<p>Weather station in place, data captured and uploaded onto weatherlink.</p>
Greenhouse Gas Emissions			
17	<p>The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the development.</p>	Y	<p>The Quarry Management System implemented on the site ensures;</p> <ul style="list-style-type: none"> • Emission control systems are fitted to all plant and equipment. • Maintenance of equipment and vehicles.

			<ul style="list-style-type: none"> Regularly updating vehicles and equipment and where practicable trailing low emission hybrid equipment. Fleet management system certification – Quarry Manager received an alert if a vehicle or plant is left idling.
Soil and Water			
Water Supply			
18	The Applicant must 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.	Y	The sites water supply is harvested from on-site dams and stored in a 250,000l tank. The water is used for blending of quarry products and dust suppression. When water is required to be imported a licensed contractor is utilised.
Water Discharges			
19	The Applicant must comply with the discharge limits in any relevant EPL, or with section 120 of the POEO Act.	Not triggered	No discharged of water has occurred on site.
Groundwater			
20	In the event that groundwater in excess of negligible quantities is intersected during extraction activities, the Applicant must undertake a hydrogeological investigation, in consultation with DPI - Water, to the satisfaction of the Secretary. The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures. The Applicant must implement reasonable and feasible management measures recommended by the hydrogeological investigation, to the satisfaction of the Secretary.	Not Triggered	Noted. No groundwater has been intersected during extraction activities.
Water Management Plan			
21	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared by suitably qualified and experienced person/s approved by the Secretary; (b) be prepared in consultation with the EPA and DoL Water; (c) be submitted to the Secretary for approval within 6 months of the date of this consent, or prior to the commencement of operations, whichever is earlier, unless otherwise agreed by the Secretary; (d) include a: (i) Site Water Balance that includes details of: <ul style="list-style-type: none"> the volume of water deficit and/or surplus for dry, average and wet years, considering all planned water management infrastructure; sources and security of water supply, including on-site water storages; water use and management on site; any off-site water transfers or discharges including discharge volumes and frequency; 	Y	The WMP was submitted to the Department of Planning and Environment on 26 February 2018 and approved on 6 March 2018. Buffer zones to the watercourses have been maintained during the reporting period. It is noted that records of this plan are kept onsite

	<ul style="list-style-type: none"> • reporting procedures; and • measures that would be implemented to minimise clean water use on site; and <p>(ii) Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ clean water diversion system; ○ erosion and sediment controls; ○ dirty water management system; and ○ water storages; • provision of a 40 metre buffer zone between watercourses and quarrying operations; and • a program to monitor and report on: <ul style="list-style-type: none"> ○ any surface water discharges; ○ the effectiveness of the water management system; and ○ surface water flows and quality in local watercourses. <p>The Applicant must implement the approved management plan as approved by the Secretary.</p>		
Transport			
Transport Routes			
22	<p>All laden trucks travelling from the development to the Pacific Highway must travel via Petersons Quarry Road, Lagoon Road, Casino – Coraki Road, Queen Elizabeth Drive and Coraki - Woodburn Road. Trucks returning to the site from the Pacific Highway must return via the same route and enter the development via Seelems Road or Petersons Quarry Road.</p> <p>This condition does not apply:</p> <p>(a) when road closures on the above route are in place;</p> <p>(b) when delivering to sites not involving travel on the Pacific Highway, such as within the local area or sites to the northwest or north of the quarry (eg Casino or Lismore); and</p> <p>(c) in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.</p>	Y	<p>All trucks are fitted with GPS trackers and advised of the routes to take during site induction. Any variance from the approved route will trigger an alert to be sent to site management. Site management also routinely reviews haulage data.</p>
Road Upgrade			
23	<p>The Applicant must cause the following road upgrade works to be undertaken to the satisfaction of the Council or the RMS (whichever is the relevant roads authority):</p> <p>(a) prior to trucks returning to the site utilising Seelems Road, provision of a minimum 6 metre sealed carriageway on Seelems Road from Petersons Quarry Road to a point approximately 200 metres west of the entrance to the industrial facility at 30 Seelems Road; and</p> <p>(b) prior to commencing despatch of laden trucks from the development, asphaltic concrete/hot mix sealing of the intersections of Petersons Quarry Road and Lagoon Road; Lagoon Road and Casino – Coraki Road; and Woodburn – Coraki Road and the Pacific Highway.</p>	Not triggered	<p>Sealing of intersections was completed in September 2016 and was captured in previous years annual report.</p> <p>Upgrade works are not required as Seelems road is not being utilised.</p>

24	<p>Prior to commencing the road upgrade works required under condition 23, the Applicant must:</p> <p>(a) notify Council and/or the RMS (whichever is the relevant roads authority) in writing of any existing damage to the sections of road and the intersections listed in condition 23; and</p> <p>(b) lodge a defects liability bond with Council based on 10% of the quantity-surveyed cost of the upgrade works for roads for which the Council is the relevant roads authority.</p>	Not triggered	Works were completed in September 2016 and was captured in previous years reporting.
Monitoring of Product Transport			
25	<p>The Applicant must, by the use of a weighbridge, make, and retain for at least 12 months, records of the time of arrival, time of dispatch, weight of load and vehicle identification for each laden truck dispatched from the development. These records must be made available to the Department on request and a summary included in the Annual Review.</p>	Y	<p>Quarry Solutions uses the 'i-weigh' system which collects the relevant data required by this condition. Data and automatic reporting was sighted to confirm compliance. Records are retained onsite and can be requested by DPIE for viewing as required.</p>
Operating Conditions			
26	<p>The Applicant must:</p> <p>(a) ensure that all laden trucks entering or exiting the site have their loads covered; and</p> <p>(b) ensure that all laden trucks exiting the site are cleaned of materials that may fall on the road, before leaving the site.</p> <p>(c) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the development so they can be easily identified by road users.</p>	Y	<p>All haulage fleet include truck trailers with automatic tarps that draw shut once loaded. Truck tarping stations have been installed for drivers to inspect loads prior to exiting onto public roads. Drivers are made aware of this requirement during site induction. Weigh bridge operator also completes visual surveillance of haulage fleet activities.</p>
Transport Management Plan			
27	<p>The Applicant must prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with RMS and Council and submitted to the Secretary for approval within 6 months of the date of this consent, or prior to the commencement of despatch of laden trucks from the development, whichever is earlier, unless otherwise agreed by the Secretary;</p> <p>(b) provide a clear description of the transport routes;</p> <p>(c) describe the processes in place for the control of truck movements;</p> <p>(d) describe the measures to be implemented to minimise noise from transport operations;</p> <p>(e) detail the procedures for receiving and addressing complaints from the community concerning traffic issues associated with heavy vehicles arriving at or leaving the development;</p> <p>(f) describe the driver induction and training processes;</p> <p>(g) include a Drivers' Code of Conduct that details the safe and quiet driving practices that must be used by drivers transporting products to and from the quarry, particularly having regard to school bus routes, intersections or sections of road where there is potential for close interactions between passing trucks, and the location of residential properties and associated private access roads; and</p> <p>(h) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct.</p> <p>The Applicant must implement the approved management plan as approved by the Secretary.</p>	Y	<p>The TMP was submitted to the Department of Planning and Environment on 22 November 2017 and approved on 24 January 2018. Copies of this report are kept on site and on the company website.</p>

Independent Traffic Audit			
28	<p>Within 6 months of commencement of transport operations, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission a suitably qualified person, whose appointment has been approved by the Secretary, to conduct an independent traffic audit of the development. This audit must:</p> <p>(a) have the site verification component of the audit undertaken without prior notice to the Applicant;</p> <p>(b) assess the impact of the development on the performance of the road network;</p> <p>(c) investigate any incidents involving heavy vehicles associated with the development, including reviewing any community complaints;</p> <p>(d) assess the effectiveness of the Drivers Code of Conduct; and</p> <p>(e) recommend any necessary measures to reduce or mitigate any adverse (or potentially adverse) impacts.</p> <p>Within one month of receiving the audit report, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, with a response to any of the recommendations contained in the audit report, to the satisfaction of the Secretary.</p>	Y	<p>Audit conducted by TTM on 22 March 2017 and report submitted to the Department on 12 April 2017. A revised audit report was prepared (dated 24 July 2017) and re-submitted to the Department for approval.</p> <p>The Department accepted the Independent Traffic Audit Report on 7 July 2017. It is noted that the next traffic audit is due in March 2020, however the applicant would like delay the ITA until the 2021 calendar year when the Pacific Highway Upgrade Project is likely to be complete and the COVID-19 emergency resolved.</p>
Aboriginal Heritage			
Aboriginal Cultural Heritage Management Plan			
29	<p>The Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH and the Aboriginal community, and be submitted to the Secretary for approval prior to the commencement of operations; and</p> <p>(b) include:</p> <ul style="list-style-type: none"> - a detailed description of the measures that would be implemented to protect Aboriginal sites outside the quarry disturbance area including the two Indigenous Heritage Non-disturbance Zones (shown in Appendix 2); - a description of the measures that would be implemented if any new Aboriginal objects or skeletal remains are discovered during quarrying operations; and - protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal cultural heritage on the site. <p>The Applicant must implement the approved management plan as approved by the Secretary.</p>	Y	<p>The ACHMP was submitted to the Department of Planning and Environment on 22 November 2017 and approved on 24 January 2018. A copy of this report is kept onsite. Also available of company website.</p>
30	<p>If any item or object of Aboriginal heritage significance is identified on land associated with the development, the Applicant must ensure that:</p> <p>(a) all work in the immediate vicinity of the Aboriginal item or object ceases immediately;</p> <p>(b) a 10 m buffer area around the item or object is cordoned off with high visibility flagging tape, or the like; and</p> <p>(c) the OEH is contacted immediately.</p> <p>Work in the vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the National Parks and Wildlife Act 1974.</p>	Not triggered	<p>No objects of Aboriginal heritage significance were found during the reporting period therefore is condition was not triggered.</p>
Biodiversity and Rehabilitation			

31	<p>The Applicant must rehabilitate the lands associated with the development to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and must comply with the objectives in Table 6.</p> <p><i>Table 6: Rehabilitation objectives</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Lands associated with the development (as a whole)</td> <td> <ul style="list-style-type: none"> • Safe, stable and non-polluting • Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and designed to minimise the visual impacts of the development when viewed from surrounding land </td> </tr> <tr> <td>Surface Infrastructure</td> <td> <ul style="list-style-type: none"> • Decommissioned and removed, unless required for the ongoing operation of Petersons Quarry or as agreed with the Secretary </td> </tr> <tr> <td>Quarry Benches and Pit Floor</td> <td> <ul style="list-style-type: none"> • Revegetated using a combination of pasture species and native vegetation corridors, which link other remnant vegetation on site </td> </tr> </tbody> </table>	Feature	Objective	Lands associated with the development (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and designed to minimise the visual impacts of the development when viewed from surrounding land 	Surface Infrastructure	<ul style="list-style-type: none"> • Decommissioned and removed, unless required for the ongoing operation of Petersons Quarry or as agreed with the Secretary 	Quarry Benches and Pit Floor	<ul style="list-style-type: none"> • Revegetated using a combination of pasture species and native vegetation corridors, which link other remnant vegetation on site 	Y	<p>Quarry Solutions have advised that rehabilitation works have not yet commenced as operation areas remain in use. A copy of the rehabilitation plan is kept onsite.</p>
Feature	Objective										
Lands associated with the development (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and designed to minimise the visual impacts of the development when viewed from surrounding land 										
Surface Infrastructure	<ul style="list-style-type: none"> • Decommissioned and removed, unless required for the ongoing operation of Petersons Quarry or as agreed with the Secretary 										
Quarry Benches and Pit Floor	<ul style="list-style-type: none"> • Revegetated using a combination of pasture species and native vegetation corridors, which link other remnant vegetation on site 										

Progressive Rehabilitation

32	<p>The Applicant must rehabilitate the lands associated with the development 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.</p> <p>Note: It is accepted that parts of the lands associated with the development that are progressively rehabilitated may be subject to further disturbance in future.</p>	Y	<p>Areas for rehabilitation are limited due to all areas of the extraction are still remaining operationally viable. Interim measures have been implemented to mitigate air and water quality impacts.</p>
----	--	---	--

Biodiversity and Rehabilitation Management Plan

33	<p>The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, and be submitted to the Secretary for approval within 6 months of the date of this consent, or prior to the commencement of operations, whichever is earlier, unless the Secretary agrees otherwise;</p> <p>(b) provide details of the conceptual final landform and associated land uses for the site;</p> <p>(c) describe how the management of biodiversity would be integrated with the overall rehabilitation of the site;</p> <p>(d) include detailed performance and completion criteria for evaluating the performance of the biodiversity management measures and rehabilitation of the site, including triggers for any necessary remedial action;</p> <p>(e) describe the short, medium and long-term measures that would be implemented to:</p> <ul style="list-style-type: none"> • protect and enhance the remnant vegetation and habitat on the site, including the measures to protect the Macadamia tetraphylla, endangered ecological communities and threatened species on site; • rehabilitate the Macadamia tetraphylla buffer area, Hoop Pine Dry Rainforest community, and • the Seelems Creek rehabilitation area as shown in Appendix 6; • ensure compliance with the rehabilitation objectives, and the progressive rehabilitation obligations in this consent; <p>(f) include a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;</p> <p>(g) identify the potential risks to the successful implementation of the plan and include a description of the contingency measures that would be implemented to mitigate these risks; and</p> <p>(h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>	Y	<p>The BRMP was submitted to the Department of Planning and Environment on 26 February 2018 and approved on 6 March 2018. A copy of this report is kept onsite and on company website</p>
----	---	---	---

	The Applicant must implement the approved management plan as approved by the Secretary.		
Conservation and Rehabilitation Bond			
34	<p>Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant must lodge a Conservation and Rehabilitation Bond with the Department to ensure that the management of biodiversity and the rehabilitation of the lands associated with the development are implemented in accordance with the performance and completion criteria set out in the Biodiversity and Rehabilitation Management Plan. The sum of the bond must be determined by:</p> <p>(a) calculating the cost of rehabilitating the lands associated with the development taking into account the likely surface disturbance over the next 3 years of quarrying operations; and</p> <p>(b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.</p>	Not triggered	<p>The BRMP was submitted to the Department of Planning and Environment on 26 February 2018 and approved on 6 March 2018. A copy of this report is kept onsite.</p> <p>Similarly, a rehabilitation bond was lodged with the Department.</p>
35	<p>Within 3 months of each Independent Environmental Audit (see condition 10 of Schedule 5), the Applicant must review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:</p> <p>(a) effects of inflation;</p> <p>(b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and</p> <p>(c) performance of the implementation of the rehabilitation of the site to date.</p>	Not triggered	<p>The Independent Audit undertaken in July 2018 did not trigger a revision of the bond. It is understood that the bond is sufficient to cover the full extent of the necessary clearing.</p>
Visual Impacts			
36	The Applicant must implement all reasonable and feasible measures to minimise the visual impacts of the development, including establishing the vegetated acoustic bunds shown in Appendix 5, to the satisfaction of the Secretary.	Y	Acoustic bunds have been constructed and vegetated in accordance with Appendix 5.
Waste			
37	<p>The Applicant must:</p> <p>(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;</p> <p>(b) minimise the waste generated by the development;</p> <p>(c) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and</p> <p>(d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.</p>	Y	<ul style="list-style-type: none"> • General Solid Waste (putrescible) is serviced by Richmond Valley Council (normal kerbside bins, including recycling) and disposed lawfully. • General Solid Waste (non-putrescible) is stored in skip bins and removed by licenced contractor Richmond Waste who lawfully dispose it at council facilities. • Scrap metal is recycled by Lismore Metal recyclers. • Site facilities have grey water and septic held in tanks underneath crib huts and pumped out by licensed contractor Richmond Waste who lawfully dispose of it at council facilities. • Waste oil stored in 1000L pods and recycled by Summerland Waste Services at a listened facility. • Used tyres are appropriately stockpiled and reused where possible to weigh down

			stockpile traps and used in haul road delineators.
Liquid Storage			
38	The Applicant shall ensure that all liquid tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.	Y	Oil and waste oil are currently stored in drums within a bunded chemical container. Quarry solutions have advised that the bund capacity of the container is compliant with the Australian Standard 1940-2017. No other liquids are stored outside this area.
Dangerous Goods			
39	The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	Y	The blasting is undertaken by an EPA licensed contractor as per these conditions.
40	The Applicant must undertake a transport safety study to the satisfaction of the Secretary and in accordance with Hazardous Industry Planning Advisory Paper No 11: Route Selection (HIPAP11) prior to transporting hazardous materials above the threshold contained in State Environmental Planning Policy 33 Hazardous and Offensive Development.	Y	An EPA licensed blasting contractor is used to transport products to site. Hazardous materials thresholds are not triggered by the development.
Bushfire			
41	The Applicant must: (a) ensure that the development is suitably equipped to respond to any fires on site; and (b) assist the NSW Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	Y	Quarry solutions have engaged with RFS NSW Coraki to further develop a Bushfire Management Plan for the site. Equipment available onsite to assist in a bush fire is as follows; <ul style="list-style-type: none"> • Water truck available – 21,000L • Fire Extinguishers in each mobile plant • Fire breaks maintained around fixed assets Following engagement with RFS NSW the site is deemed sufficient to respond to fires.
Schedule 4 – Additional Procedures			
Notification of Landowners			
1	As soon as practicable and no longer than 7 days after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in Schedule 3, the Applicant must 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	Y	One event occurred during the reporting period where noise levels exceeded the relevant criteria. Noise monitoring results were received that noise, criteria had been exceeded neighbouring landholders were notified of the event.

	(b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant must 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).		
Independent Review			
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.	Not triggered	No landowner requests have been made within the reporting period.
3	If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must: a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: <ul style="list-style-type: none"> · 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; b) give the Secretary and landowner a copy of the independent review; and c) comply with any written requests made by the Secretary to implement any findings of the review.	Not triggered	Not Triggered
4	If the independent review determines that the development is complying with the relevant impact assessment criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Secretary. If the independent review determines that the development is not complying with the relevant impact assessment criteria in Schedule 3, then the Applicant must: (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria, and conduct further monitoring to determine whether these measures ensure compliance; or (b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria; to the satisfaction of the Secretary. If the further monitoring referred to under paragraph (a) above determines that the development is complying with the relevant impact assessment criteria, then the Applicant may discontinue the independent review with the approval of the Secretary.	Not triggered	Not triggered
Schedule 5 – Environmental Management, Reporting and Auditing			
Environmental Management Strategy			
1	If the Secretary requires; the Applicant must prepare 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 or prior to the commencement of operations, whichever is earlier; (b) be prepared in consultation with Council; (c) provide the strategic framework for the environmental management of the development; (d) identify the statutory approvals that apply to the development; (e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; (f) describe the procedures that would be implemented to: <ul style="list-style-type: none"> · keep the local community and relevant agencies informed about the operation and environmental performance of the development; 	Y	Following approval of modification 3 of the consent, the Environmental Management Strategy has been revised and submitted to the Department 20 th June 2019. The EMS was subsequently approved by DPIE on 13/11/19.

	<ul style="list-style-type: none"> • 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 <p>(g) include:</p> <ul style="list-style-type: none"> • 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. <p>The Applicant must implement the approved management strategy as approved by the Secretary.</p>		
Evidence of Consultation			
1A	<p>Where consultation with any public authority is required by the conditions of this consent, the Applicant must:</p> <p>(a) consult with the relevant public authority prior to submitting the required document to the Secretary for approval;</p> <p>(b) submit evidence of this consultation as part of the relevant document;</p> <p>(c) describe how matters raised by the authority have been addressed and any matters not resolved; and</p> <p>(d) include details of any outstanding issues raised by the authority and an explanation of disagreement between any public authority and the Applicant.</p>	Y	<p>Sighted correspondence with the Department regarding review and amendments to the EMS and associated environmental management plans.</p> <p>The Department has now approved the EMS and all applicable Environmental Management Plans which are available on the company's website.</p> <p>EPA and DPIE attended the site following the noise exceedance event however no follow-up actions were assigned.</p>
Management Plan Requirements			
2	<p>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; and • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> • impacts and environmental performance of the development; and • effectiveness of any management measures (see (c) above); <p>(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> • incidents; • complaints; • non-compliances with statutory requirements; and 		<p>Within the reporting period the applicant reviewed and revised the site's Environmental Management Strategy and Noise Management Plan to ensure that the site remains consistency with relevant guidelines and updated approval.</p> <p>Quarry Solutions have advised that other requirements of this condition have been previously been reported on and closed out.</p>

	<ul style="list-style-type: none"> exceedances of the impact assessment criteria and/or performance criteria; and (h) a protocol for periodic review of the plan. 		
Revision of strategies, plans and programs			
3	<p>Within 3 months of the submission of an:</p> <ul style="list-style-type: none"> (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, <p>the Applicant must 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.</p>	Y	<p>All management plans have recently been approved by the Department as outlined in items above.</p> <p>Following submission of the incident report Quarry solutions have advised that the appropriate reviews and corrective actions have been put in place.</p> <p>Submission of the annual review will trigger the requirement to undertake a review of the strategies, plans and programs prior to the end of June 2020.</p>
Updating and staging of strategies, plans and programs			
4	<p>To ensure that strategies, plans and programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.</p>	Y	<p>All management plans have only recently been approved by the Department as outlined in items above.</p>
Adaptive Management			
5	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 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:</p> <ul style="list-style-type: none"> (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. 	Y	<p>Following reporting of the noise exceedance event an incident investigation was conducted. The findings of the investigation lead to implementing a number of remediation measures to ensure operational noise is further mitigated.</p>
Community Consultative Committee			
6	<p>If directed by the Secretary, the Applicant must establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. Any such CCC must be operated in general accordance with the Department's Community Consultative Committee Guidelines for State Significant Projects, January 2019 (or its latest version).</p> <p>Notes:</p> <ul style="list-style-type: none"> The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. 	Not triggered	<p>The Secretary has not requested to that the applicant establish a Community Consultative Committee (CCC).</p>

	<ul style="list-style-type: none"> In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community. 		
Reporting			
Incident Reporting			
7	<p>The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the development (including the development application number and name) and set out the location and nature of the incident.</p>	Y	<p>On 12 February 2019 Quarry Solutions was advised by the EPA that the EPA had received a complaint about dust. Quarry Solutions advised that a response was given to the EPA on the 12 February 2019 and included the DPIE in that response.</p> <p>On 30th of April 2019 a noise incident was reported following 3-monthly verification noise monitoring. Quarry Solutions first became aware of the at this time and subsequently reported the event.</p>
7A	<p>Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing to compliance@planning.nsw.gov.au and identify the development (including the development application number and name), set out in the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.</p> <p><small>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</small></p>	Y	<p>On 30th of April 2019 a noise incident was reported following 3-monthly verification noise monitoring. Quarry Solutions first became aware of the at this time and subsequently reported the event.</p>
Regular Reporting			
8	<p>The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.</p>	Y	<p>All documents mentioned are available on company's website: http://www.quarrysolutions.com.au/quarry/</p> <p>Environmental monitoring data can be found on the following link: https://www.emonitoring.com.au/peterson</p>
Annual Review			
9	<p>By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the previous reporting period, and the development that is proposed to be carried out over the current calendar year;</p> <p>(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:</p> <ul style="list-style-type: none"> relevant statutory requirements, limits or performance measures/criteria; requirements of any plan or program required under this consent; the monitoring results of previous years; and 	Y	<p>Annual review has been conducted and submitted prior to 31 March 2020.</p>

	<ul style="list-style-type: none"> • the relevant predictions in the documents listed in condition 2(a) of Schedule 2; (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the 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			
10	<p>Within two years of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <ul style="list-style-type: none"> (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; (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; and (f) be conducted and reported to the satisfaction of the Secretary. 	Not triggered	Next Independent Environmental Audit is due in 2021.
11	<p>Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the report.</p>	Not triggered	Report was submitted in May 2018 and accepted by DPIE.
Monitoring and Environmental Audits			
11A	<p>Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.</p> <p><small>Notes: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development</small></p>	Y	Noted
11B	<p>Noise, blast and air quality monitoring under this consent is not required at all privately-owned residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria.</p>	Y	Noted
Access to Information			
12	<p>Within 6 months of the date of this consent, until the completion of all works, including rehabilitation and remediation, the Applicant must:</p> <ul style="list-style-type: none"> (a) make the following information publicly available on its website: 	Y	<p>All documents mentioned are available on company's website: http://www.quarrysolutions.com.au/quarry/</p>

	<ul style="list-style-type: none"> • the documents listed in condition 2(a) 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; • minutes of any CCC meetings; • any other matter required by the Secretary; and <p>(b) keep this information up-to-date; to the satisfaction of the Secretary.</p>		<p>Environmental monitoring data can be found on the following link: https://www.emonitoring.com.au/peterson</p> <p>Quarry Solutions have advised that the website remained up to date throughout the reporting period.</p>
--	---	--	--

Attachment 2

DGR Production Data



RETURN FOR EXTRACTIVE MATERIALS: YEAR ENDED 30 JUNE 2019

Quote RIMS ID in all correspondence

Quarry Id:	Rims ID: 401120	Inquiries please telephone: (02) 4063 6713 Completed or Nil Returns Email – mineral.royalty@planning.nsw.gov.au Postal Address (see below)	2018-2019
Operators Name: Address:	QUARRY SOLUTIONS PTY LTD PO BOX 152 CORAKI NSW 2471		
Email:	murray.payne@quarrysolutions.com.au	Please amend name, postal address and location of mine or quarry if incorrect or incomplete.	
Quarry Name: Quarry Address:	CORAKI QUARRY PETERSON'S QUARRY RD, CORAKI NSW 2471		

The return should be completed and forwarded to **Senior Advisory Officer, RESOURCE ECONOMICS, RESOURCE PLANNING & PROJECTS, NSW DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT, PO BOX 344 HUNTER REGION MAIL CENTRE NSW 2310 on or before 31 October 2019.** If completion of the return is unavoidably delayed, an application for extension of time should be requested **before** the due date. If no work was done during the year, a **NIL** return must be forwarded.

The return should relate to the **above quarrying establishment** and should cover the operations of quarrying and treatment (such as crushing, screening, washing etc.) carried out at or near the quarry. A return is required even if the operations are solely of a developmental nature and whether the area being worked is held under a mining title or otherwise.

Director, Resource Planning & Projects

Please complete all of the following information to assist in identifying the location of the Quarry

Typical Geology – **Basalt**

Nearest Town to Quarry – **Coraki**

Local Council Name - **Richmond Valley Council**

Deposited Plan and Lot Number/s of Quarry - **Lot 401 DP633427, Lot 402 DP802985, Lot 403 DP802985, Lot 408 DP1166287, Lot A DP397946, Lot A DP389418, Lot 3 DP 701197, Lot 2 DP 954593, Lot 1 DP954592 & Lot 1 DP 310756.**

Email Address of Operator - **murray.payne@quarrysolutions.com.au**

Name of Owner or Licensee - **Quarry Solutions**

Postal Address of Licensee - **PO Box 152 Coraki 2471**

Licence/Lease Number/s (if any)

From Mineral Resources NSW (Industry & Investment NSW) _____

From Department of Lands or other Department _____

If any output was obtained from land NOT held under licence from the above Departments, state the Name/s and Address/es of the Owners of the land _____

To the best of my knowledge, information entered in this return is correct and no blank spaces left where figures should have been inserted.

- **SIGNATURE** of PROPRIETOR or MANAGER
- **CONTACT PERSON** for this return - Murray Payne
- **NAME** (Block letters) MURRAY PAYNE

DATE 17/10/2019

Telephone 0427 978 964

SALES During 2018-2019

Production information may be published in aggregated form for statistical reporting. However, production data for individual operations is kept strictly confidential.

Product	Description	Quantity Tonnes
Virgin Materials		
• Crushed Coarse Aggregates		
Over 75mm	Drainage Rock / Scour protection	204,442
Over 30mm to 75mm	Capping Wick	119
5mm to 30mm	Concrete, Sealing & Drainage Aggregates	384,015
Under 5mm		
Natural Sand		
Manufactured Sand	Man Sand , General Dust & Agg Dust	140,525
Prepared Road Base & Sub Base	MB , MTBB, DGS20, DGB20 , Scalps	262,705
Other Unprocessed Materials		
Recycled Materials		
• Crushed Coarse Aggregates		
Over 75mm		
Over 30mm to 75mm		
5mm to 30mm		
Under 5mm		
Natural Sand		
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
• River Gravel		
Over 30mm		
5mm to 30mm		
Under 5mm		
• Construction Sand	Excluding Industrial	
• Industrial Sand		
Foundry, Moulding		
Glass		
Other (Specify)		
• Dimension Stone	Building, Ornamental, Monumental	
Quarried in Blocks		
Quarried in Slabs		
• Decorative Aggregate	Including Terrazzo	
• Loam	Soil for Topdressing, Garden soil, Horticultural purposes)	
• TOTAL SITE PRODUCTION		
• Gross Value (\$) of all Sales	14,877,090	
• Type of Material	Basalt	
• Number of Full-Time Equivalent (FTE) Employees	Employees: 16	Contractors 6

Please Note: A return for clay based products can be obtained by contacting the inquiry number.

Attachment 3

Waste Register



Waste Register 2019

Legend:	Septic	Waste Oil	Scrap Metal	
Date	Company	Description	Notes	Volume/Weight
14/01/2019	Summerland Environmental	Septic Tank		4000L
29/01/2019	Summerland Environmental	Septic Tank		4000l
11/02/2019	Summerland Environmental	Septic Tank		3000L
25/02/2019	Summerland Environmental	Septic Tank		4000L
25/03/2019	Summerland Environmental	Septic Tank		4000L
8/04/2019	Summerland Environmental	Septic Tank		4000L
16/04/2019	Summerland Environmental	Septic Tank		3000L - call out
2/05/2019	Summerland Environmental	Oil Waste collection	190429294358	500L
4/05/2019	Summerland Environmental	Septic Tank		4000L
20/05/2019	Summerland Environmental	Septic Tank		4500L
27/05/2019	Lismore Metal Recyclers	Scrap Metal	2 Skip Bins	42,682KG
27/05/2019	Summerland Environmental	Oil Waste collection	190527294358	400L
7/05/2019	Summerland Environmental	Oil Waste collection	190527294358	400L
3/06/2019	Ballina Pumping	Septic Tank	19739	3000L
1/07/2019	Summerland Environmental	Septic Tank		3000L
25/07/2019	Summerland Environmental	Oil Waste Collection	190722294358	600L
12/08/2019	Summerland Environmental	Septic Tank		4000L
9/09/2019	Summerland Environmental	Septic Tank		3000L
16/09/2019	Summerland Environmental	Oil Waste Collection		1800L
21/10/2019	Summerland Environmental	Septic Tank		4000
11/11/2019	Summerland Environmental	Septic Tank		
22/11/2019	Lismore Metal Recyclers	Scrap Metal	1 Skip	2213Kg
2/12/2019	Summerland Environmental	Septic Tank		3000

Attachment 4

EPA Incident Report



Incident Detail Report

Ref No	I01495-2019	State	Allocated	Work Unit	Environmental Management - Grafton
1st Tier Code	100 AIR PARTICULATE S	2nd Tier Code	101 MINE	Legislation	POEO Act 1997

Complaint Types

Incident Description	A caller who requested to remain anonymous reported excessive dust pollution coming from Petersons Quarry and Coraki Quarry located at Petersons Quarry Road, Coraki NSW 2471, on 31/1/2019 at 2:00pm. The caller advises that the dust is seriously affecting both staff working inside the Quarry and the surrounding areas. The dust is coming from a crashing plant used to extract gravel and concrete from rocks. The wind is northerly. The caller has first hand information to the dust pollution. The caller declined to give personal details citing the caller's association with the Quarry. The caller advised that the dust pollution is an ongoing problem.	Urgent	No
-----------------------------	---	---------------	----

Region	EPA NORTH GRAFTON	Dates	Officer
LGA	RICHMOND VALLEY	Created	31/01/2019
Address	Petersons Quarry Road	Incident Start	31/01/2019
Suburb	CORAKI	Incident End	
Postcode	2471	Confirmed	31/01/2019 Hillan Nzioka
State	NSW	Allocated	1/02/2019 Janelle Bancroft 11:16:40 AM
Zone		Closed	
Eastings			
Northings			
Location Description	Quarry Solutions Pty Ltd, Petersons Quarry Road, Coraki NSW 2471 - excessive dust		

Incident Detail Report

Incident Calls

Notification No	Suburb	Call Type	Caller Name	Involved Party	Incident Description
C01493-2019	CORAKI	100 AIR PARTICULATES - 101 MINE	Anonymous	QUARRY SOLUTIONS PTY LTD	A caller who requested to remain anonymous reported excessive dust pollution coming from Petersons Quarry and Coraki Quarry located at Petersons Quarry Road, Coraki NSW 2471 , on 31/1/2019 at 2:00pm. The caller advises that the dust is seriously affecting both staff working inside the Quarry and the surrounding areas. The dust is coming from a crashing plant used to extract gravel and concrete from rocks. The wind is northerly. The caller has first hand information to the dust pollution. The caller declined to give personal details citing the caller's association with the Quarry. The caller advised that the dust pollution is an ongoing problem.

Materials

No Entries

Prioritisation

No Entries

Involvement

Relationship	Name
Suspect	QUARRY SOLUTIONS PTY LTD (Company)

Attachments

No Entries

Exhibits

No Entries

Notices Issued

No Entries

Incident Detail Report

Outcomes

No Entries

Linked Items

No Entries

Time and Costs

No Entries

Activities

No Entries

Consolidated Log

Date	By	Details	Type	Category
01/02/2019 11:16 AM	DEC BancroJ	Janelle Bancroft allocated Incident to Janelle Bancroft	System	
01/02/2019 11:16 AM	DEC BancroJ	Janelle Bancroft changed work unit of Incident to Environmental Management - Grafton and allocated to Janelle Bancroft	System	
31/01/2019 03:11 PM	DEC nziokah	Allocated to EPA - Clearing House - Grafton for action.	System	
31/01/2019 03:11 PM	DEC nziokah	Hillan Nzioka sent Call C01493-2019 to EPA - Clearing House - Grafton.	System	

Attachment 5

March 2019 Noise Compliance Monitoring



Ref: L11219/BH/15-041

29 April 2019

Quarry Solutions Pty Ltd
c/- Groundwork Plus
6 Mayneview Street
MILTON QLD 4064

Attention: Mr Jim Lawler

Dear Jim

Re: March 2019 Noise Compliance Monitoring – Coraki Quarry, Coraki

MWA Environmental conducted noise compliance monitoring for the Coraki Quarry in March 2019 in accordance with Condition 5(c) of the Development Consent Schedule 3.

Quarry Solutions Pty Ltd has advised that no noise complaints have been received in relation to the Coraki Quarry since the previous December 2018 noise monitoring event.

Noise monitoring was undertaken between 7:00am and 12:00pm on 22 March 2019.

Weather conditions during the early monitoring period were calm and stable with no wind measured above the on-site weather station anemometer start-up speed until after 11am. Temperatures gradually increased from 21°C at 7am and relative humidity was high until the wind arrived.

Wind conditions during the monitoring were below the 3 metres per second threshold for valid compliance monitoring in accordance with the Development Consent. Calm conditions were present through to approximately 11am. Light 1 to 2 metre per second winds after 11am were from northeasterly directions.

Monitoring was ceased at approximately 11:50am prior to the collection of second samples at all locations due to a crushing plant breakdown. Parts were required to repair the crushing and screening plant had to be transported from Brisbane which dictated that the normal operation of the quarry would not recommence on 22 March 2019.

For certain locations/measurements, extraneous noise influences included:

- Bird calls – significant influence for many of the measurements but able to be substantially but not completely filtered out through post-processing using audio recordings
- Insect (cicada) noise – minor influence overall
- Public road traffic noise - filtered out through on-site data exclusion where practical however background noise from Casino-Coraki Road and Lagoon was relatively consistent during a limited number of measurements

Coraki Quarry operations during the noise monitoring period were as follows:

- Main crushing and screening plant
- Excavator sorting and loading material at an elevated bench
- Loading dump trucks by excavator and haulage from pit to plant
- Stockpile management
- Loading and dispatch of product (road) trucks – consistent trucks throughout the monitoring period

No rock drill was operating on 22 March 2019.

Noise monitoring was undertaken over generally 10 to 15 minute periods at free-field locations within 30 metres of the following six (6) residential dwellings nearest to the Coraki Quarry (refer **Figure 1**):

- R1
- R2
- R3
- R4
- R6
- R7

Noise monitoring was undertaken using a Bruel & Kjaer Type 2250 frequency analysing sound level meter. The sound level meter was calibrated to a reference signal of 94 dB at 1kHz prior to the monitoring and displayed no variance post-monitoring.

Condition 4 of the Development Consent Schedule 3 prescribes a 35 dB(A) $L_{Aeq,15min}$ noise limit for privately owned residences unless formal written agreements are in place with landowners.

As allowed for by Development Consent Schedule 3 Condition 4 and EPL Condition L4.2, formal written agreements are in place with the following landowners to the effect that the land owners do not hold objections to the operation of the Coraki Quarry exceeding the noise emission criterion by up to 5 dB(A):

- R1: 200 Lagoon Road, Coraki
- R2: 95 Spring Hill Road, Coraki
- R3: 75 Spring Hill Road, Coraki
- R6: 1905 Casino-Coraki Road, Coraki
- R7: 140 Newmans Road, Coraki

A summary of the 22 March 2019 compliance noise monitoring is provided in **Attachment 1**.

During the 22 March 2019 noise monitoring period the Coraki Quarry was assessed to be:

- **Compliant with the Development Consent and Environment Protection Licence No. 3397 noise limits for each of two (2) measurements at locations R1, R4, R6 and R7; and**
- **Non-compliant with the Development Consent and Environment Protection Licence No. 3397 noise limits for the single measurements at R2 and R3 obtained prior to the crushing plant breakdown i.e. no second measurements were obtained to confirm outcomes due to plant breakdown.** Noise from the crushing and screening plant was the dominant quarry noise influence during the measurements at R2 and R3.

Further noise compliance monitoring is required by 30 June 2019 in accordance with Condition 5(c) of the Development Consent Schedule 3.

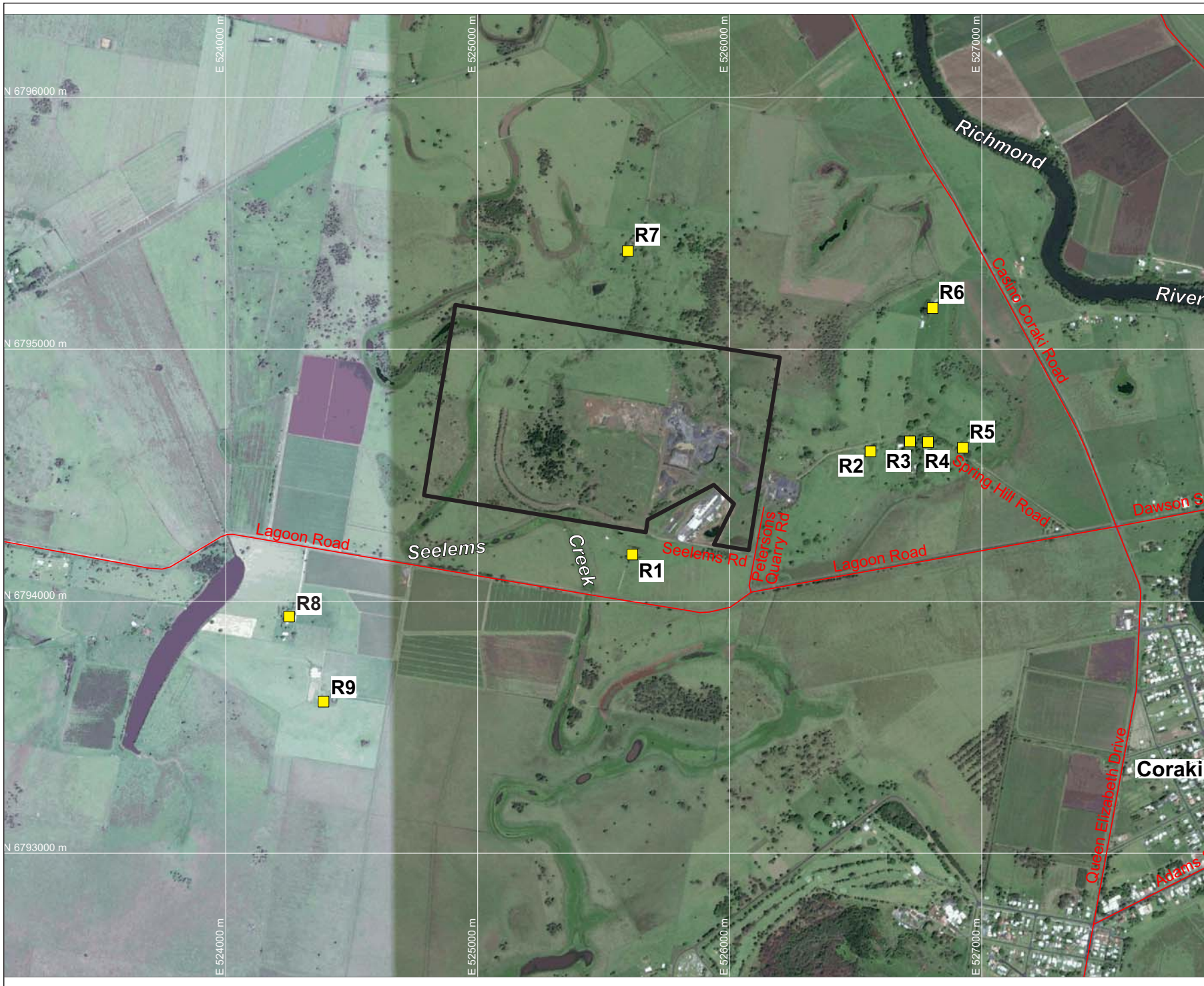
If you require any clarification or additional information please contact the undersigned.

Yours sincerely



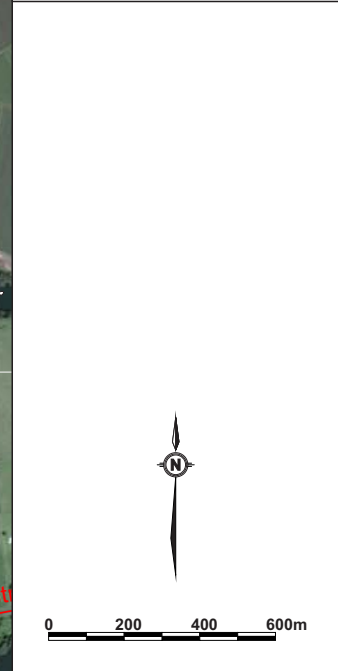
Ben Hyde
Environmental Engineer

FIGURES



LEGEND
 — SITE BOUNDARY
 ■ R9 SURROUNDING RESIDENCES (R1-R9)

DRAWING REFERENCE
 GROUNDWATER PLUS SITE LOCATION PLAN
 1837.DRG.002, 13/04/15.



CLIENT
QUARRY SOLUTIONS PTY LTD

PROJECT
**CORAKI
 NOISE COMPLIANCE
 ASSESSMENT
 CORAKI QUARRY**
 Petersons Quarry Rd Coraki NSW

TITLE
**AERIAL PHOTOGRAPH
 SHOWING SURROUNDING
 RESIDENCES**

JOB	CORAKI	FIGURE 1
JOB NO.	15-041	
DATE	16/12/16	DRAWING NUMBER
SCALE	1:20,000 (A4)	15-041-1
REV.		

Max Winders & Associates Pty Ltd tas MWA Environmental
 Level 15, 241 Adelaide St, Brisbane, GPO BOX 3137, Brisbane Qld 4001
 P 07 3002 5500 F 07 3002 5588 E mail@mwaenviro.com.au
 W www.mwaenviro.com.au
 ABN 94 010 833 084

ATTACHMENT 1

Summary of Compliance Noise Monitoring

MONITORING LOCATION	TIME	WIND	ASSESSED QUARRY NOISE Leq - dB(A)	OPERATIONS	NOISE LIMIT LAeq dB(A)	STATUS	NOTES
R1	730	Calm	<37	Normal Operations, no rock drill	40	Compliant	Insect and bird noise, occasional trucks audible around office area and at top stockpile area, processing plant inaudible, quarry <40dBA
R1	1020	Calm to very light WSW	<35	Normal Operations, no rock drill	40	Compliant	Some birds, planes paused out, processing plant not to barely audible, occasional trucks at top stockpile pad audible, quarry <35dBA
R2	750	Calm	47.5	Normal Operations, no rock drill	40	Non-compliant	Processing plant mid 40s, some birds, excavator sorting and loading at elevated bench
R3	805	Calm	<45	Normal Operations, no rock drill	40	Compliant	Processing plant mid 40s, some birds, excavator sorting and loading at elevated bench
R4	820	Calm	<33	Normal Operations, no rock drill	35	Compliant	Insects and birds at times, Lagoon Rd traffic paused generally, processing plant barely audible when background <33dBA, occasional excavator loading clunks mid 30s
R4	1135	1.3m/s ENE => 2.2m/s NE	<31	Normal Operations, no rock drill	35	Compliant	Casino-Coraki Road traffic noise, Lagoon Rd generally paused out, quarry not audible, birds, quarry well below 35dBA, advised of plant breakdown after 9mins so measurement stopped
R6	850	Calm to very light WSW	<36	Normal Operations, no rock drill	40	Compliant	Constant insects + some birds, excavator sorting and handling rock audible intermittently at high 30s to low 40s, processing plant possibly just audible at times
R6	1115	Calm => 1.3m/s NE	<32	Normal Operations, no rock drill	40	Compliant	Casino-Coraki Road traffic noise, birds+insects, processing plant just audible but <30dBA background noise, trucks audible and visible at times, occasional tips audible
R7	710	Calm	<36	Normal Operations, no rock drill	40	Compliant	Significant bird noise, Casino-Coraki Rd traffic noise, dump truck engines audible because of different tone but below background noise therefore not measureable, tractor started to west so had to cease measurements, processing plant inaudible
R7	950	Calm to very light WSW	<30	Normal Operations, no rock drill	40	Compliant	Birds, excavator scraping and rock handling audible at times, processing plant not to barely audible when ambient <30dBA