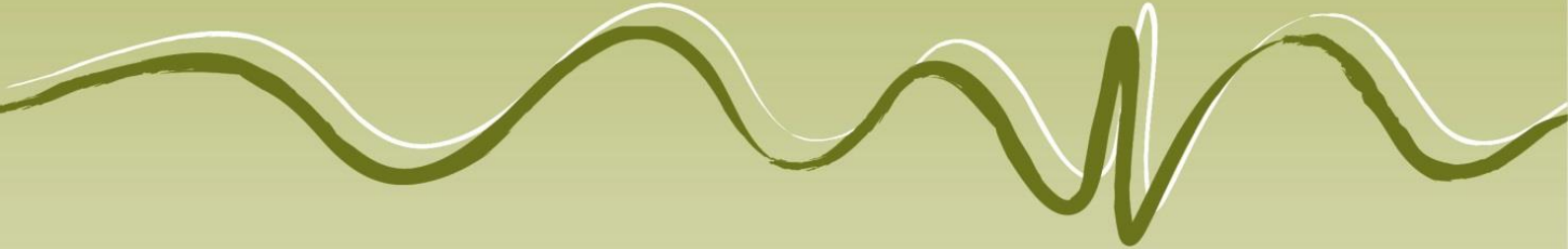


# Annual Environmental Monitoring Report

Blakebrook Quarry: January 2020 to  
December 2020



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Prepared for: Lismore City Council  
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## Certification

	<b>Name</b>	<b>Signature</b>	<b>Date</b>
Prepared by	Gemma Quick		26/03/2021
Reviewed by	Duncan Thomson		26/03/2021
<b>UPR</b>	<b>Description</b>	<b>Date Issued</b>	<b>Issued By</b>
3882-1003	1 <sup>st</sup> issue – for review by Council	05/03/2021	Duncan Thomson
3882-1004	2 <sup>nd</sup> issue – updated with Council input	22/03/2021	Duncan Thomson
3882-1005	3 <sup>rd</sup> issue – final for submission to DPIE	26/03/2021	Duncan Thomson

# Table of Contents

<b>1.</b>	<b>Introduction</b>	<b>1</b>
1.1	Background	1
1.1.1	Objectives and Scope	1
1.1.2	Reporting Period	1
1.2	Relevant Approvals	4
1.3	Applications to Amend Approvals	4
1.4	DPIE Response to 2019 AEMR	4
<b>2.</b>	<b>Statement of Compliance</b>	<b>5</b>
2.1	Introduction	5
2.2	Schedule 1 - Description of Approval	5
2.3	Schedule 2 – Administrative Conditions	5
2.3.1	Schedule 2 - Condition 1 (Minimise Harm)	5
2.3.2	Schedule 2 - Condition 2 (Comply with Approval)	5
2.3.3	Schedule 2 - Condition 3 (Interpretation)	6
2.3.4	Schedule 2 - Condition 4 (Compliance with Written Instruction)	6
2.3.5	Schedule 2 - Condition 5 (Surrender of Former Consent)	6
2.3.6	Schedule 2 - Condition 6 (Expiry of Approval)	6
2.3.7	Schedule 2 - Condition 7 (Quarry Depth)	7
2.3.8	Schedule 2 - Condition 8 (Limits on Approval)	7
2.3.9	Schedule 2 - Condition 9 (New Buildings & Structures)	8
2.3.10	Schedule 2 – Condition 10 (Demolition)	8
2.3.11	Schedule 2 – Condition 11 (Protection of Public Infrastructure)	9
2.3.12	Schedule 2 – Condition 12 (Plant & Equipment)	9
2.3.13	Schedule 2 – Condition 13 (Roads Contributions)	9
2.3.14	Schedule 2 – Condition 14 (Production Data)	10
2.3.15	Schedule 2 – Condition 15 (Compliance with Conditions)	10
2.3.16	Schedule 2 – Condition 16 (Extraction Limits)	10
2.4	Schedule 3 – Specific Environmental Conditions	11
2.4.1	Schedule 3 - Condition 1 (Hours of Operation)	11
2.4.2	Schedule 3 – Condition 2 (Exception to Hours of Operation)	11
2.4.3	Schedule 3 – Condition 3 (Noise)	12
2.4.4	Schedule 3 – Condition 4 (Noise Monitoring)	14
2.4.5	Schedule 3 – Condition 5 (Noise Management Plan)	14
2.4.6	Schedule 3 – Condition 6 (Blast Parameters)	15
2.4.7	Schedule 3 – Condition 7 (Number of Blasts)	16
2.4.8	Schedule 3 – Condition 8 (Blast Management)	16
2.4.9	Schedule 3 – Condition 9 (Blast Management Plan)	17
2.4.10	Schedule 3 – Condition 10 (Air Quality)	17
2.4.11	Schedule 3 – Condition 11 (Air Quality Management)	24
2.4.12	Schedule 3 - Condition 12 (Air Quality Management Plan)	25
2.4.13	Schedule 3 – Condition 13 (Weather Station)	25
2.4.14	Schedule 3 - Condition 14 (Greenhouse Gas Emissions)	25

<u>2.4.15</u>	<u>Schedule 3 - Condition 15 (Water Supply)</u>	<u>26</u>
<u>2.4.16</u>	<u>Schedule 3 - Condition 16 (Water Discharge)</u>	<u>26</u>
<u>2.4.17</u>	<u>Schedule 3 - Condition 17 (Groundwater Assessment)</u>	<u>26</u>
<u>2.4.18</u>	<u>Schedule 3 - Condition 18 (Intercept of Groundwater)</u>	<u>27</u>
<u>2.4.19</u>	<u>Schedule 3 - Condition 19 (Soil and Water Management Plan)</u>	<u>27</u>
<u>2.4.20</u>	<u>Schedule 3 - Condition 20 (Record of Truck Movements)</u>	<u>34</u>
<u>2.4.21</u>	<u>Schedule 3 - Condition 21 (Road Upgrades)</u>	<u>34</u>
<u>2.4.22</u>	<u>Schedule 3 - Condition 22 (Road Upgrades)</u>	<u>34</u>
<u>2.4.23</u>	<u>Schedule 3 - Condition 23 (Traffic Management Plan)</u>	<u>35</u>
<u>2.4.24</u>	<u>Schedule 3 - Condition 24 (Aboriginal Heritage Management Plan)</u>	<u>35</u>
<u>2.4.25</u>	<u>Schedule 3 - Condition 25 (Aboriginal Heritage)</u>	<u>36</u>
<u>2.4.26</u>	<u>Schedule 3 – Condition 5 (Habitat Offsets)</u>	<u>36</u>
<u>2.4.27</u>	<u>Schedule 3 - Condition 26 (Rehabilitation Strategy)</u>	<u>37</u>
<u>2.4.28</u>	<u>Schedule 3 - Condition 27 (Progressive Rehabilitation)</u>	<u>38</u>
<u>2.4.29</u>	<u>Schedule 3 - Condition 28 (Biodiversity Management Plan)</u>	<u>38</u>
<u>2.4.30</u>	<u>Schedule 3 - Condition 29 (Biodiversity and Rehabilitation Bond)</u>	<u>39</u>
<u>2.4.31</u>	<u>Schedule 3 – Condition 30 (Review of Biodiversity Bond)</u>	<u>40</u>
<u>2.4.32</u>	<u>Schedule 3 – Condition 31 (Visual Impacts)</u>	<u>40</u>
<u>2.4.33</u>	<u>Schedule 3 – Condition 32 (Waste Management)</u>	<u>41</u>
<u>2.4.34</u>	<u>Schedule 3 - Condition 33 (Waste Management)</u>	<u>41</u>
<u>2.4.35</u>	<u>Schedule 3 – Condition 34 (Storage of Liquids)</u>	<u>42</u>
<u>2.4.36</u>	<u>Schedule 3 - Condition 35 (Dangerous Goods)</u>	<u>42</u>
<u>2.4.37</u>	<u>Schedule 3 - Condition 36 (Fire)</u>	<u>42</u>
<u>2.5</u>	<u>Schedule 4 – Additional Procedures</u>	<u>43</u>
<u>2.5.1</u>	<u>Schedule 4 - Condition 1 (Notification of Exceedance)</u>	<u>43</u>
<u>2.5.2</u>	<u>Schedule 4 – Condition 2 (Independent Review if Impacts)</u>	<u>43</u>
<u>2.5.3</u>	<u>Schedule 4 - Condition 3 (Baseline Dilapidation Reports)</u>	<u>44</u>
<u>2.5.4</u>	<u>Schedule 4 – Condition 4 (Property Inspections)</u>	<u>44</u>
<u>2.5.5</u>	<u>Schedule 4 - Condition 5 (Property Investigations)</u>	<u>44</u>
<u>2.6</u>	<u>Schedule 5 – Environmental Management, Reporting &amp; Auditing</u>	<u>45</u>
<u>2.6.1</u>	<u>Schedule 5 - Condition 1 (Environmental Management Strategy)</u>	<u>45</u>
<u>2.6.2</u>	<u>Schedule 5 - Condition 2 (Consultation with Agencies)</u>	<u>46</u>
<u>2.6.3</u>	<u>Schedule 5 - Condition 3 (Preparation of Management Plans)</u>	<u>46</u>
<u>2.6.4</u>	<u>Schedule 5 - Condition 4 (Application of Management Plans)</u>	<u>47</u>
<u>2.6.5</u>	<u>Schedule 5 - Condition 4 (Review of Strategies and Plans)</u>	<u>47</u>
<u>2.6.6</u>	<u>Schedule 5 - Condition 5 (Update to Strategies and Plans)</u>	<u>48</u>
<u>2.6.7</u>	<u>Schedule 5 – Condition 6 (Notification of Exceedance)</u>	<u>48</u>
<u>2.6.8</u>	<u>Schedule 5 - Condition 7 (Community Consultative Committee)</u>	<u>49</u>
<u>2.6.9</u>	<u>Schedule 5 - Condition 8 (Reporting of Incidents)</u>	<u>49</u>
<u>2.6.10</u>	<u>Schedule 5 - Condition 9 (Reporting of Incidents)</u>	<u>50</u>
<u>2.6.11</u>	<u>Schedule 5 - Condition 10 (Information to be Provided Online)</u>	<u>50</u>
<u>2.6.12</u>	<u>Schedule 5 - Condition 11 (Annual Review)</u>	<u>50</u>
<u>2.6.13</u>	<u>Schedule 5 - Condition 12 (3 Year Independent Audit)</u>	<u>51</u>
<u>2.6.14</u>	<u>Schedule 5 - Condition 13 (Implementation of Audit Recommendations)</u>	<u>52</u>
<u>2.6.15</u>	<u>Schedule 5 - Condition 14 (Information to be Available Online)</u>	<u>52</u>
<u>2.7</u>	<u>Appendix 5 – Noise Compliance Assessment</u>	<u>53</u>
<u>2.7.1</u>	<u>Appendix 5 - Condition 1 (Weather Parameters)</u>	<u>53</u>

<u>2.7.2</u>	<u>Appendix 5 - Condition 2 (Meteorological Station)</u>	<u>53</u>
<u>2.7.3</u>	<u>Appendix 5 - Condition 3 (Timing of Assessment)</u>	<u>54</u>
<u>2.7.4</u>	<u>Appendix 5 - Condition 4 (Methodology of Assessment)</u>	<u>54</u>

### **3. Summary of Findings and Actions** **55**

<u>3.1</u>	<u>Summary of Non-Compliances</u>	<u>55</u>
<u>3.1.1</u>	<u>Non-compliance 1 – Truck Movements</u>	<u>55</u>
<u>3.1.2</u>	<u>Non-compliance 2 – Deposited Dust Exceedance</u>	<u>55</u>
<u>3.1.3</u>	<u>Non-compliance 3 – Surface Water Monitoring Parameters</u>	<u>56</u>
<u>3.2</u>	<u>Status of Actions Identified in 2019 AEMR</u>	<u>56</u>
<u>3.3</u>	<u>Proposed Improvement Actions</u>	<u>56</u>

### **4. Conclusion** **58**

## **Illustrations**

<u>Illustration 1.1</u>	<u>Site location</u>	<u>2</u>
<u>Illustration 1.2</u>	<u>Environmental offset areas</u>	<u>3</u>
<u>Illustration 2.1</u>	<u>Noise monitoring locations</u>	<u>13</u>
<u>Illustration 2.2</u>	<u>Dust monitoring locations</u>	<u>19</u>
<u>Illustration 2.3</u>	<u>Surface water monitoring locations</u>	<u>30</u>

## **Tables**

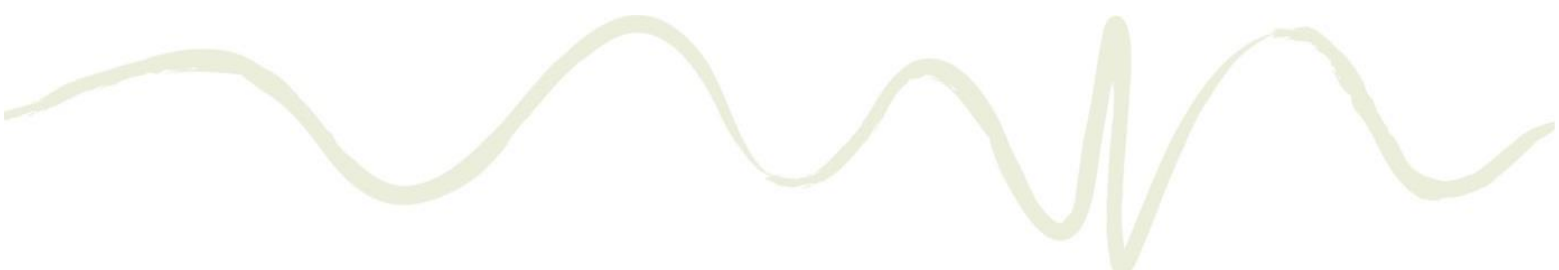
<u>Table 2.1</u>	<u>Summary of truck movements 2020</u>	<u>8</u>
<u>Table 2.2</u>	<u>Blast monitoring results – 2 March 2020</u>	<u>16</u>
<u>Table 2.3</u>	<u>Air quality criteria for particulate matter and average results</u>	<u>24</u>
<u>Table 2.4</u>	<u>Summary of surface water monitoring of receiving waterways</u>	<u>31</u>
<u>Table 2.5</u>	<u>Timeline of reporting of incidents</u>	<u>50</u>
<u>Table 3.1</u>	<u>Actions planned for 2020 and status</u>	<u>56</u>

## **Figures**

<u>Figure 2.1</u>	<u>D1 monthly ash deposition results 2017-2020</u>	<u>21</u>
<u>Figure 2.2</u>	<u>D2 monthly ash deposition results 2017-2020</u>	<u>21</u>
<u>Figure 2.3</u>	<u>D3 monthly ash deposition results 2017-2020</u>	<u>22</u>
<u>Figure 2.4</u>	<u>D1 monthly total suspended solids deposition results 2012-2020</u>	<u>22</u>
<u>Figure 2.5</u>	<u>D2 monthly total suspended solids deposition results 2012-2020</u>	<u>23</u>
<u>Figure 2.6</u>	<u>D3 monthly total suspended solids deposition results 2012-2020</u>	<u>23</u>
<u>Figure 2.7</u>	<u>Surface water TSS monitoring results 2013-2020</u>	<u>32</u>
<u>Figure 2.8</u>	<u>Surface water pH monitoring results 2013-2020</u>	<u>32</u>

## **Appendices**

<u>Appendix A Part 3A Approval No.07_0020 (Mod 1)</u>
<u>Appendix B DPIE Comments on 2019 AEMR</u>
<u>Appendix C EPA Licence 3384</u>
<u>Appendix D Extractive Materials Return – July 2019 – June 2020</u>



[Appendix E Stockpile and Production Report –2020](#)  
[Appendix F 2020 Quarry Truck Movements](#)  
[Appendix G DPIE Post Approval – Truck Exceedance](#)  
[Appendix H LCC Letter to DPIE – Exceedance of Truck Movements](#)  
[Appendix I Section 94 Levies 2020](#)  
[Appendix J Noise Monitoring Report 2020](#)  
[Appendix K Blast Reports 2020](#)  
[Appendix L Dust Monitoring Data 2020](#)  
[Appendix M Dust Exceedance Incident Report \(Dec 2020\)](#)  
[Appendix N Water Access Licence – Notice of Decision](#)  
[Appendix O Water Access Licence – Certificate](#)  
[Appendix P Surface Water Laboratory Results 2020](#)  
[Appendix Q Ground Water Monitoring Data 2020](#)  
[Appendix R Community Consultative Committee Minutes 2020](#)  
[Appendix S Information Available on LCC Website](#)  
[Appendix T Complaints Register](#)



## Executive Summary

Blakebrook Quarry (the quarry) is a basalt quarry located off Nimbin Road, approximately 6 kilometres north-west of Lismore. The quarry is operated by Northern Rivers Quarries (NRQ), which is a commercial entity operated by Lismore City Council. The quarry is identified as a 'State significant' resource and provides a range of quarry products to northern NSW. Materials provided include aggregates, drainage rock, road base, basalt, metal dust, fill material and select fill (overburden).

One of the conditions of the approval for the quarry requires the preparation of an annual review of the environmental performance of the quarry. This Annual Environmental Monitoring Report (AEMR) has been prepared to comply with this requirement. The reporting period for this AEMR is 1 January 2020 to 31 December 2020.

In this AEMR, each condition of approval is reproduced in full and followed by a compliance statement addressing the findings. Overall, this AEMR has found a high level of compliance with the conditions of approval.

Three non-compliances were identified:

- **Truck movements:** There was one occasion where the daily truck movement limit of 100 laden trucks was exceeded. On 8 September 2020, one additional laden truck was dispatched from the quarry.
- **Deposited dust exceedance:** During the 16 November 2020 to 14 December 2020 monitoring period, exceedance of the air quality criteria for deposited dust (ash > 4 g/m<sup>2</sup>/month) occurred on at monitoring location D2 (6.7 g/m<sup>2</sup>/month).
- **Surface Water Monitoring Parameters:** During the March and June 2020 surface water monitoring rounds of receiving waterways, some of the required parameters (i.e. turbidity, nutrients, and oil and grease) were not monitored or reported.

Each non-compliance was appropriately reported and investigated. Relevant actions have been implemented and no further action is recommended in this AEMR.

The following actions to improve the overall environmental performance of the project are ongoing:

- Continuation of groundwater data collection to establish 12 data points for each monitoring well;
- Continuation of surface water data collection to establish 8 data points for each sampling location; and
- Continuation of work with DPIE to finalise the current modification request to Part 3A Approval No.07\_0020.



# 1. Introduction

## 1.1 Background

Blakebrook Quarry (the quarry) is a basalt quarry located off Nimbin Road, approximately 6 kilometres north-west of Lismore. The location of the quarry is provided at **Illustration 1.1** and the quarry layout, including areas set aside for the purpose of environmental offsets, is provided at **Illustration 1.2**.

The quarry is operated by Northern Rivers Quarries (NRQ), which is a commercial entity operated by Lismore City Council. The quarry is identified as a 'State significant' resource and provides a range of quarry products to northern NSW. Materials provided include aggregates, drainage rock, road base, basalt, metal dust, fill material and select fill (overburden).

The quarry initially started operations in 1979 with development consent formally granted by Lismore City Council in 1995. Approval was granted for the expansion of the quarry in November 2009 via Part 3A Approval No. 07\_0020. This approval was issued by the Minister for Planning and was subject to an extensive list of consent conditions. In September 2017, approval was issued for Modification 1 to the consent. A copy of the approval (as modified) is provided at **Appendix A**.

One of the conditions of the approval requires the quarry operator to prepare an annual review of the environmental performance of the quarry and submit this documentation to the Department of Planning, Industry & Environment (DPIE), (formerly Department of Planning & Environment (DPE)). This Annual Environmental Monitoring Report (AEMR) has been prepared to comply with this requirement.

### 1.1.1 Objectives and Scope

This AEMR is prepared in response to Schedule 5 Condition 11 of the Blakebrook Quarry Part 3A Approval No. 07\_0020 (Mod 1).

It is noted that the asphalt plant which operates within the quarry footprint does not form part of development approval MP 07\_0020 (Mod 1). Rather, the asphalt plant is approved and regulated via DA 1990/431 (as amended) approved by Lismore City Council and EPA Licence No.3384.

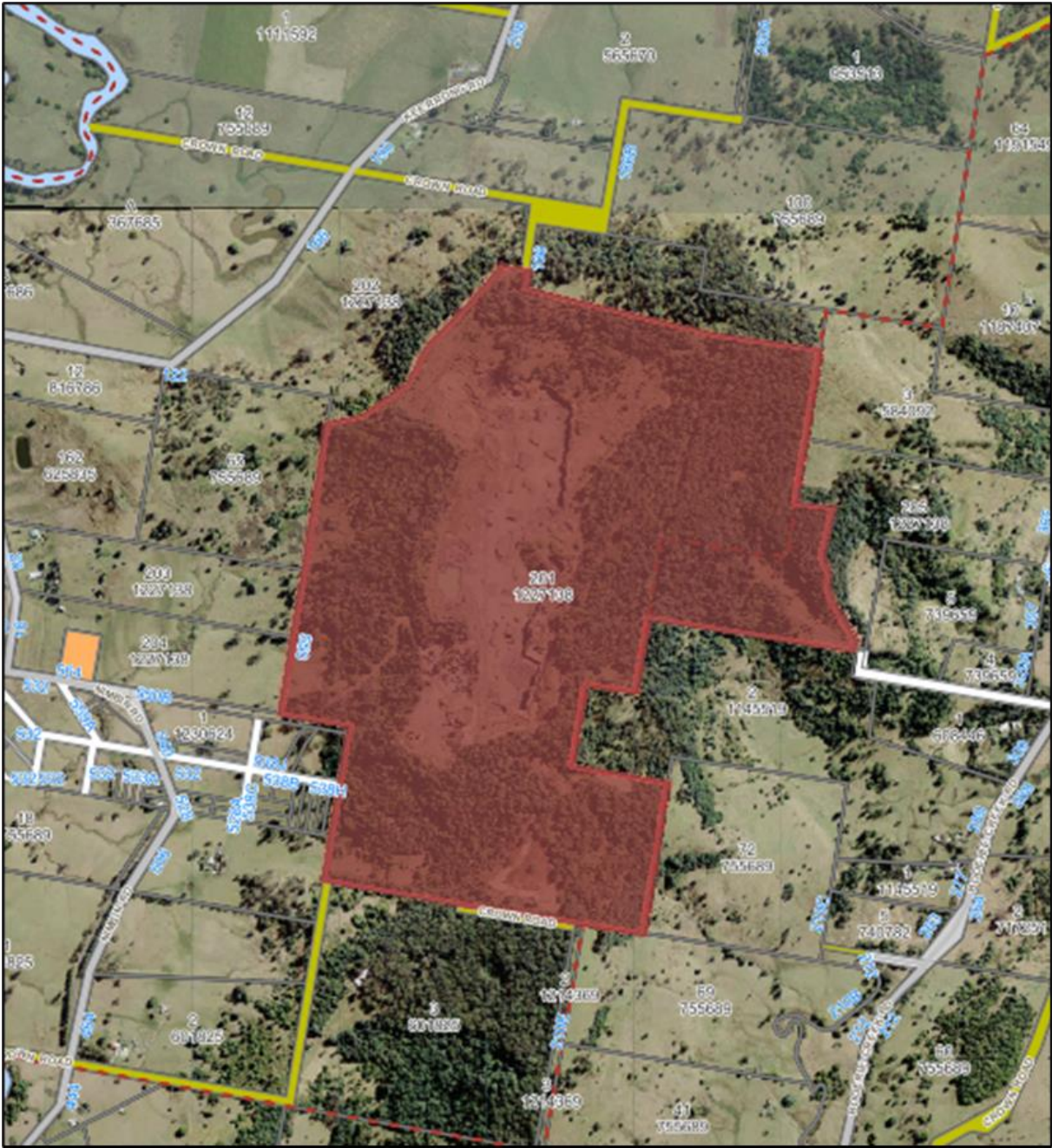
Accordingly, the environmental performance of the asphalt plant does not form part of the current AEMR for Blakebrook Quarry.

### 1.1.2 Reporting Period

The reporting period for this AEMR is 1 January 2020 to 31 December 2020.

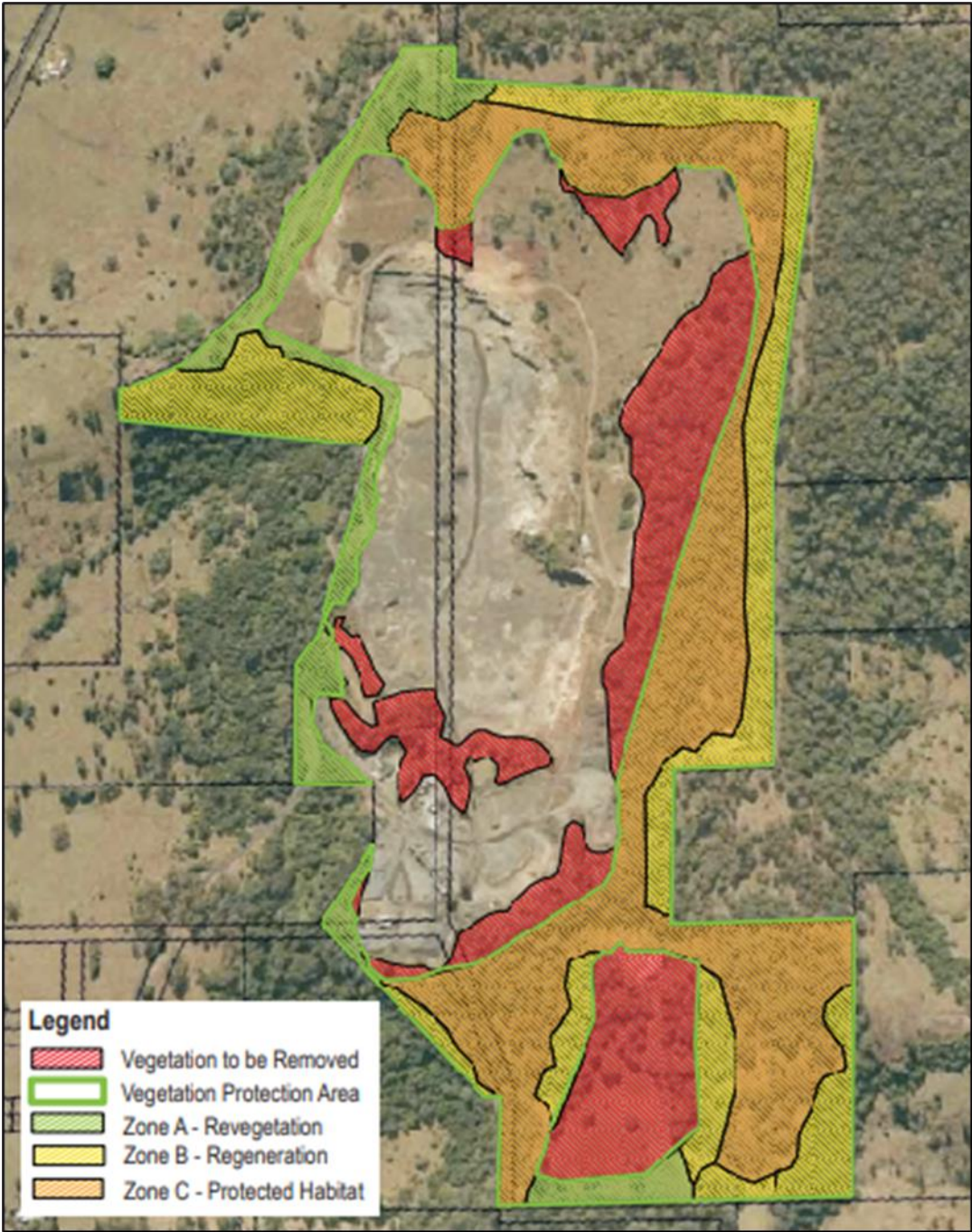


Illustration 1.1 Site location



Source: ERM 2019

Illustration 1.2 Environmental offset areas



Source: ERM 2019



## 1.2 Relevant Approvals

S75W Approval (Modification 1) to Project Approval 07\_0020 was approved in September 2017. A copy of the Notice of Modification is provided at **Appendix A**. The approval was issued by the Minister for Planning and expires on 31 December 2039.

The quarry is also subject to EPA Licence 3384 which is issued by the NSW Environment Protection Authority (EPA) pursuant to the Protection of the Environment Operations Act 1997. The licence provides details with respect to a range of environmental thresholds to be complied with during the operation of the quarry. The licence is reviewed annually and a copy of the current licence is provided at **Appendix C**.

## 1.3 Applications to Amend Approvals

There is currently one application lodged with the DPIE to modify Part 3A Approval No. 07\_0020. In this regard, an application was lodged to DPIE on 11 January 2019 to amend Part 3A Approval No. 07\_0020 (Mod 1) to amalgamate the approvals for the asphalt plant and the quarry. As part of this, a request has been made to DPIE seeking changes to several conditions and commitments within the approval notice that are considered to be either duplicates, inaccurate reflections of operations or onerous requirements.

Assessment of the application to modify the approval is ongoing. Given that the amendment has not been determined, Approval No. 07\_0020 (Mod 1) remains the current approval for Blakebrook Quarry.

## 1.4 DPIE Response to 2019 AEMR

The 2019 AEMR was submitted to DPIE on 31<sup>st</sup> March 2020. On 17<sup>th</sup> April 2020, DPIE advised that the AEMR had been reviewed and DPIE *“considers it to satisfy the reporting requirements of the approval and the Department’s Annual Review Guideline (October 2015).”* A copy of this response is provided at **Appendix B**. DPIE did not make any specific comments to be addressed in this AEMR.



## 2. Statement of Compliance

### 2.1 Introduction

This section provides a comprehensive compliance assessment relating to each condition of consent applicable to MP07\_0020. Each condition is reproduced in full and followed by a compliance statement addressing the findings of this AEMR.

### 2.2 Schedule 1 - Description of Approval

Schedule 1 describes the development, approval dates and delegations. No compliance statement is required.

### 2.3 Schedule 2 – Administrative Conditions

#### 2.3.1 Schedule 2 - Condition 1 (Minimise Harm)

##### Condition

*In addition to meeting the specific performance measures and criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.*

##### Compliance Statement

Noted.

#### 2.3.2 Schedule 2 - Condition 2 (Comply with Approval)

##### Condition

*The Proponent must carry out the project:*

*(a) generally in accordance with the EA and EA (Mod 1); and*

*(b) in accordance with the conditions of this approval, Project Layout Plan and the Statement of Commitments.*

##### Compliance Statement

Noted.

### 2.3.3 Schedule 2 - Condition 3 (Interpretation)

#### Condition

*If there is any inconsistency between the documents in condition 2(a), the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.*

#### Compliance Statement

*Noted.*

### 2.3.4 Schedule 2 - Condition 4 (Compliance with Written Instruction)

#### Condition

*The Proponent must comply with any written 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 approval (including any stages of these documents);*
- (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this approval;*
- (c) and the implementation of any actions or measures contained in these documents.*

#### Compliance Statement

As per **Section 1.4**, DPIE did not make any specific comments to be addressed relating to the 2019 AEMR.

### 2.3.5 Schedule 2 - Condition 5 (Surrender of Former Consent)

#### Condition

By 30 June 2010, the Proponent shall surrender development consent DA 95/239 to the relevant consent authority to the satisfaction of the Secretary.

#### Compliance Statement

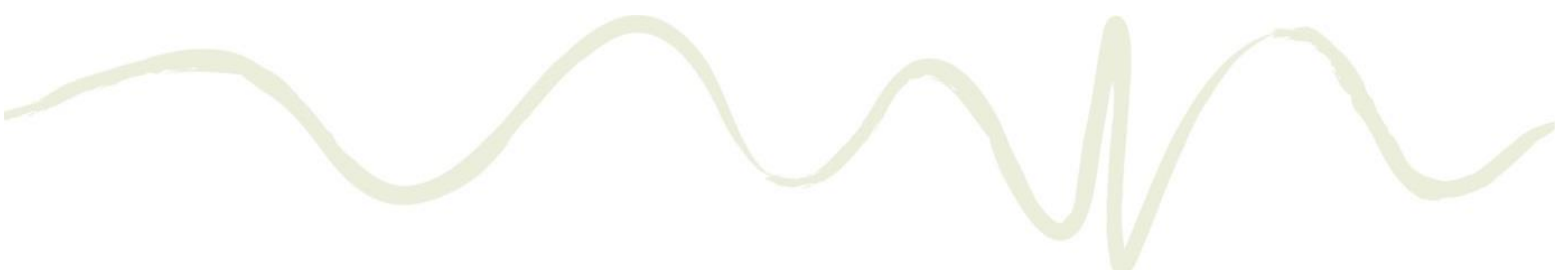
Completed.

### 2.3.6 Schedule 2 - Condition 6 (Expiry of Approval)

#### Condition

*The Proponent may carry out quarrying operations on the site until 31 December 2039.*

*Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional requirements and undertakings to the satisfaction of the Secretary. Consequently, this approval will continue to apply in all respects other than the right to conduct quarrying operations until the*



*rehabilitation of the site and those requirements and undertakings have been carried out to the standard required by the applicable conditions.*

#### Compliance Statement

Noted. Rehabilitation requirements are not applicable to the current stage of the development.

### **2.3.7 Schedule 2 - Condition 7 (Quarry Depth)**

#### Condition

*The Proponent must not undertake quarrying operations below 55 m AHD in the northern pit or 105 m AHD in the southern pit.*

*Note: Drainage sumps may be constructed below this level with the agreement of the Secretary.*

#### Compliance Statement

Blasting occurred on one occasion during the reporting period. Quarry operations did not extend below the nominated levels in 2020.

### **2.3.8 Schedule 2 - Condition 8 (Limits on Approval)**

#### Condition

*The Proponent must not:*

- (a) transport more than 600,000 tonnes of quarry materials from the site per calendar year; or*
- (b) dispatch more than 100 laden trucks from the site on any calendar day.*

*Note: Dispatch of laden trucks is also controlled under condition 1 of Schedule 3.*

#### Compliance Statement

- (a) The DPIE extractive return reflects product sales for the financial year rather than calendar year as required by this condition. The correction of this administration error forms part of the current request to the Department to modify the terms of Part 3A Approval No. 07\_0020 (Mod 1).

Sale production tonnages have been provided in the Extractive Materials Return for the 2019/2020 financial year at **Appendix D** and in the Quarry Stockpile Report for the 2020 calendar year at **Appendix E**. The total annual quantities reported are 126,096 and 52,711 tonnes respectively. Both of these quantities are substantially less than the 600,000 tonnes per calendar year permitted by Schedule 2 Condition 8.

- (b) **Appendix F** contains a schedule of daily laden truck movements from the quarry. Yellow cells in the schedule represent weekly totals. A summary of truck movements is provided in **Table 2.1** and exceedances of the daily truck movement limits are presented in bold red font.

**Table 2.1 Summary of truck movements 2020**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Highest number of trucks/day	27	14	21	51	24	48	41	100	101	19	29	10
Average number of trucks/day	5	4	9	22	11	15	13	49	58	5	11	2
Total number of trucks/month	97	81	185	472	220	315	304	1027	1332	101	210	52

During the reporting period there was one occasion where the daily truck movement limit of 100 trucks was exceeded. On 8 September 2020, one additional laden truck was dispatched from the quarry. This exceedance occurred because internet disruptions caused data delays to the weighbridge reporting system. When the Weighbridge Operator became aware of the error no additional truck movements occurred. The matter was reported by LCC to DPIE as soon as practicable via email on 9 September 2020. A DPIE post approval form relating to the exceedance is provided at **Appendix G** and a letter to DPIE from LCC summarising the events surrounding the exceedance is provided at **Appendix H**.

### 2.3.9 Schedule 2 - Condition 9 (New Buildings & Structures)

#### Condition

*The Proponent 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.*

#### *Notes:*

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

#### Compliance Statement

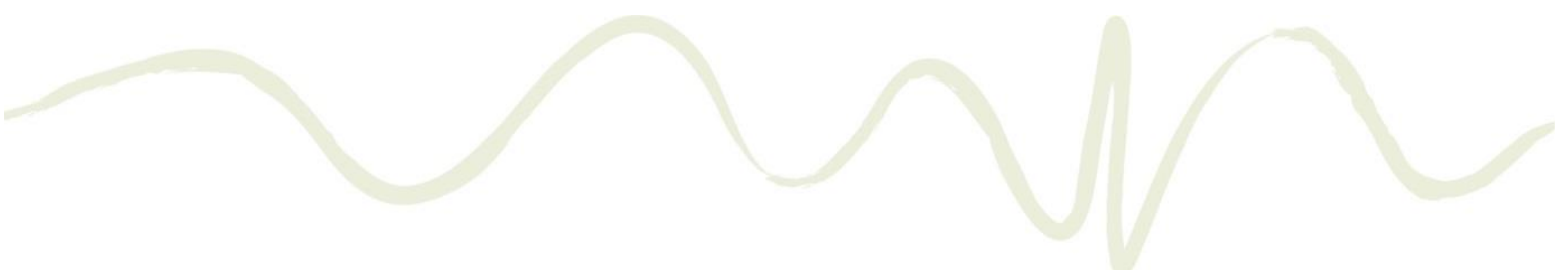
Noted. During the reporting period, no building works that required construction and occupation certificates were undertaken.

### 2.3.10 Schedule 2 – Condition 10 (Demolition)

#### Condition

#### Demolition

*The Proponent 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.*



### Compliance Statement

Noted. There was no demolition of structures during the reporting period.

#### **2.3.11 Schedule 2 – Condition 11 (Protection of Public Infrastructure)**

##### Condition

###### *Protection of Public Infrastructure*

*Unless the Proponent and the applicable authority agree otherwise the Proponent must:*

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

*Note: This condition does not apply to damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition 13 of Schedule 2.*

##### Compliance Statement

No damage to public infrastructure occurred as the result of the project during the reporting period.

#### **2.3.12 Schedule 2 – Condition 12 (Plant & Equipment)**

##### Condition

*The Proponent must ensure that all the plant and equipment used at the site, or to monitor the performance of the project is:*

- (a) maintained in a proper and efficient condition; and*
- (b) operated in a proper and efficient manner.*

##### Compliance Statement

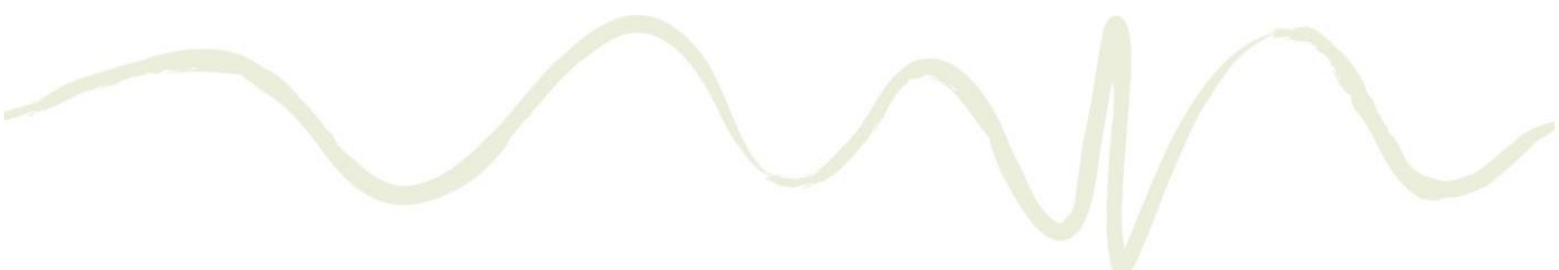
Quarry fleet maintenance is managed by Council contracted fleet suppliers. Contractors evaluated as part of the procurement process must have adequate operation, maintenance and safety procedures in place. Environmental monitoring is largely completed by contractors. A condition of engagement requires that a regular maintenance program is completed for all monitoring equipment.

#### **2.3.13 Schedule 2 – Condition 13 (Roads Contributions)**

##### Condition

*The Proponent must pay Council an annual financial contribution toward the maintenance of local roads used for haulage of quarry products. The contribution must be determined in accordance with the Lismore City Council Section 94 Contribution Plan, 2004, or any subsequent relevant contributions plan adopted by Council.*





### Compliance Statement

Section 7.11 contributions are paid to Lismore City Council monthly. **Appendix I** provides a report of the monthly payments made during the reporting period.

#### **2.3.14 Schedule 2 – Condition 14 (Production Data)**

##### Condition

*The Proponent must:*

*(a) from the commencement of quarrying operations provide calendar year annual quarry production data to DRG using the standard form for that purpose; and*

*(b) include a copy of this data in the Annual Review.*

##### Compliance Statement

Annual quarry production data was provided to the Department of Trade on 27 August 2020. A copy of the Extractive Materials Return is provided at **Appendix D**.

#### **2.3.15 Schedule 2 – Condition 15 (Compliance with Conditions)**

##### Condition

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

##### Compliance Statement

LCC has advised that staff are briefed on approval requirements (relevant to their responsibilities) as part of the induction process.

#### **2.3.16 Schedule 2 – Condition 16 (Extraction Limits)**

##### Condition

*The Proponent must ensure that the boundaries of the approved limits of extraction are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.*

##### Compliance Statement

LCC advises that extraction boundaries are clearly identified on site with metal stakes. These were viewed by DPIE officers at their last inspection.

## 2.4 Schedule 3 – Specific Environmental Conditions

### 2.4.1 Schedule 3 - Condition 1 (Hours of Operation)

#### Condition

*The Proponent must comply with the operating hours set out in Table 1.*

Activity	Permissible Hours
Quarrying operations including loading and dispatch of laden trucks	7 am to 6 pm Monday to Friday
	7 am to 3 pm Saturday
	At no time on Sundays or public holidays
Blasting	10 am to 3 pm Monday to Friday (except public holidays)
	At no time on Sundays or public holidays
Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence

#### Compliance Statement

The following observations are made with respect to hours of operation of the quarry:

(a) The quarry opening hours are advertised on the LCC website as follows:

- 7am - 4pm Monday to Thursday
- 7am - 3.30pm Friday

The opening hours are compliant with the approved operating hours for the premises.

(b) Blasting occurred on one occasion during the reporting period at 2:59pm on Monday 2 March 2020. This event was compliant with the approved operating hours for the premises.

(c) Quarry Management advises that no quarrying operations or significant maintenance were undertaken outside of the permitted operating hours.

### 2.4.2 Schedule 3 – Condition 2 (Exception to Hours of Operation)

#### Condition

*The following activities may be carried out outside the hours specified in condition 1 above:*

- (a) delivery or dispatch of materials as requested by Police or other public authorities; and*
- (b) emergency work to avoid the loss of lives, property or to prevent environmental harm.*

*In such circumstances, the Proponent must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.*

#### Compliance Statement

Quarry Management advises that no significant works or activities were completed outside of the operating hours nominated in Schedule 3 Condition 1.

### 2.4.3 Schedule 3 – Condition 3 (Noise)

#### Condition

The Proponent must ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land.

Receiver	Day
	<i>L<sub>Aeq</sub></i> (15 minute)
Location 2	36
All other locations	35

Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, the noise criteria in Table 2 do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

#### Compliance Statement

##### (a) Environmental Assessment Predictions

The Noise Impact Assessment lodged with the development application included the following predicted operational noise levels.

Receiver Area	Predicted Noise LA <sub>eq</sub> dB(A)			PSNL LA <sub>eq</sub> dB(A)
	Scenario			
	1.	2.	3.	Day
Location 1	33	33	33	38
Location 2	34	36	36	38
Location 3	<30	<30	<30	35
Location 4	<30	<30	<30	35
Location 5	33	33	31	35
Location 6	<30	<30	<30	35
Location 7	35	35	33	35

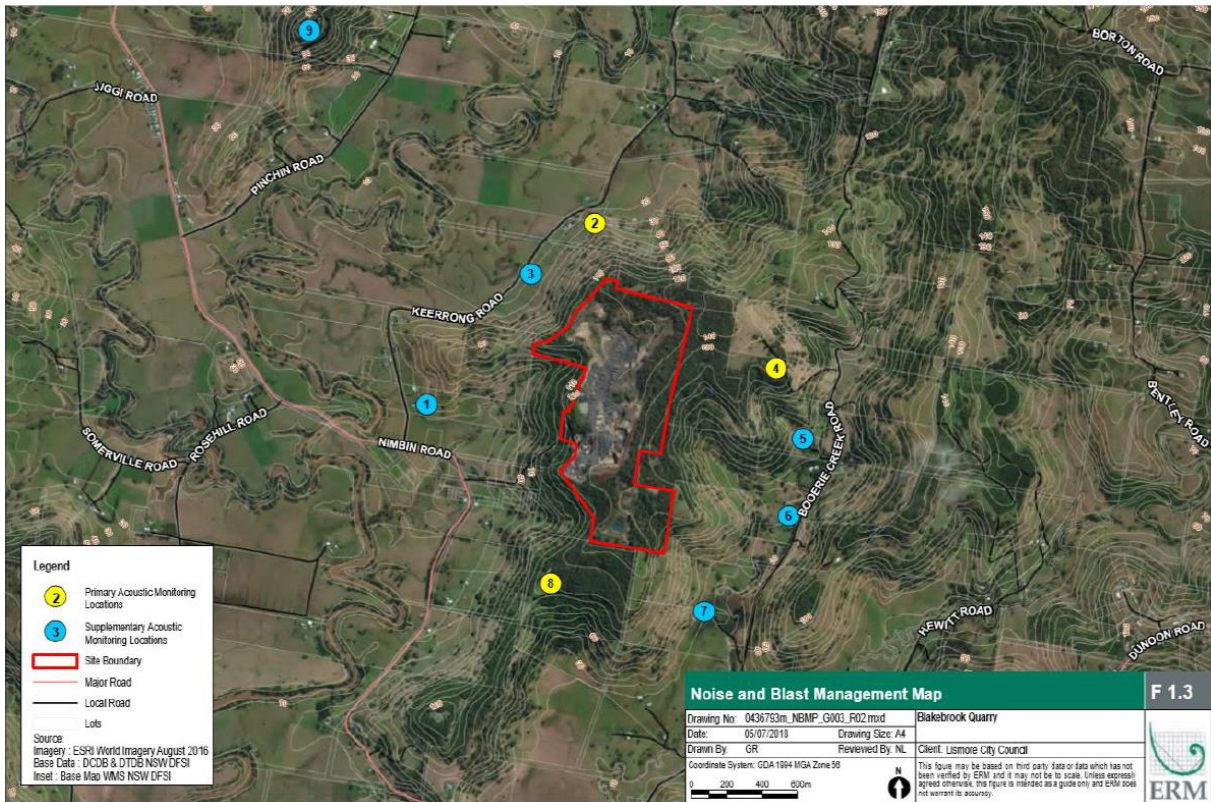
Notes:

- Scenario 1 – proposed overburden stripping
- Scenario 2 – proposed central operation
- Scenario 3 – proposed northern operation

##### (b) Monitoring Results

The 2020 Annual Noise Monitoring Assessment was completed in December 2020 by Ambience Audio Services. A copy of the report documenting the findings of this assessment is provided at **Appendix J. Illustration 2.1** provides the noise monitoring locations.

**Illustration 2.1 Noise monitoring locations**



Source: ERM 2018b

The Noise Monitoring Assessment Report (Ambience Audio Services, 2020) summarises as follows:

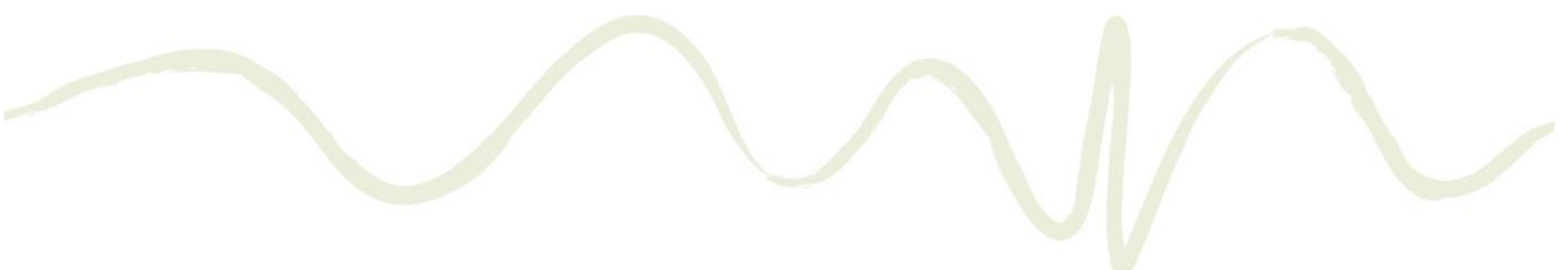
*A noise monitoring survey was conducted to assess compliance of quarry operational noise levels at Blakebrook Quarry, Blakebrook, via Lismore NSW. Measurements were undertaken with calibrated noise monitoring equipment on the 1st of December 2020 and conducted in general accordance with procedures laid down in Australian Standard AS 1055:2018 and the NSW Noise Policy for Industry.*

*The Blakebrook Quarry operates under EPL No. 3384. Condition L6.1 stipulates that noise from the premises must not exceed 35dB(A) LAeq,15min during the day (7am to 6pm) Monday to Saturday at residential receiver locations. The current Noise and Blast Management Plan v3.1 (Aug 2018) allows a limit of 36dB(A) LAeq,15min. at Receiver 2.*

*Measurements were conducted at the 3 primary receiver locations while the quarry was operating. The quarry operations were not audible at receiver locations 2 and 4, and occasional low frequency was observed at Receiver 8.*

*The quarry operational noise levels (LAeq,15min) were not able to be accurately assessed at residential receiver monitoring locations, as the quarry noise was not audible, or barely audible against other noise sources such as distant traffic, insects, birds or moving foliage.*

*It is estimated from the recorded LA90,15 min levels and observations, that the quarry noise levels are below the Project Specific Noise Level of 35 dB(A) Leq,15min at receiver locations 4 and 8, and below the Project Specific Noise Level of 36 dB(A) Leq,15min at receiver location 2.*



*The current crushing, screening, rock hammering and stock piling operations are on the main pit floor, which provides a substantial noise barrier to receivers. If crushing, screening, rock hammering and stock piling operations change to a higher ground level, then there is potential for increased noise impact at receivers and it is recommended that noise monitoring be conducted at residential receivers.*

*Receiver 8 is close to the southern cell. It is recommended that noise monitoring be conducted at Receiver 8 when work in the southern cell is undertaken, to assess the noise impact at Receiver 8.*

#### **2.4.4 Schedule 3 – Condition 4 (Noise Monitoring)**

##### Condition

*The Proponent must:*

*(a) implement best practice management to minimise the construction, operational and road transportation noise of the project;*

*(b) minimise the noise impacts of the project during meteorological conditions when the noise criteria in this approval do not apply (see Appendix 5);*

*(c) carry out noise monitoring (at least every 3 months or as otherwise agreed with the Secretary) to determine whether the project is complying with the relevant conditions of this approval; and*

*(d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Secretary.*

*Note: Required frequency of noise monitoring may be reduced if approved by the Secretary.*

##### Compliance Statement

Noise monitoring is completed annually, generally in November, to ensure compliance with the monitoring requirements documented within the Noise and Blast Management Plan Version 3.1 (ERM 2018). During this reporting period, monitoring was conducted in December 2020.

During the reporting period no complaints were received with respect to noise generation at the quarry. Accordingly, LCC is of the view that more frequent monitoring is not warranted.

#### **2.4.5 Schedule 3 – Condition 5 (Noise Management Plan)**

##### Condition

*The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:*

*(a) be prepared in consultation with the EPA;*

*(b) be submitted to the Secretary within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;*

*(c) describe the measures to be implemented to ensure:*

- *compliance with the noise criteria and operating conditions of this approval;*
- *best practice management is being employed; and*

- the noise impacts of the project are minimised during meteorological conditions under which the noise criteria in this approval do not apply (see Appendix 5);

(d) describe the proposed noise management system; and

(e) include a monitoring program to be implemented to measure noise from the project against the noise criteria in Table 2.

The Proponent must implement the Noise Management Plan as approved from time to time by the Secretary.

#### Compliance Statement

The Noise and Blast Management Plan (Rev 3.1) was updated and approved by DPIE in 2018.

### 2.4.6 Schedule 3 – Condition 6 (Blast Parameters)

#### Condition

The Proponent must ensure that blasting on site does not cause any exceedance of the criteria in Table 3.

Table 3: 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

However, these criteria do not apply if the Proponent has a written agreement with the relevant owner to exceed the limits in Table 3, and the Proponent has advised the Department in writing of the terms of this agreement.

It is noted that in early 2016, an agreement was reached with the owner of former Receiver 9 (located at [REDACTED]) concerning noise monitoring results at that property. DPIE was advised of this agreement in May 2016. Accordingly, the above assessment criteria do not apply to Receiver 9. Given this, Receiver 9 has been removed as a primary acoustic monitoring location and a new monitoring location has been selected.

#### Compliance Statement

##### (a) Environmental Assessment Predictions

The environmental assessments concluded that compliance with the above criteria should be able to be achieved during operation.

##### (b) Monitoring Results

Blasting occurred on one occasion during the reporting period, with formal blast monitoring occurring at the following locations:

- MP1 – [REDACTED]
- MP 2 – [REDACTED]

A summary of the blast monitoring results is provided in **Table 2.2**, and the complete blast reports are provided at **Appendix K**. The blast met the airblast overpressure and ground vibration level criteria. The blast also occurred within:

- the nominated frequency specified in Condition 7 of Schedule 3 (refer to **Section 2.4.7**); and
- on Monday 2 March at 2:59 pm which is within the nominated hours of operation specified in Condition 1 of Schedule 3 (refer to **Section 2.4.1**).

**Table 2.2 Blast monitoring results – 2 March 2020**

<b>Monitoring location</b>	<b>Airblast Overpressure (dB(Lin Peak))</b>	<b>Ground Vibration (mm/s)</b>
<b>Blasting criteria</b>	<b>120<sup>1</sup></b>	<b>10<sup>1</sup></b>
	<b>115<sup>2</sup></b>	<b>5<sup>2</sup></b>
MP1	109	4
MP 2	103	2

<sup>1</sup> The allowable exceedance is 0%

<sup>2</sup> The allowable exceedance is 5% of the total number of blasts over a period of 12 months

#### **2.4.7 Schedule 3 – Condition 7 (Number of Blasts)**

##### Condition

*The Proponent may carry out a maximum of 2 blasts per month, unless an additional blast is required following a blast misfire. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site.*

*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.*

##### Compliance Statement

One blast occurred during the reporting period on Monday 2 March 2020. This is lower than the maximum monthly frequency.

#### **2.4.8 Schedule 3 – Condition 8 (Blast Management)**

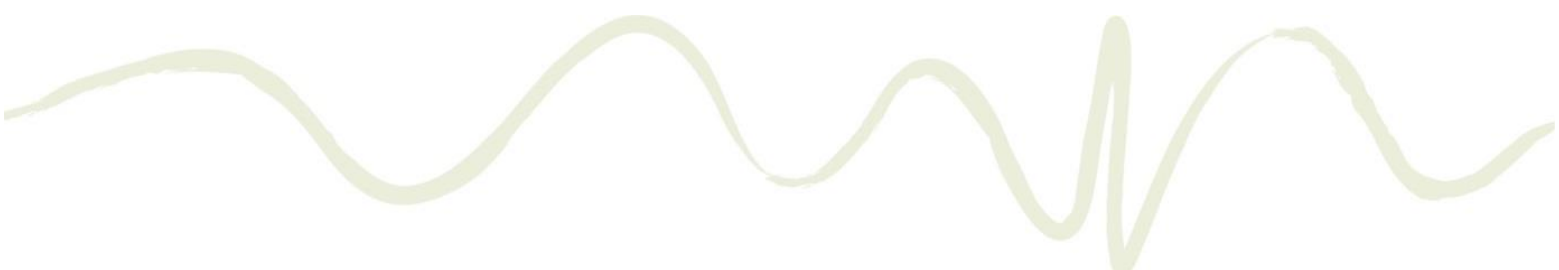
##### Condition

*During blasting operations, the Proponent must:*

*(a) implement best practice management to: protect the safety of people and livestock; protect public or private infrastructure and property from damage; and minimise the dust and fume emissions;*

*(b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and*

*(c) carry out regular monitoring to determine whether the project is complying with the relevant conditions of this approval, to the satisfaction of the Secretary.*



### Compliance Statement

The updated Noise and Blast Management Plan (Rev 3.1) includes management measures relating to these matters. The blasting that occurred during the reporting period complied with the requirements in the Noise and Blast Management Plan.

#### **2.4.9 Schedule 3 – Condition 9 (Blast Management Plan)**

##### Condition

*The Proponent must prepare a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:*

*(a) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;*

*(b) describe the measures to be implemented to ensure compliance with the blast criteria and operating conditions of this approval;*

*(c) include measures to manage flyrock to ensure the safety of people and livestock and to protect property;*

*(d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this approval;*

*(e) include local community notification procedures for the blasting schedule, in particular to nearby residences; and*

*(f) include a protocol for investigating and responding to complaints related to blasting operations.*

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

##### Compliance Statement

The Noise and Blast Management Plan (Rev 3.1) was updated and endorsed by the DPIE in 2018.

#### **2.4.10 Schedule 3 – Condition 10 (Air Quality)**

##### Condition

*The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.*



*Table 4: Air quality criteria*

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

Notes to Table 4:

a) Cumulative impact (i.e. increase in concentrations due to the project plus background concentrations due to all other sources).

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

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

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

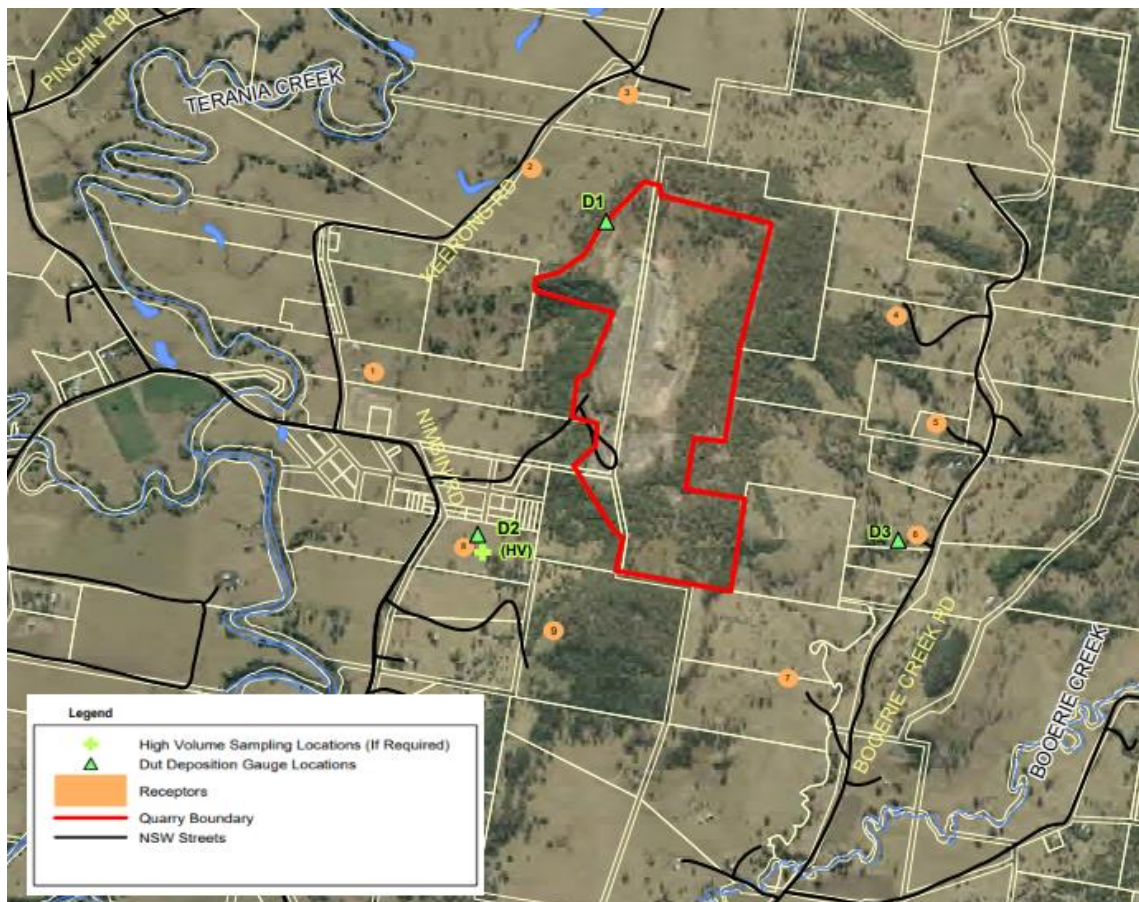
e) “Reasonable and feasible avoidance measures” includes, but is not limited to, the operational requirements in conditions 11, 12 and 13 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.

#### Compliance Statement

#### **Deposited Dust Monitoring Results:**

Dust monitoring stations are established at three sites around the quarry north-west (D1), south-west (D2) and east (D3), refer to **Illustration 2.2**.

## Illustration 2.2 Dust monitoring locations



Source: ERM 2018a

A review of the dust monitoring results from the 2020 monitoring period confirms that the correct number of monitoring rounds has been completed and the monitoring has been completed in accordance with the required exposure period of 30 days (+/- 2 days) per monthly monitoring event. Results from the monitoring period are provided at **Appendix L** and exceedances in the air quality criteria for deposited dust are highlighted in bold red font.

As per the guidance provided in the Air Quality Management Plan (Rev 3.1), the deposit rate of ash is used to determine compliance with the deposited dust criterion. This is because pollutants that contribute to the insoluble solids (total suspended solids) quantity include mineral content, as well as organic pollutants such as bird droppings, pollen, and plant material.

Exceedance of the air quality criterion for deposited dust (ash > 4 g/m<sup>2</sup>/month) occurred on one occasion:

- 16 November 2020 to 14 December 2020:
  - D2, 6.7 g/m<sup>2</sup>/month

LCC investigated this exceedance and reviewed environmental and operational conditions that may have contributed to the exceedance. An incident report was prepared, and a copy is provided in **Appendix M**.



The closest sensitive receivers to monitoring point D2 are:

- [REDACTED] (located approximately 150 metres west of the location in question), and
- [REDACTED] (located approximately 150 metres south of the location in question).

No complaints were received from the public or neighbours during the relevant period.

A discussion with [REDACTED] on 22 December 2020 (where the D2 monitoring station is located), indicated that the dry and windy weather conditions had created dust in his paddock during the monitoring period. [REDACTED] did not identify the quarry as generating excessive or nuisance dust during the relevant period.

Weather conditions during the monitoring period were dry and hot, with rainfall for November (4.2 mm) well below the long term average monthly rainfall of 93.7 mm. Of the 28-day monitoring period, 13 days were above 30°C, up to 38.2°C in November and 37.1°C in December. Wind direction varied over the course of the monitoring period. The additional east and north west dust monitoring locations recorded results that were consistent with previous monitoring results and were below the limit.

Operational activity at the site during the relevant period was minimal and consistent (50% of allowable production limit). There had been no blasting or active extraction undertaken on the site for more than 9 months prior to the relevant period. All loads are covered before they leave the operational area, monitored closely by the Weighbridge Operator. Operational staff were consulted upon reopening after the Christmas break to reiterate dust mitigation practices onsite to minimise any generated dust and impacts from the quarry.

**Figure 2.1 to Figure 2.3** present monthly ash deposition results for 2017 to 2020 with reference to the deposited dust limit. To provide an indication of dust deposition levels over a longer period of time, **Figure 2.4 to Figure 2.6** present monthly total suspended solids deposition results for 2012 to 2020. Over the duration of the monitoring period, monthly results have varied. Higher dust deposition levels have typically been recorded at D2 and D3 compared with D1.

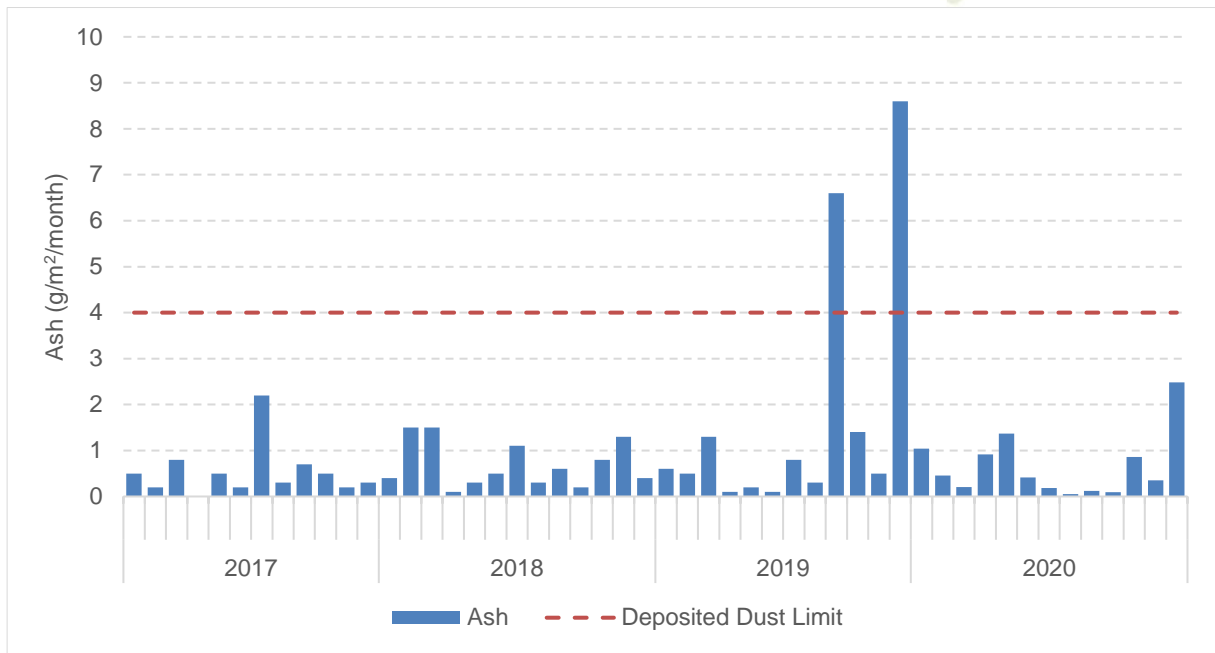


Figure 2.1 D1 monthly ash deposition results 2017-2020

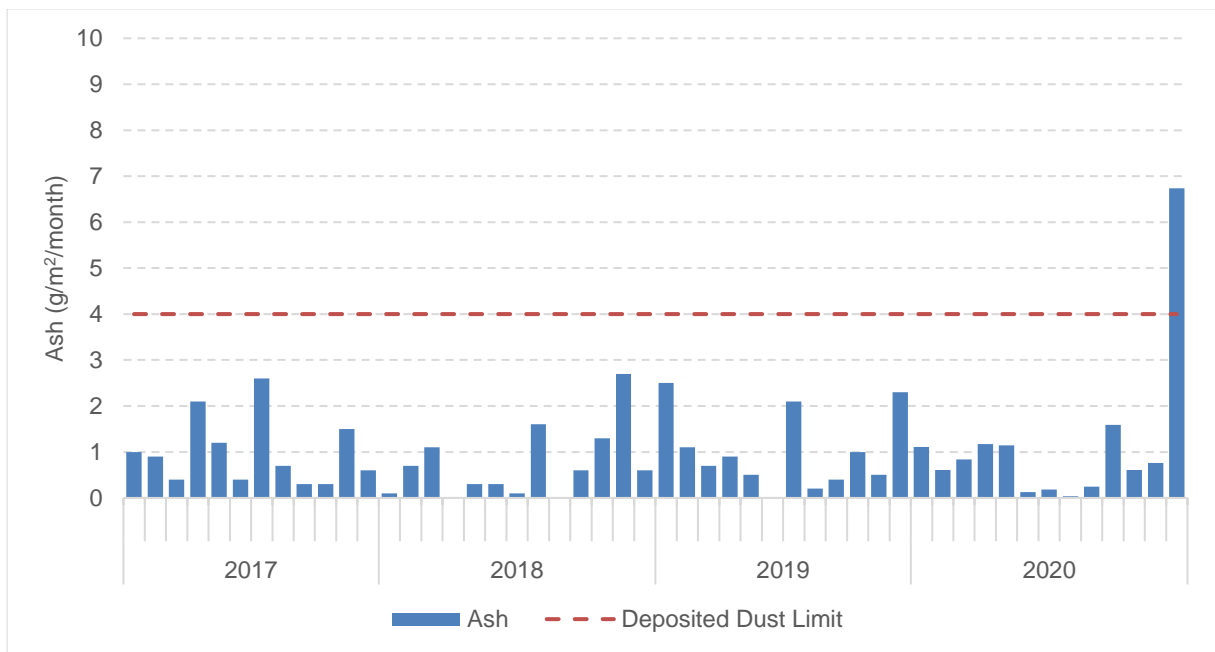


Figure 2.2 D2 monthly ash deposition results 2017-2020

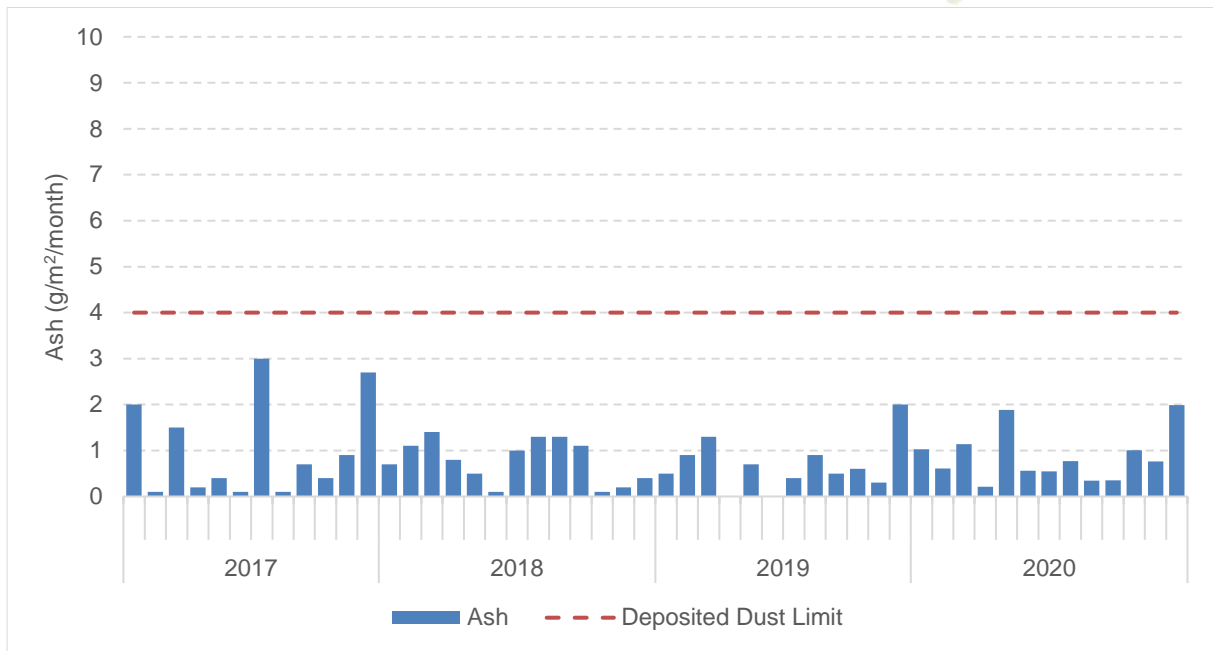


Figure 2.3 D3 monthly ash deposition results 2017-2020

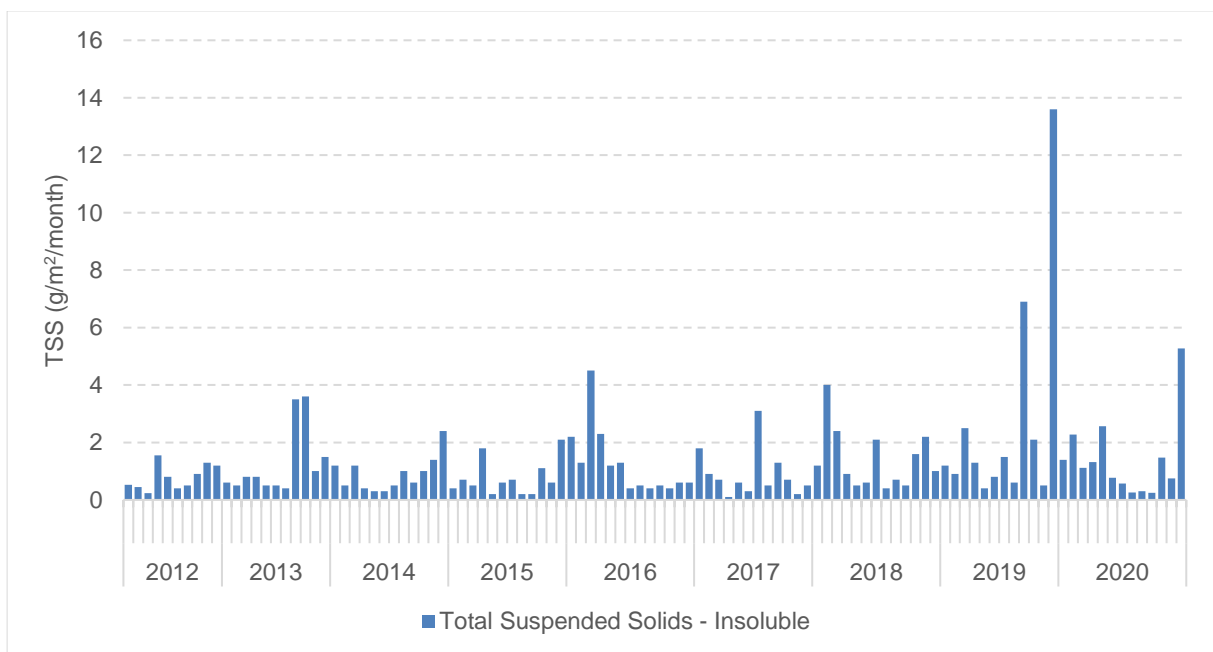
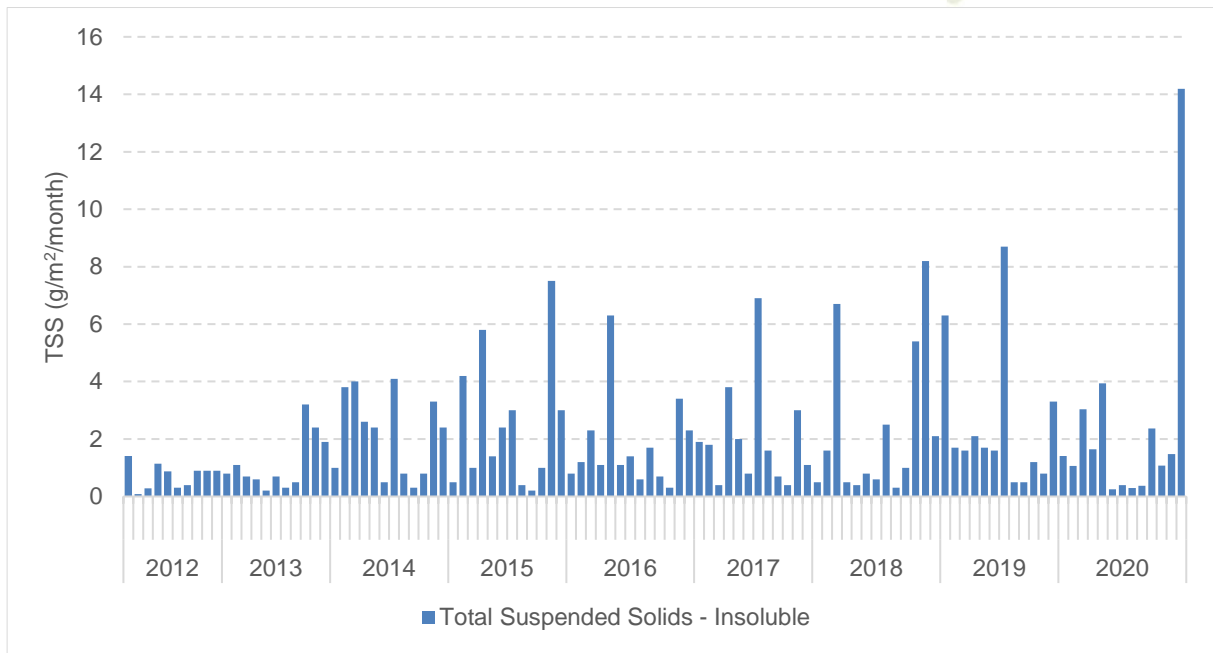
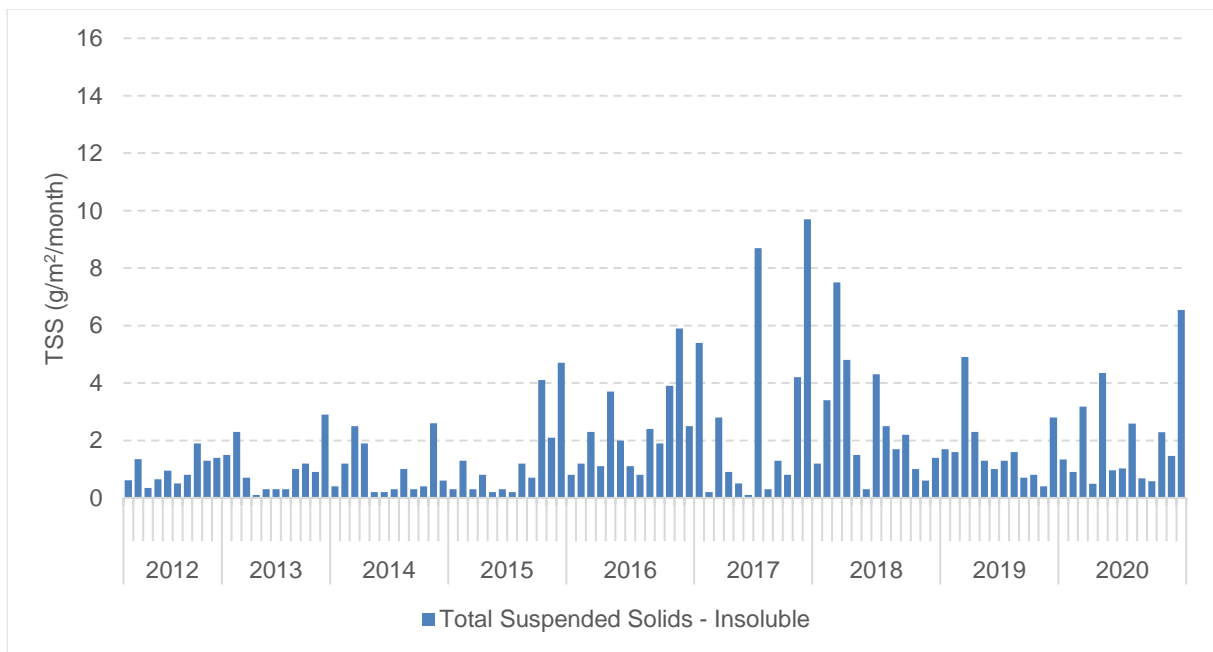


Figure 2.4 D1 monthly total suspended solids deposition results 2012-2020



**Figure 2.5 D2 monthly total suspended solids deposition results 2012-2020**



**Figure 2.6 D3 monthly total suspended solids deposition results 2012-2020**

### Particulate Matter Monitoring Results:

The air quality criteria relevant to particulate matter and the results for the monitoring period are presented in **Table 2.3**.

As per the Air Quality Management Plan, an air quality assessment was undertaken in 2008. Compliance with the particulate criteria was considered sufficient to prove the low risk of the operations to ambient PM<sub>10</sub> concentrations. Additional monitoring for PM<sub>10</sub> and TSP are required only in the event of sustained exceedances of deposited dust criteria. If sustained annual average dust deposition > 4 g/m<sup>2</sup>/month is identified the quarry will establish an additional monitoring site for testing particulate matter concentrations (PM<sub>10</sub> and TSP).

As indicated in **Table 2.3**, the average deposited dust result for 2020 was 0.9 g/m<sup>2</sup>/month. This is lower than the applicable annual average dust deposition threshold, therefore there is no requirement for the establishment of an additional monitoring site for testing particulate matter concentrations.

**Table 2.3 Air quality criteria for particulate matter and average results**

<b>Pollutant</b>	<b>Averaging Period</b>	<b>Criteria</b>	<b>2020 Results (Average)</b>
Particulate Matter < 10 µm (PM10)	Annual	25 µg/m <sup>3</sup>	NA <sup>1</sup>
Particulate Matter < 10 µm (PM10)	24 Hour	50 µg/m <sup>3</sup>	NA <sup>1</sup>
Total Suspended Particulates (TSP)	Annual	90 µg/m <sup>3</sup>	NA <sup>1</sup>
Deposited Dust (measured as ash)	Annual	4 g/m <sup>2</sup> /month	0.9 g/m <sup>2</sup> /month

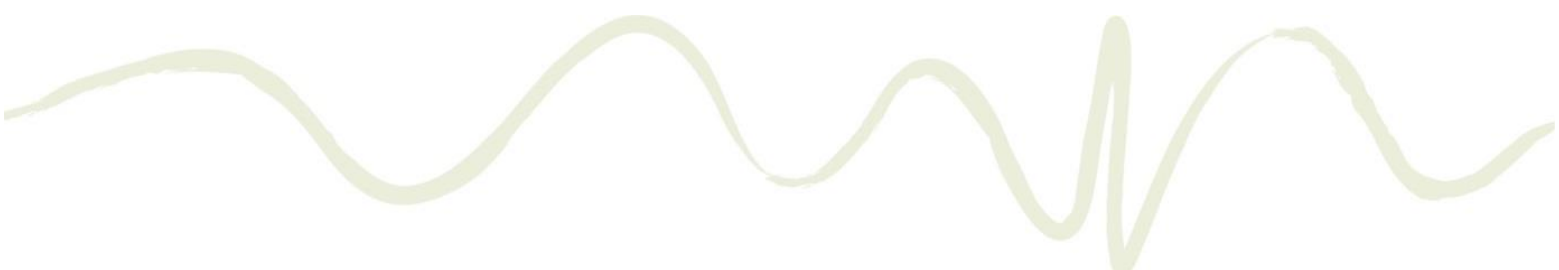
<sup>1</sup> Monitoring not required during 2020 monitoring period

#### 2.4.11 Schedule 3 – Condition 11 (Air Quality Management)

##### Condition

*The Proponent must:*

- (a) implement best practice management to minimise the dust emissions of the project;*
- (b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this approval;*
- (c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 4);*
- (d) monitor and report on compliance with the relevant air quality conditions in this approval; and*
- (e) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.*



### Compliance Statement

The updated Air Quality Management Plan (Rev 3.1) incorporates suitable management measures relating to the above matters.

#### **2.4.12 Schedule 3 - Condition 12 (Air Quality Management Plan)**

##### Condition

*The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:*

- (a) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;*
- (b) describe the measures to be implemented to ensure: compliance with the air quality criteria and operating conditions of this approval; best practice management is being employed; and the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events;*
- (c) describe the proposed air quality management system;*
- (d) include an air quality monitoring program that: is capable of evaluating the performance of the project; includes a protocol for determining any exceedances of the relevant conditions of approval; and effectively supports the air quality management system.*

*The Proponent must implement the approved Air Quality Management Plan as approved from time to time by the Secretary.*

##### Compliance Statement

An updated Air Quality Management Plan (Rev 3.1) for the quarry was submitted and endorsed by DPIE in 2018.

#### **2.4.13 Schedule 3 – Condition 13 (Weather Station)**

##### Condition

*For the life of the project, the Proponent 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 and Analysis of Air Pollutants in New South Wales guidelines.*

##### Compliance Statement

A meteorological weather station was installed on site in 2018.

#### **2.4.14 Schedule 3 - Condition 14 (Greenhouse Gas Emissions)**

##### Condition

*The Proponent must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.*



### Compliance Statement

The vehicle fleet associated with the quarry currently focuses on achieving US EPA Tier 3 Emission Standards and, where possible within budget limitations, aspires to Tier 4.

#### **2.4.15 Schedule 3 - Condition 15 (Water Supply)**

##### Condition

*The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations under the approval to match its available water supply, to the satisfaction of the Secretary.*

##### Compliance Statement

No water was required to be imported to the site during the reporting period.

#### **2.4.16 Schedule 3 - Condition 16 (Water Discharge)**

##### Condition

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

##### Compliance Statement

No water discharge occurred during the reporting period.

#### **2.4.17 Schedule 3 - Condition 17 (Groundwater Assessment)**

##### Condition

*The Proponent must undertake a detailed groundwater assessment to the satisfaction of the Secretary. This assessment must be:*

- (a) prepared by a suitably qualified expert in consultation with DPI Water;*
- (b) submitted to the Secretary for approval by 30 December 2018;*
- (c) approved by the Secretary before any extraction below 105 m AHD in the northern pit or below 118.5 m AHD in the southern pit;*
- (d) adequately assess groundwater resources affected by the northern and southern pits, to the proposed full extraction depths of those pits;*
- (e) adequately assess all groundwater impacts associated with proposed extraction;*
- (f) provide data for predicted groundwater pit inflows during and following extraction; and*
- (g) propose management measures to address pit inflows and impacts to groundwater resources.*

*The Proponent must implement the management measures proposed in the groundwater assessment to the satisfaction of the Secretary.*

### Compliance Statement

The Groundwater Assessment Report was submitted and approved by DPIE in June/July 2019. Following consideration of the report, the Department of Industry (Lands and Water) and the DPIE required LCC to obtain:

*“the necessary Water Access Licences (WALs) for the extraction of groundwater up to the predicted maximum annual take of 70ML per annum from the North Coast Volcanics Ground Water Source and the North Coast Fractured and Porous Rock Groundwater Sources. The Department requests that this process commence no later than 9 July 2019 and to be notified once the required WALs have been obtained”.*

The initial application for a Water Access Licence was made on 9 July 2019. On 12 November 2019, a formal application was made via the Controlled Allocation Order, 3rd period ROI process for 70 Unit Shares from the North Coast Volcanics Groundwater Source at the rate of \$550 per share.

LCC was notified of a successful outcome on 7 January 2020. Shares were paid in full on 2 March 2020.

A Notice of Decision for the Water Access Licence was issued in June 2020 (refer to **Appendix N**) and the licence was registered on 19 January 2021 (refer to **Appendix O**).

#### **2.4.18 Schedule 3 - Condition 18 (Intercept of Groundwater)**

##### Condition

*If groundwater is encountered during quarrying operations in the South Pit under EA (Mod 1), the Proponent must cease quarrying operations until authorised to recommence by the Secretary.*

##### Compliance Statement

Groundwater was not encountered during the operation of the quarry during the reporting period. No quarrying activities were undertaken in the South Pit during the reporting period.

#### **2.4.19 Schedule 3 - Condition 19 (Soil and Water Management Plan)**

##### Condition

*The Proponent must prepare a Soil and Water Management Plan for the project 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 DPI Water;*
- (c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary; and*
- (d) include a:*
  - (i) Site Water Balance that includes:*

*details of:*

- *sources and security of water supply;*
- *water use and management onsite;*
- *any off-site water transfers; and*
- *reporting procedures; and*
- *measures to be implemented to minimise clean water use on site;*

*(ii) Surface Water Management Plan, that includes:*

*a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the project;*

- *a detailed description of the surface water management system on site including the:*
  - *clean water diversion system;*
  - *erosion and sediment controls;*
  - *dirty water management system; and*
  - *water storages; and*
- *a program to monitor and report on:*
  - *any surface water discharges;*
  - *the effectiveness of the water management system,*
  - *the quality of water discharged from the site to the environment;*
  - *surface water flows and quality in local watercourses;*

*(iii) Groundwater Management Plan that includes:*

- *a provision that requires the Proponent to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the quarry from the quarry face or floor; and*
- *a monitoring program to manage potential impacts, if any, on any alluvium and associated surface water source near the proposed extraction area that includes:*
  - *identification of a methodology for determining threshold water level criteria;*
  - *contingency measures in the event of a breach of thresholds; and*
  - *a program to regularly report on monitoring.*

*The Proponent must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.*

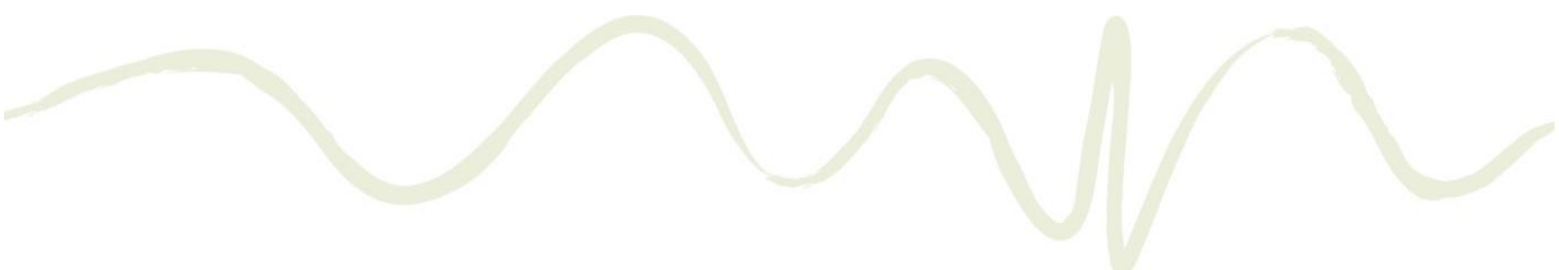
#### Compliance Statement

**Soil and Water Management Plan:** The updated Soil and Water Management Plan (December 2018) was submitted on 5 March 2019 and approved by DPIE on 25 June 2019.

**Site Water Balance:** The updated Soil and Water Management Plan incorporates a Site Water Balance report (February 2019). The report provides recommendations to improve the accuracy of the site water balance estimates. The recommendations are being implemented and the surface water balance monitoring report for 2020 is due to be received from the consultant in March 2021.

#### **Surface Water Monitoring Results:**

**Illustration 2.3** provides an extract from the Soil and Water Management Plan which identifies the locations of the required background surface water monitoring points, SW1, SW2, SW3 and SW5. It is noted that SW5 is required to be monitored only if sediment basin LPD3 comes on line. As this



sediment basin is not yet a licenced point of discharge no monitoring has been undertaken at this location.

As per the Soil and Water Management Plan quarterly monitoring of the background sites is to include the following parameters:

- pH
- EC
- DO
- Temperature
- Turbidity
- TSS
- Nutrients
- a visual inspection for oil and grease

A summary of the monitoring results for the reporting period is provided in **Table 2.4**. Laboratory analysis reports are provided at **Appendix P**.

Background surface water monitoring of receiving waterways was undertaken at SW1 to SW3 in March, June, September and December 2020. As previously discussed, SW5 was not sampled during the reporting period. During the December monitoring event SW1 was dry and therefore was not sampled.

During March and June turbidity, nutrients, and oil and grease were not monitored. LCC have advised that “an annual internal audit identified the oversight, which was rectified for the September and December monitoring rounds”.

Illustration 2.3 Surface water monitoring locations

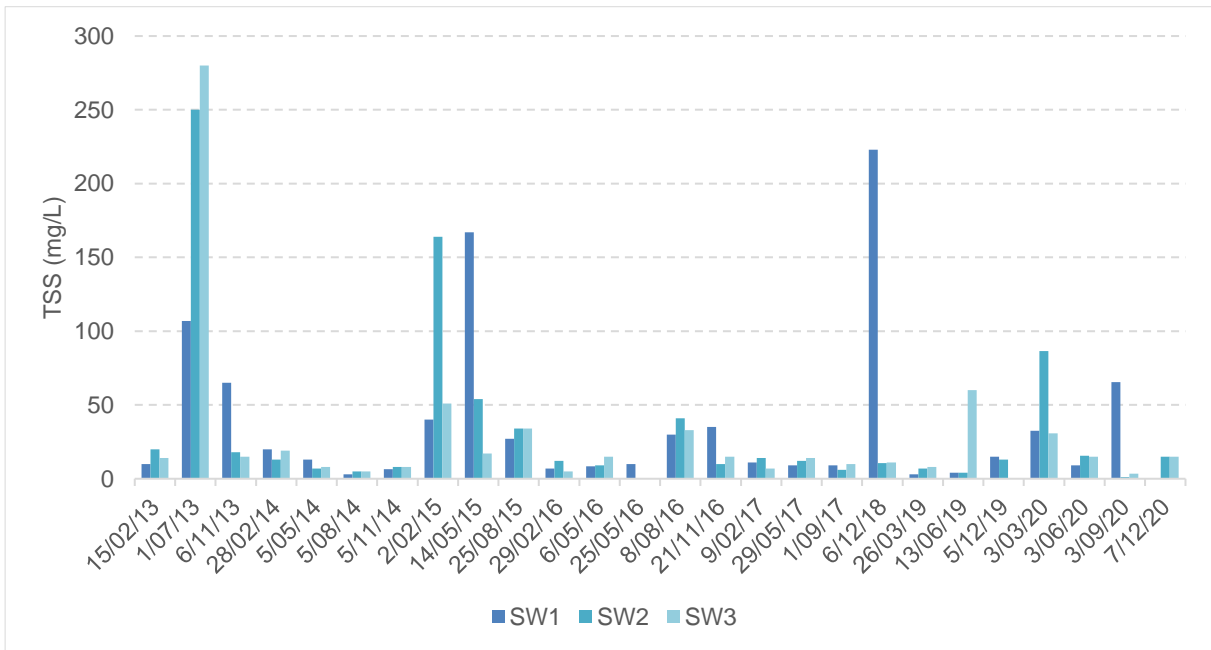


Source: Gilbert & Sutherland 2019

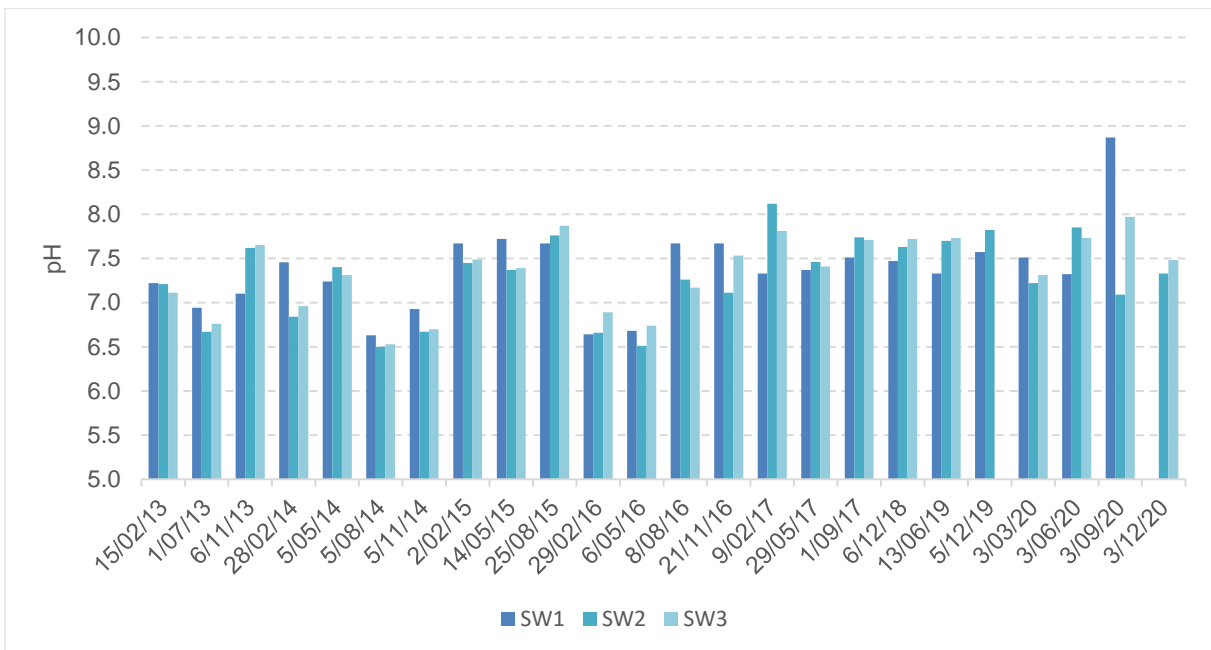
**Table 2.4 Summary of surface water monitoring of receiving waterways**

Site	Date	Field Comments	pH	EC (mS/cm)	DO (mg/L)	DO (%)	Temperature (°C)	Turbidity (NTU)	TSS (mg/L)	Phosphate (mg/L)	Nitrate (mg/L)	Nitrite (mg/L)	Ammonia (mg/L)	Oil & Grease Present? (Visual Inspection)
SW1	2/03/2020	Medium flow medium sediment	7.51	0.32	5.9		23.7		33					
SW1	3/06/2020	Medium flow low sediment	7.35	0.73	5.0		8.3		9					
SW1	3/09/2020	Low flow, highly turbid	8.87	0.01		82.3	22.8	41	66	0.007	<0.005	0.014	0.100	N
SW1	2/12/2020	Dry.												N
SW2	2/03/2020	Medium flow high sediment	7.22	0.13	7.1		23.9		87					
SW2	3/06/2020	Medium flow low sediment	7.64	0.17	9.6		8.7		16					
SW2	3/09/2020	Moderate flow, slightly turbid	7.09	0.01		69.3	19.1	10	1	0.015	<0.005	0.015	0.109	N
SW2	2/12/2020	Moderate flow, very turbid	7.33	0.01		94.6	30.2	20	15	0.023	<0.005	0.006	0.052	N
SW3	2/03/2020	Medium flow high sediment	7.31	0.14	6.8		24.0		31					
SW3	3/06/2020	Medium flow low sediment	7.54	0.17	9.2		9.4		15					
SW3	3/09/2020	Moderate flow, slightly turbid	7.97	0.01		92.9	20.1	10	4	0.016	<0.005	0.013	0.040	N
SW3	2/12/2020	Moderate flow, slightly turbid	7.48	0.01		88.9	30.3	22	15	0.014	<0.005	<0.005	0.044	N
SW5	2/03/2020	No flow												
SW5	3/06/2020	No flow												
SW5	3/09/2020	No flow												N
SW5	2/12/2020	No flow - Black water present												N

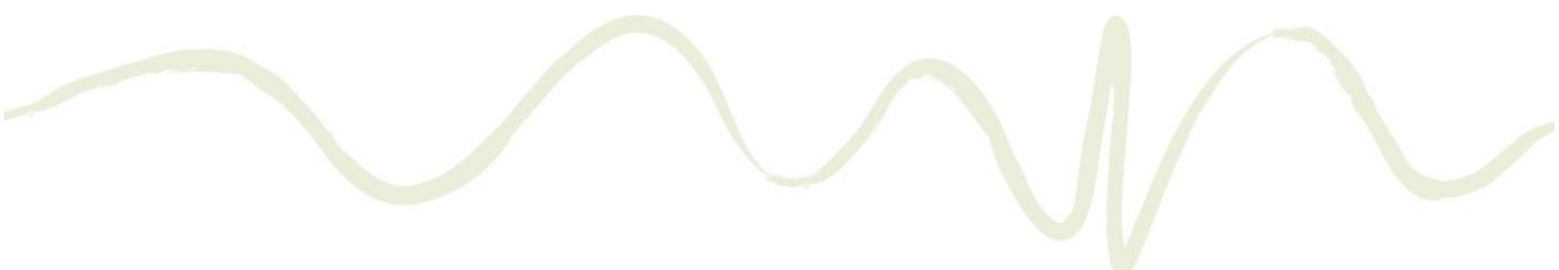
Background monitoring results for 2013 to 2020 for TSS and pH are presented in **Figure 2.7** and **Figure 2.8**, respectively.



**Figure 2.7 Surface water TSS monitoring results 2013-2020**



**Figure 2.8 Surface water pH monitoring results 2013-2020**



Water quality monitoring of sediment basins is required prior to water being actively discharged from sediment basins. There was no active discharge of waters from sediment basins during the reporting period, therefore sediment basin monitoring was not conducted.

### **Groundwater Monitoring Results:**

Quarterly groundwater quality monitoring was undertaken at nine groundwater monitoring bores in March, June, September and December 2020.

As per the Soil and Water Management Plan groundwater is to be analysed for the following parameters:

- pH<sup>1</sup>
- EC<sup>1</sup>
- TPH<sup>1</sup>
- BTEX<sup>1</sup>
- total iron<sup>1</sup>
- total lead<sup>1</sup>
- dissolved iron<sup>2</sup>
- dissolved lead<sup>2</sup>
- total oils and grease (to be monitored as a surrogate for TPH and BTEX until sufficient data is available)<sup>2</sup>
- major ions and cations<sup>2</sup>

<sup>1</sup> Site specific interim groundwater quality triggers have been established for these parameters in the Soil and Water Management Plan.

<sup>2</sup> There are no site-specific trigger values for these parameters in the Soil and Water Management Plan. These additional parameters are monitored to assist with the characterisation of groundwater.

A summary of the 2020 groundwater quality monitoring results and interim trigger values is provided at **Appendix Q**. Where a groundwater quality result is higher than the relevant trigger value, this has been indicated in bold red font

Results that were higher than the relevant interim trigger values were recorded at seven bores. The following points are relevant to the results that exceed the interim trigger values:

- In some instances, the result was only slightly higher than the relevant trigger and these are not considered to be of concern.
- The Soil and Water Management Plan notes that *“a target exceedance has a 20% probability per monitoring round (using this approach). As such, results from multiple monitoring events necessarily need to be reviewed as a group against the interim target to determine compliance or otherwise (i.e. one exceedance of the target is not necessarily an indication of non-compliance).”*
- The trigger values are stated as being ‘interim’ in the Soil and Water Management Plan with the intention being to update the trigger values once sufficient data is available.

Taking into account the above points, an exceedance of the interim trigger values is not necessarily considered to be a non-compliance.



## 2.4.20 Schedule 3 - Condition 20 (Record of Truck Movements)

### Condition

*The Proponent must keep accurate records of all laden truck movements to and from the site (including time of arrival and dispatch) and publish a summary of records on its website every 6 months.*

### Compliance Statement

Records on laden truck movements are kept which detail the date, time and registration plate details of trucks exiting the quarry. A review of the LCC website on 23 February 2021 indicates that these records and a summary table with daily, weekly, and monthly total laden truck movements are provided for the 2020 calendar year.

## 2.4.21 Schedule 3 - Condition 21 (Road Upgrades)

### Condition

*The Proponent must undertake the following road upgrade works generally in accordance with the recommendations in the EA, and to the satisfaction of the RMS:*

- a) upgrade the intersection of the Quarry Access and Nimbin Road to a 'Type AUR Intersection Treatment', prior to 31 December 2010;*
- b) upgrade the guard rails on the approaches to Booerie Creek Bridge prior to 31 December 2010;*
- c) upgrade the Booerie Creek Road and Nimbin Road intersection to a 'Type BAR Right Turn Treatment on the Through Road' prior to 31 December 2010;*
- d) upgrade the Wilson Street and Nimbin Road intersection to a 'Type CHR Right Turn Bay Treatment' prior to 31 December 2010; and*
- e) re-align Nimbin Road and the Quarry Access intersection to meet the AUSTRROADS sight distance requirements for vehicles travelling in both directions through the intersection prior to 31 December 2011.*

*Note: The road works must be constructed in accordance with the relevant RMS or AUSTRROADS standards, and signposted and lit in accordance with AS:1742 – Manual of Uniform Traffic Control Devices and AS/NZ 1158:2005 – Lighting for Roads and Public Spaces.*

### Compliance Statement

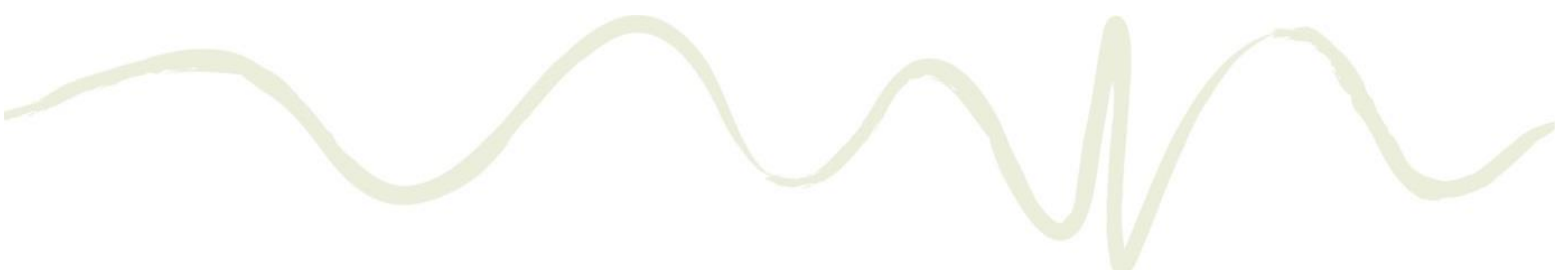
All required roadworks were completed prior to this reporting period.

## 2.4.22 Schedule 3 - Condition 22 (Road Upgrades)

### Condition

*The Proponent must:*

- (a) restrict truck movements from the quarry to an average of 50 laden trucks a day until all road upgrades works required by condition 20 of Schedule 3, are met or unless otherwise approved by the Secretary;*



*(b) ensure that all laden trucks entering or exiting the site have their loads covered, with the exception of loads consisting solely of boulders greater than one tonne in weight;*

*(c) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site; and*

*(d) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the project so they can be easily identified by road users.*

#### Compliance Statement

All roadworks referenced in Item (a) are complete.

The Operational Traffic Management Plan (refer to Schedule 3 Condition 23 in **Section 2.4.23**) includes measures to address Items (b), (c) and (d).

### **2.4.23 Schedule 3 - Condition 23 (Traffic Management Plan)**

#### Condition

*The Proponent must prepare a Traffic Management Plan for the project to the satisfaction of the Secretary. This plan must:*

*a) be prepared in consultation with the RMS and Council;*

*b) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;*

*c) describe the processes in place for the control of truck movements entering and exiting the site;*

*d) 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;*

*e) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and*

*f) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry.*

*The Proponent must implement the approved Traffic Management Plan as approved from time to time by the Secretary.*

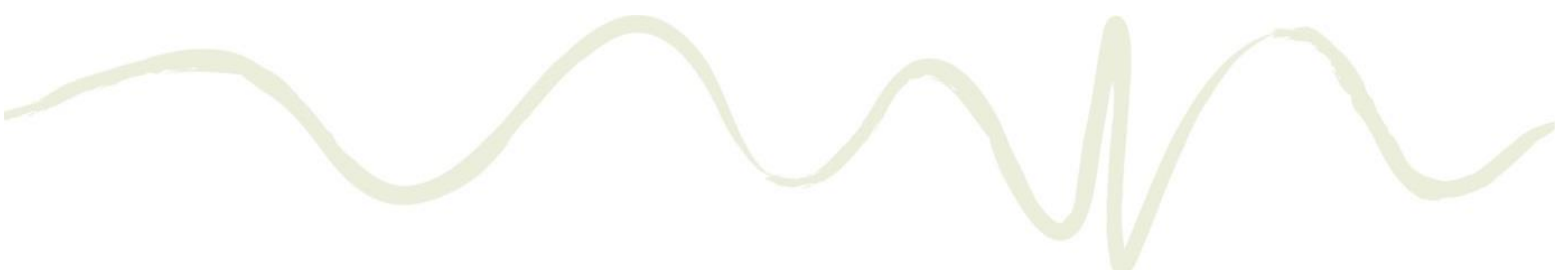
#### Compliance Statement

The updated Operational Traffic Management Plan (Rev 3.1) for the quarry was submitted by LCC and endorsed by the DPIE in 2018.

### **2.4.24 Schedule 3 - Condition 24 (Aboriginal Heritage Management Plan)**

#### Condition

*The Proponent must prepare an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. The plan must:*



*(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;*

*(b) be prepared in consultation with OEH and the Registered Aboriginal Parties;*

*(c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary; and*

*(d) include a description of the measures that would be implemented to:*

- *protect, monitor and manage known sites of archaeological significance;*
- *manage any new Aboriginal objects or relics that are discovered;*
- *store Aboriginal heritage items salvaged on site; and*
- *ensure ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.*

*The Proponent must implement the approved Aboriginal Heritage Management Plan as approved from time to time by the Secretary.*

#### Compliance Statement

The updated Aboriginal Heritage Management Plan (Rev 3.1) for the quarry was submitted by LCC and endorsed by the DPIE in 2018.

### **2.4.25 Schedule 3 - Condition 25 (Aboriginal Heritage)**

#### Condition

*If any item or object of Aboriginal heritage significance is identified on site, the Proponent must ensure that:*

*(a) all work in the immediate vicinity of the suspected Aboriginal item or object ceases immediately;*

*(b) a 10 m buffer area around the suspected item or object is cordoned off; and*

*(c) the OEH is contacted immediately.*

*Work in the immediate 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.*

#### Compliance Statement

LCC advises that no items or objects of Aboriginal Cultural Heritage significance were identified during the reporting period. The Aboriginal Heritage Management Plan (Schedule 3 Condition 23 in **Section 2.4.24**) includes an Unexpected Finds Procedure, which will further guide staff actions in the event that an item or object of Aboriginal Cultural Heritage is discovered.

### **2.4.26 Schedule 3 – Condition 5 (Habitat Offsets)**

*Note: There appears to be an error in condition numbering within the Notice of Determination*

#### Condition

*The Proponent must:*

- (a) implement the Biodiversity Offset Strategy (see Table 5);
- (b) ensure that adequate resources are dedicated towards the implementation of this strategy;
- (c) provide appropriate long term security for the offset area; and
- (d) provide a timetable for the implementation of the offset strategy prior to 30 June 2010, or as otherwise agreed by the Secretary, to the satisfaction of the Secretary.

Offset Areas	Minimum Size
On-site offset (Protection Zone in Appendix 4)	17.6 hectares
Off-site offset (within Lismore local government area, and not already within a conservation area)	45 hectares
Total	62.6 hectares

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

Compliance Statement

The Biodiversity Offset Strategy for the quarry was submitted by LCC and endorsed by the DPIE in 2019.

**2.4.27 Schedule 3 - Condition 26 (Rehabilitation Strategy)**

Condition

The Proponent must rehabilitate the site 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.

Feature	Objective
All areas of the site affected by the project	<ul style="list-style-type: none"> <li>• Safe</li> <li>• Hydraulically and geotechnically stable</li> <li>• Non-polluting</li> <li>• Fit for the intended post-mining land use(s)</li> <li>• Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>
Surface Infrastructure	<ul style="list-style-type: none"> <li>• Decommissioned and removed, unless otherwise agreed by the Secretary</li> </ul>
Quarry benches and pit floor	<ul style="list-style-type: none"> <li>• Landscaped and vegetated using native tree and understorey species</li> </ul>
Final Void	<ul style="list-style-type: none"> <li>• Minimise the size, depth and slope of the batters of the final void</li> <li>• Minimise the drainage catchment of the final void</li> </ul>

Compliance Statement

No site rehabilitation was required, or occurred, during the reporting period.

#### **2.4.28 Schedule 3 - Condition 27 (Progressive Rehabilitation)**

##### Condition

*The Proponent must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.*

*Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance*

##### Compliance Statement

No site rehabilitation was required, or occurred, during the reporting period.

#### **2.4.29 Schedule 3 - Condition 28 (Biodiversity Management Plan)**

##### Condition

*The Proponent must prepare a Biodiversity and Rehabilitation Management Plan for the project to the satisfaction of the Secretary. This plan must:*

- (a) be prepared by a suitably qualified expert;*
- (b) be prepared in consultation with OEH and Council;*
- (c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;*
- (d) provide details of the conceptual final landform and associated land uses for the site;*
- (e) describe how the implementation of the Biodiversity Offset Strategy will be integrated with the overall rehabilitation of the site;*
- (f) include a Koala Management Plan prepared in accordance with SEPP 44;*
- (g) include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and rehabilitation of the site (including progressive rehabilitation), including triggers for any necessary remedial action;*
- (h) describe the short, medium and long term measures to be implemented to:*
  - *manage remnant vegetation and habitat on site, including within the Biodiversity Offset Strategy area; and*
  - *ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this approval;*
- (i) include a detailed description of the measures described in paragraph (h) to be implemented over the next 3 years (to be updated for each 3 year period following initial approval of the plan) including the procedures to be implemented for:*

- *maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation;*
- *restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features;*
- *protecting vegetation and fauna habitat outside the approved disturbance area on-site, including core Koala habitat;*
- *minimising the impacts on native fauna, including undertaking pre-clearance surveys;*
- *establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;*
- *ensuring minimal environmental consequences for threatened species, populations and habitats;*
- *collecting and propagating seed;*
- *controlling weeds and feral pests*
- *controlling erosion; and*
- *managing bushfire risk;*

*(j) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;*

*(k) identify the potential risks to the successful implementation of the Biodiversity Offset Strategy, and include a description of the contingency measures to be implemented to mitigate these risks; and*

*(l) include details of who is responsible for monitoring, reviewing, and implementing the plan.*

*The Proponent must implement the Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.*

#### Compliance Statement

The Biodiversity Rehabilitation Management Plan was submitted to DPIE in August 2018. In 2019, following the approval of the Biodiversity Offset Strategy, the Biodiversity Rehabilitation Management Plan was again amended and submitted to DPIE for approval. This was subsequently approved on 14 March 2019.

#### **2.4.30 Schedule 3 - Condition 29 (Biodiversity and Rehabilitation Bond)**

##### Condition

*Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Proponent must lodge a Biodiversity and Rehabilitation Bond with the Department to ensure that the Biodiversity Offset Strategy and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and the relevant conditions of this approval. The sum of the bond must be determined by:*

*(a) calculating the full cost of implementing the Biodiversity Offset Strategy;*

*(b) calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and*

*(c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.*

Notes:

*Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by OEH as part of a BioBanking Agreement, or transfer to conservation reserve estate can be used to reduce the liability of the Biodiversity and Rehabilitation Bond.*

*If capital and other expenditure required by the Biodiversity and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.*

*If the Biodiversity Offset Strategy and/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the Secretary, then the Secretary will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy and rehabilitation of the site are not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant work.*

Compliance Statement

This condition was complied with prior to the reporting period.

**2.4.31 Schedule 3 – Condition 30 (Review of Biodiversity Bond)**

Condition

*Within 3 months of each Independent Environmental Audit (see Condition 12 of Schedule 5), the Proponent must review, and if necessary revise, the sum of the Biodiversity and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:*

*(a) effects of inflation;*

*(b) likely cost of implementing the Biodiversity Offset Strategy and rehabilitating all disturbed areas of the site (taking into account the likely surface disturbance over the next 3 years of the project); and*

*(c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date.*

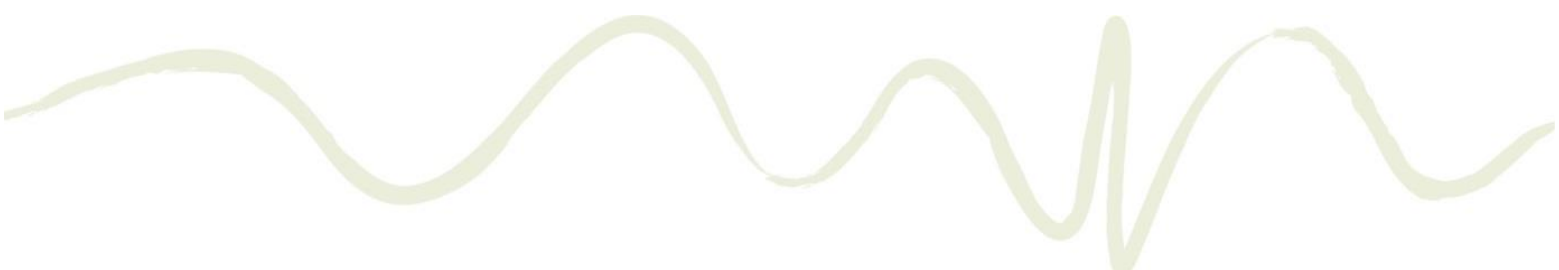
Compliance Statement

The bond was reviewed and paid in 2019, following completion of the last Independent Environmental Audit. No action was required by this condition during the reporting period.

**2.4.32 Schedule 3 – Condition 31 (Visual Impacts)**

Condition

*The Proponent must implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project to the satisfaction of the Secretary.*



### Compliance Statement

Quarry operations are located below the tree line and do not intrude on the landscape of visual character of the locality. LCC advises that they are not aware of any complaints with respect to visual impacts associated with the quarry.

#### **2.4.33 Schedule 3 – Condition 32 (Waste Management)**

##### Condition

*The Proponent 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 project;*
- (c) ensure that the waste generated by the project 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.*

##### Compliance Statement

LCC advises that, during the reporting period, waste management practices at the quarry involved the following:

- Waste generated by staff is separated into general waste and recyclables.
- Lismore City Council 'standard' waste collection service, supplemented by waste delivery to the Wyrallah Road Waste Management Facility by quarry staff as required.
- Used oil and chemicals (when applicable) drums / containers are transported to the Wyrallah Road Waste Management Facility by quarry staff on an 'as needs' basis'
- Crushed glass from the Wyrallah Road Waste Management Facility is mixed with quarry product road base. The EPA Licence has been varied to allow the acceptance of glass sand for this purpose.
- No waste (other than the glass product referenced above) is stored or processed on site.

#### **2.4.34 Schedule 3 - Condition 33 (Waste Management)**

##### Condition

*Except as expressly permitted in an EPL, the Proponent must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.*

##### Compliance Statement

LCC advises that during the reporting period the only waste product received and processed on the site was crushed glass, which is mixed with quarry product and sold for road base.



#### 2.4.35 Schedule 3 – Condition 34 (Storage of Liquids)

##### Condition

*The Proponent must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.*

##### Compliance Statement

LCC advises that during the reporting period there were no changes to the former methods of storing liquids, namely:

- A 20,000 litre self bunded fuel tank is provided on site within a besser block bund;
- Oils and lubricants are stored in suitable containers with self contained bunding; and
- Chemicals associated with the on-site laboratory are stored within suitable containers within a bunded shed.

#### 2.4.36 Schedule 3 - Condition 35 (Dangerous Goods)

##### Condition

*The Proponent 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.*

##### Compliance Statement

Quarry stores include ethanol (for laboratory use), hydraulic and transmission fluids and oils. These liquids, in addition to diesel fuel, are stored as outlined in **Section 2.4.35**.

#### 2.4.37 Schedule 3 - Condition 36 (Fire)

##### Condition

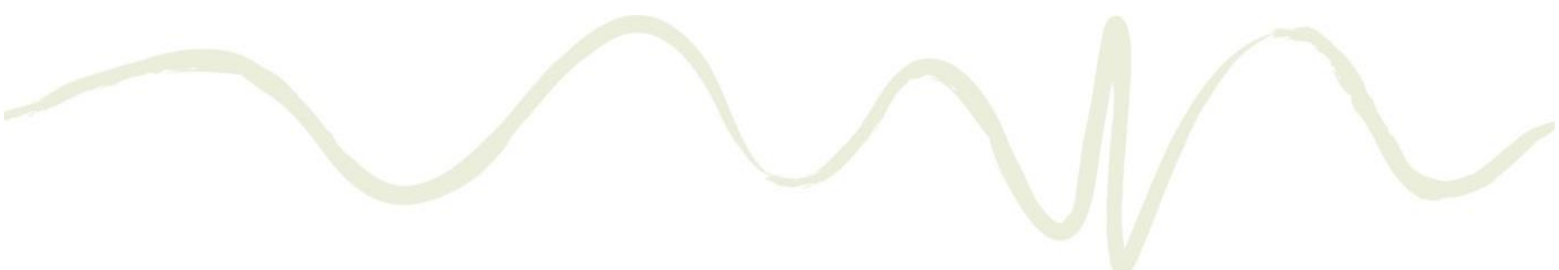
*The Proponent must:*

- (a) ensure that the project is suitably equipped to respond to any fires on site; and*
- (b) assist the Rural Fire Service and emergency services to the extent practicable if there is a fire in the vicinity of the site.*

##### Compliance Statement

LCC advises that during the reporting period:

- The Emergency Response Plan was reviewed and updated in October 2020.
- The quarry was equipped with both fire extinguishers and water carts, with this equipment maintained on a regular basis, and
- A machine fire occurred on a Contractor's crushing equipment on 2 December 2020. The Rural Fire Service were promptly notified and attended the site. The fire was then promptly extinguished. The incident was reported to the Resources Regulator who did not deem it a notifiable incident nor attend site. An internal investigation was undertaken in consultation with the Contractor. The



Quarry was adequately equipped to respond to the fire and emergency response procedures were followed.

## 2.5 Schedule 4 – Additional Procedures

### 2.5.1 Schedule 4 - Condition 1 (Notification of Exceedance)

#### Condition

*As soon as practicable, and no longer than 7 days, after obtaining monitoring results showing:*

- *an exceedance of any criteria in Schedule 3, the Proponent must notify the affected landowners in writing of the exceedance, and provide regular monitoring results, at least every 3 months, to each affected landowner until the project is again complying with the relevant criteria; and*
- *an exceedance of any air quality criteria in Schedule 3, the Proponent 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).*

#### Compliance Statement

During the reporting period exceedances occurred with respect to the following criteria in Schedule 3:

#### **Schedule 3 – Condition 10 (Air Quality):**

- Dust exceedance at monitoring location D2 for monitoring period 16 November 2020 to 14 December 2020: As per the incident report provided in **Appendix M**, the dust exceedance was discussed with the closest sensitive receiver on the day LCC became aware of the exceedance.

### 2.5.2 Schedule 4 – Condition 2 (Independent Review if Impacts)

#### Condition

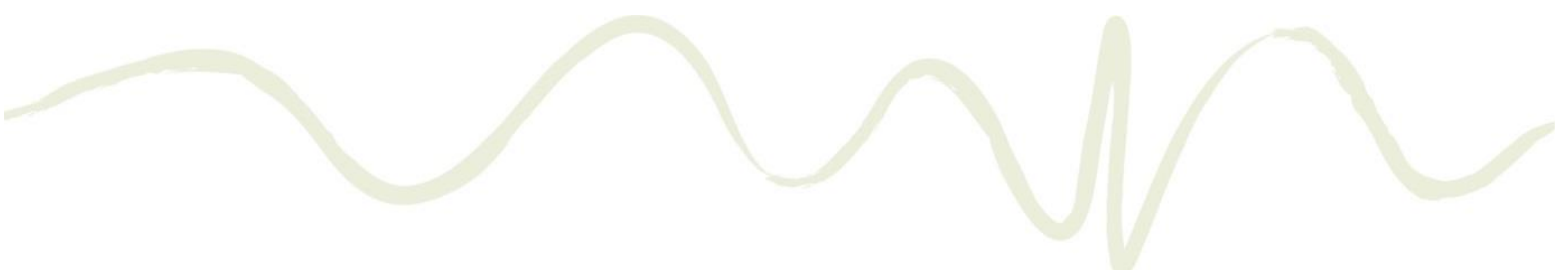
*If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary’s decision, the Proponent must:*

*(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:*

- *consult with the landowner to determine his/her concerns;*
- *conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and*
- *if the project is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and*

*(b) give the Secretary and landowner a copy of the independent review; and*

*(c) comply with any written requests made by the Secretary to implement any findings of the review.*



### Compliance Statement

No neighbours requested an independent assessment of the impacts of the development on their land during the reporting period.

#### **2.5.3 Schedule 4 - Condition 3 (Baseline Dilapidation Reports)**

##### Condition

*Prior to 30 June 2010, the Proponent must advise all owners of privately-owned land within 2 kilometres of proposed blasting activities, and any other landowner nominated by the Secretary, that they are entitled to a property inspection to establish the baseline condition of the property.*

##### Compliance Statement

All notifications and associated inspections required by this condition were completed prior to this reporting period.

#### **2.5.4 Schedule 4 – Condition 4 (Property Inspections)**

##### Condition

*If the Proponent receives a written request for a property inspection from any such landowner, the Proponent must:*

*(a) commission a suitably qualified person, whose appointment has been approved by Secretary, to inspect and report on the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and*

*(b) give the landowner a copy of this property inspection report.*

*Note: It is preferable for the property inspection to be carried out prior to the commencement of blasting activities on the site, and the Proponent should facilitate this occurring wherever possible.*

##### Compliance Statement

No landholder requested an independent property inspection during the reporting period.

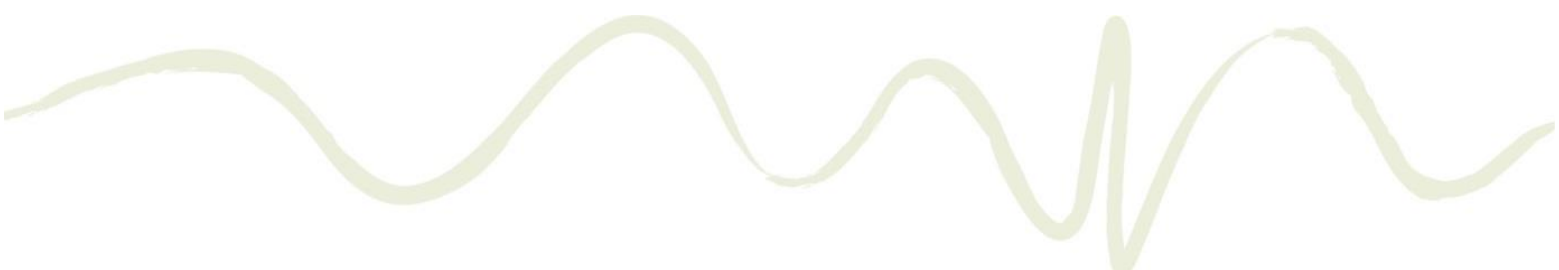
#### **2.5.5 Schedule 4 - Condition 5 (Property Investigations)**

##### Condition

*If any owner of privately-owned land within 2 kilometres of proposed blasting activities, or any other landowner nominated by the Secretary, claims that his/her property, including vibration-sensitive infrastructure such as water supply or underground irrigation mains, has been damaged as a result of blasting at the project, the Proponent shall within 3 months of receiving this request:*

*(a) commission a suitably qualified person whose appointment has been approved by the Secretary to investigate the claim and prepare a property investigation report; and*

*(b) give the landowner a copy of the report.*



*If this independent investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damage to the satisfaction of the Secretary.*

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

#### Compliance Statement

No landholder requested an independent property investigation during the reporting period.

## **2.6 Schedule 5 – Environmental Management, Reporting & Auditing**

### **2.6.1 Schedule 5 - Condition 1 (Environmental Management Strategy)**

#### Condition

*The Proponent must prepare an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:*

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

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

#### Compliance Statement

The Environmental Management Strategy for the quarry was updated and endorsed by DPIE in 2018. A copy of the updated plan (Rev 3.1) is available on the LCC Website.

## 2.6.2 Schedule 5 - Condition 2 (Consultation with Agencies)

### Condition

*Where consultation with any State or local agency is required by the conditions of this approval, the Proponent must:*

- (a) consult with the relevant agency prior to submitting the required document to the Secretary for approval;*
- (b) submit evidence of this consultation as part of the relevant document;*
- (c) describe how matters raised by the agency have been addressed and any matters not resolved; and*
- (d) include details of any outstanding issues raised by the agency and an explanation of disagreement between any agency and the Proponent.*

### Compliance Statement

No documents (or updates to documents) requiring consultation with State or local agencies were prepared or submitted during the reporting period. Numerous management plans were updated and submitted to the DPIE during 2018 and 2019.

## 2.6.3 Schedule 5 - Condition 3 (Preparation of Management Plans)

### Condition

*The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:*

- (a) detailed baseline data;*
- (b) a description of:*
  - *the relevant statutory requirements (including any relevant approval, licence or lease conditions);*
  - *any relevant limits or performance measures/criteria; and*
  - *the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;*
- (c) a description of the measures that to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;*
- (d) a program to monitor and report on the:*
  - *impacts and environmental performance of the project; and*
  - *effectiveness of any management measures (see (c) above);*
- (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;*
- (f) a program to investigate and implement ways to improve the environmental performance of the project over time;*

(g) a protocol for managing and reporting any:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria; and

(h) a protocol for periodic review of the plan.

*Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

#### Compliance Statement

No management plans (or updates to management plans) required by the approval were prepared during the reporting period.

#### **2.6.4 Schedule 5 - Condition 4 (Application of Management Plans)**

##### Condition

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

##### Compliance Statement

LCC has confirmed that the most recently approved versions of management plans, strategies and monitoring programs are being applied.

#### **2.6.5 Schedule 5 - Condition 4 (Review of Strategies and Plans)**

*Note: There appears to be an error in condition numbering within the Notice of Determination*

##### Condition

*Within 3 months of the submission of an:*

- (a) incident report under condition 9 below;
- (b) Annual Review under condition 11 below;
- (c) audit report under condition 12 below; and
- (d) any modifications to this approval,

*the Proponent must review the strategies, plans and programs required under this approval, to the satisfaction of the Secretary. The proponent must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.*

*Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.*

## Compliance Statement

LCC advises that they have systems and processes in place to:

*"...review any incidents, non-conformities and/or recommendations for improvement against the approval conditions and management plans. Should a report require update or amendment, it is forwarded to the Department for approval. Planned activities are assessed against the approval conditions and EPL to determine if any modification is required."*

### **2.6.6 Schedule 5 - Condition 5 (Update to Strategies and Plans)**

#### Condition

*To ensure that strategies, plans or programs required under this approval are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the project, the Proponent may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Proponent may also submit any strategy, plan or program required by this approval on a staged basis. The Secretary may approve a revised strategy, plan or program required under this approval, or the staged submission of any of these documents, at any time. With the agreement of the Secretary, the Proponent may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this approval. While any strategy, plan or program may be submitted on a staged basis, the proponent will need to ensure that the operations associated with the project are covered by suitable strategies, plans or programs at all times.*

*If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the project to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.*

#### Compliance Statement

Noted. Numerous updates to the management plans and strategies have been submitted to DPIE for endorsement in recent years.

### **2.6.7 Schedule 5 – Condition 6 (Notification of Exceedance)**

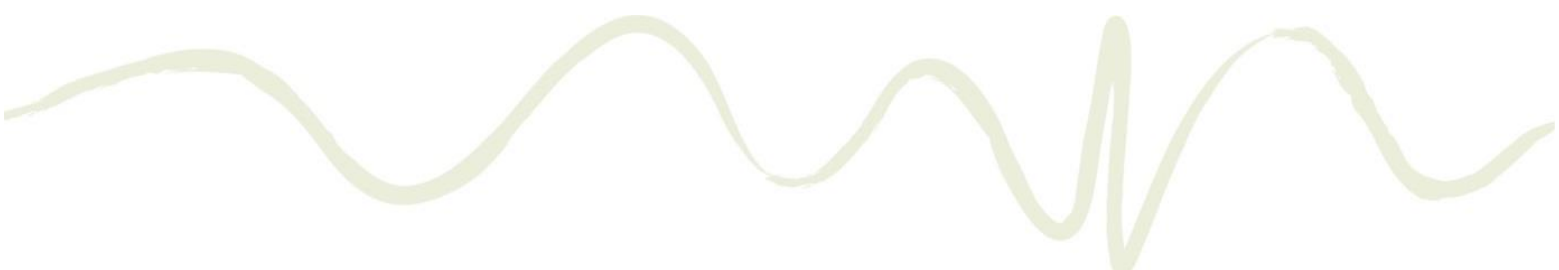
#### Condition

*The Proponent must assess and manage project-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 approval 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 Proponent must as soon as becoming aware of any exceedance:*

*(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);*



*(c) within 14 days of the exceedance occurring, submit a report to the Secretary describing these remediation options and any preferred remediation measures or other course of action; and*

*(d) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.*

#### Compliance Statement

**Deposited dust exceedance (Schedule 3 – Condition 10):** As noted in **Section 2.4.10**, there was one exceedance of the deposited dust criteria at monitoring location D2 for the monitoring period 16 November 2020 to 14 December 2020. An incident report (refer to **Appendix M**) was prepared and submitted within the required timeframe.

### **2.6.8 Schedule 5 - Condition 7 (Community Consultative Committee)**

#### Condition

*The Proponent must establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. The CCC must be operated in general accordance with the Department's Community Consultative Committee Guidelines, November 2016 (or later version).*

#### Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
- *In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council and the local community.*

#### Compliance Statement

As outlined in the 2018 AEMR, the CCC decided to convene annually due to the lack of attendance. In keeping with this, the CCC met on one occasion during the reporting period on 30 October 2020. The minutes of this meeting are provided at **Appendix R** and are also available on the LCC Website.

### **2.6.9 Schedule 5 - Condition 8 (Reporting of Incidents)**

#### Condition

*The Proponent must immediately notify the Secretary (using the contact name, email address and phone number provided by the Department from time to time) and any other relevant agencies of any incident.*

#### Compliance Statement

During the reporting period, there were no incidents defined as a set of circumstances that causes or threatens to cause material harm to the environment.

However, there were two incidents defined as breaches or exceedances of the limits or performance measures/criteria in the approval. A description of these events is provided within the Compliance Statements relative to Schedule 2 Condition 8 in **Section 2.3.8** and Schedule 3 Condition 10 in **Section 2.4.10**

**Table 2.5** summarises the timelines associated with the reporting of the exceedance events.



**Table 2.5 Timeline of reporting of incidents**

<b>Exceedance</b>	<b>Date that LCC became aware of the exceedance</b>	<b>Date first reported to DPIE</b>	<b>Date of follow up reporting to DPIE</b>
<b>Daily Truck Movements (Schedule 2 – Condition 8)</b>			
8 September 2020: 100 truck movement per day limit exceeded by one additional truck	8 September 2020	9 September 2020	16 September 2020
<b>Deposited Dust (Schedule 3 – Condition 10)</b>			
Monitoring Location D2: 16 November 2020 to 14 December 2020	22 December 2020	22 December 2020	23 December 2020

**2.6.10 Schedule 5 - Condition 9 (Reporting of Incidents)**

Condition

*Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested. This report must include the time and date of the incident, details of the incident, measures implemented to prevent re-occurrence and must identify any non-compliance with this approval.*

Compliance Statement

Refer to response to previous item against Schedule 5 Condition 8 in **Section 2.6.9**.

**2.6.11 Schedule 5 - Condition 10 (Information to be Provided Online)**

Condition

*The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.*

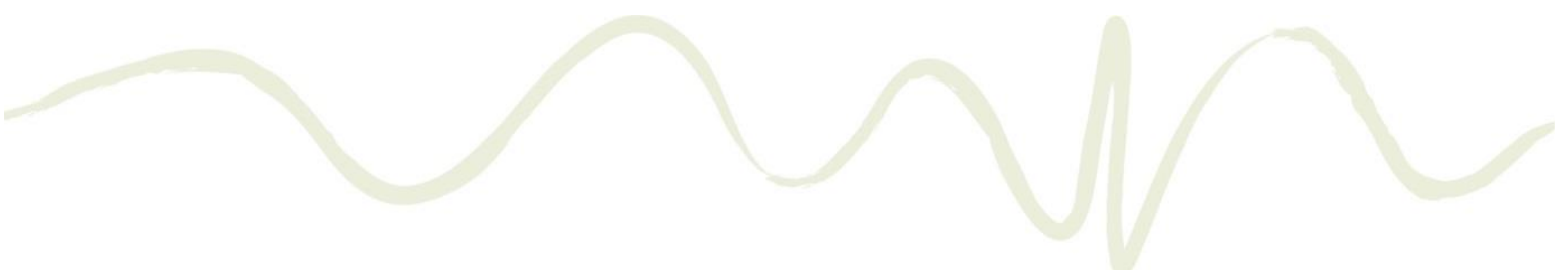
Compliance Statement

The LCC website contains comprehensive information regarding the environmental performance of the project, including the Annual Environmental Monitoring Reports.

**2.6.12 Schedule 5 - Condition 11 (Annual Review)**

Condition

*By the end of March each year, or other timing as may be agreed by the Secretary, the Proponent must submit a review to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must:*



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

*(b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the:*

- *relevant statutory requirements, limits or performance measures/criteria;*
- *requirements of any plan or program required under this approval;*
- *monitoring results of previous years; and*
- *relevant predictions in the documents listed in condition 2(a) of Schedule 2;*

*(c) evaluate and report on:*

- *the effectiveness of the air quality and noise management systems; and*
- *compliance with the performance measures, criteria and operating conditions in this approval.*

*(d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;*

*(e) identify any trends in the monitoring data over the life of the project;*

*(f) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies;*

*(g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.*

*The Proponent must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 7 of Schedule 5) and any interested person upon request.*

#### Compliance Statement

The Annual Review reports are called Annual Environmental Monitoring Reports (AEMR). The 2019 AEMR was submitted to DPIE in March 2020 in accordance with the required timeframe. The AEMR has been structured to provide clear reporting against each condition within the approval. **Section 3.1** of this current AEMR provides a summary of non-compliances which have been identified and provides the actions proposed to resolve these issues.

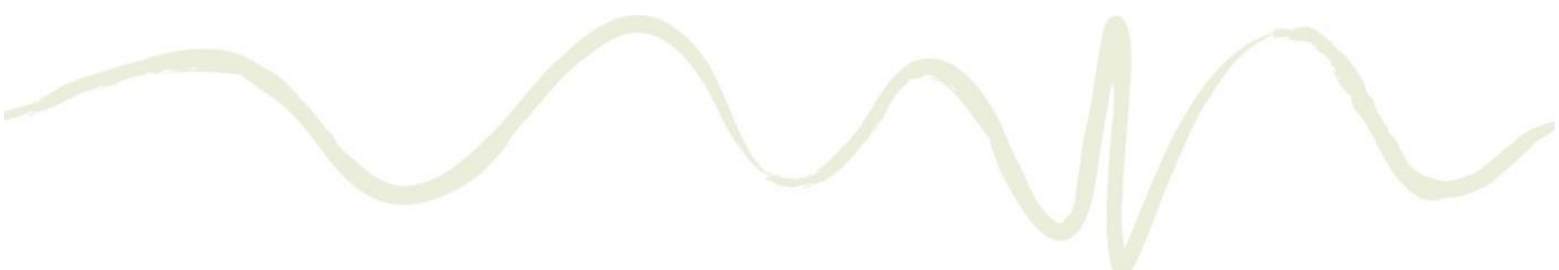
### **2.6.13 Schedule 5 - Condition 12 (3 Year Independent Audit)**

#### Condition

*Within three years of the date of grant of this project approval, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must:*

*(a) be led and 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 and the CCC;*



*(c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or necessary water licences for the project (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 project, 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.*

#### Compliance Statement

The most recent Independent Environmental Audit was undertaken in December 2018 by GeoLINK, with the report submitted to DPIE in early 2019. In accordance with the three-yearly cycle, an Independent Environmental Audit was not required during the reporting period.

#### **2.6.14 Schedule 5 - Condition 13 (Implementation of Audit Recommendations)**

##### Condition

*Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Proponent must implement these recommendations, to the satisfaction of the Secretary.*

##### Compliance Statement

In accordance with the three-yearly cycle, an Independent Environmental Audit was not required during the reporting period.

#### **2.6.15 Schedule 5 - Condition 14 (Information to be Available Online)**

##### Condition

*Within 3 months of the determination of Modification 1, until the completion of all works, including rehabilitation and remediation the Proponent must:*

*(a) make the following information publicly available on its website:*

- *the documents listed in condition 2(a) of Schedule 2;*
- *current statutory approvals for the project;*
- *all approved strategies, plans and programs required under the conditions of this approval;*
- *a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;*
- *a complaints register, updated monthly;*
- *the annual reviews of the project;*
- *any independent environmental audit as described in condition 12 above, and the Proponent's*
- *response to the recommendations in any audit; and*
- *any other matter required by the Secretary; and*

(b) keep this information up-to-date, to the satisfaction of the Secretary.

#### Compliance Statement

**Appendix S** provides a schedule confirming that the information listed above is available on the LCC website.

**Appendix T** provides a copy of the Complaint Register for the reporting period. The register is available on the LCC website and has been updated monthly as required.

## 2.7 Appendix 5 – Noise Compliance Assessment

### 2.7.1 Appendix 5 - Condition 1 (Weather Parameters)

#### Condition

The noise criteria in Table 2 are to apply under all meteorological conditions except the following:

- (a) wind speeds greater than 3 m/s at 10 m above ground level; or
- (b) temperature inversion conditions between 1.5°C and 3°C/100 m and wind speed greater than 2 m/s at 10 m above ground level; or
- (c) temperature inversion conditions greater than 3°C/100 m.

Table 2: Noise criteria dB(A)

Receiver	Day <i>L<sub>Aeq</sub> (15 minute)</i>
Location 2	36
All other locations	35

#### Compliance Statement

Noted.

### 2.7.2 Appendix 5 - Condition 2 (Meteorological Station)

#### Condition

Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station required under Condition 13 of Schedule 3.

#### Compliance Statement

The meteorological station was installed onsite in early 2018. The 2020 Noise Monitoring Report includes reference to the on-site weather data as well as available external meteorological data.

### 2.7.3 Appendix 5 - Condition 3 (Timing of Assessment)

#### Condition

*A noise compliance assessment must be undertaken within two months of commencing mining operations under EA (Mod 1). The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and must assess compliance with the noise criteria in Table 2. A report must be provided to the Secretary and EPA within 1 month of the assessment.*

#### Compliance Statement

Mod 1 was approved in September 2017. The required noise compliance assessment was completed in November 2017 in accordance with this requirement.

### 2.7.4 Appendix 5 - Condition 4 (Methodology of Assessment)

#### Condition

*Unless the Secretary agrees otherwise, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to:*

- (a) monitoring locations for the collection of representative noise data;*
- (b) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment;*
- (c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration; and*
- (d) the use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the INP) and before comparison with the specified noise levels in the approval*

#### Compliance Statement

The 2020 Noise Assessment has been completed in accordance with the NSW Industrial Noise Policy. The Noise monitoring report is provided at **Appendix J**.



## 3. Summary of Findings and Actions

### 3.1 Summary of Non-Compliances

This AEMR has reported on three non-compliances, as summarised below.

#### 3.1.1 Non-compliance 1 – Truck Movements

The relevant condition (Schedule 2 Condition 8) is reproduced in **Section 2.3.8**, and additional details are also provided in the same section.

##### Findings

During the reporting period, there was one occasion where the daily truck movement limit of 100 laden trucks was exceeded. On 8 September 2020, one additional laden truck was dispatched from the quarry. This exceedance occurred because internet disruptions caused data delays to the weighbridge reporting system. Once the Weighbridge Operator became aware of the error, no additional truck movements occurred. The matter was reported by LCC to DPIE as soon as practicable via email on 9 September 2020.

##### Recommendation

LCC investigated the matter and implemented appropriate actions. No further action is recommended.

#### 3.1.2 Non-compliance 2 – Deposited Dust Exceedance

The relevant condition (Schedule 3 Condition 10) is reproduced in **Section 2.4.10**, and additional details are also provided in the same section.

##### Findings

During the reporting period, exceedances of the air quality criteria for deposited dust (ash > 4 g/m<sup>2</sup>/month) occurred on one occasion:

- 16 November 2020 to 14 December 2020:
  - Monitoring location D2, 6.7 g/m<sup>2</sup>/month

The routine monthly dust monitoring results were received from the laboratory on 22 December 2020. LCC immediately notified DPIE and an incident report was prepared and submitted. It is considered likely that the hot and dry weather conditions during the monitoring period contributed to increased dust levels from a range of sources in the local area. Operational activity at the site during the relevant period was minimal and consistent (50% of allowable production limit). There had been no blasting or active extraction undertaken on the site for more than 9 months prior to the relevant period. All loads are covered before they leave the operational area, monitored closely by the Weighbridge Operator.

##### Recommendation

LCC investigated the matter and implemented appropriate actions. No further action is recommended.

### 3.1.3 Non-compliance 3 – Surface Water Monitoring Parameters

The relevant condition (Schedule 3 Condition 19) is reproduced in **Section 2.4.19**, and additional details are also provided in the same section.

#### Findings

During the March and June 2020 surface water monitoring rounds of receiving waterways, some of the required parameters (i.e. turbidity, nutrients, and oil and grease) were not monitored or reported. LCC have advised that an annual internal audit identified the oversight, which was rectified for the subsequent monitoring rounds in September and December 2020.

#### Recommendation

LCC has investigated the matter and implemented appropriate actions. No further action is recommended.

## 3.2 Status of Actions Identified in 2019 AEMR

Section 3.3 of the 2019 AEMR identified actions to improve environmental performance. **Table 3.1** presents the actions and the corresponding current progress status based on information provided in this AEMR and advice from LCC.

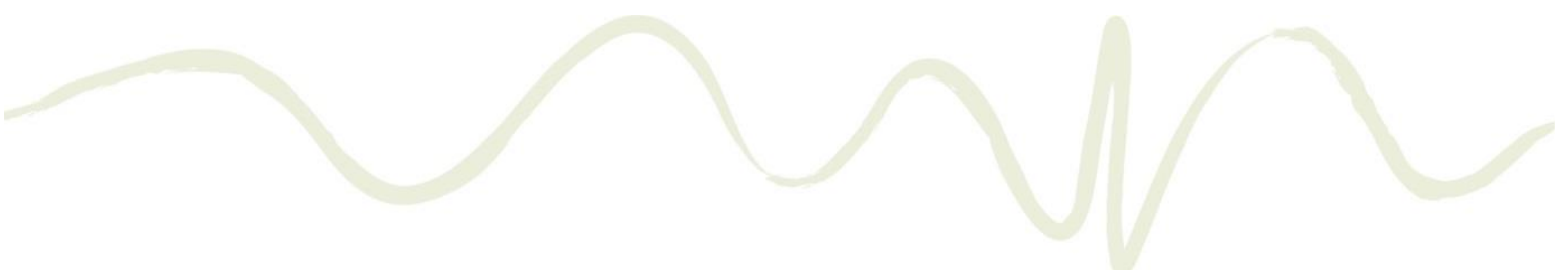
**Table 3.1 Actions planned for 2020 and status**

<b>Action Reference</b>	<b>Action</b>	<b>Current Progress Status</b>
2019 AEMR Section 3.3 Action a)	Continuation of groundwater data collection to establish 12 data points for each monitoring well	Collection of groundwater data is ongoing.
2019 AEMR Section 3.3 Action b)	Working with LCC's Strategic Planners to finalise the Planning Proposal to rezone the environmental offset area to the E2 Environmental Conservation Zone	Rezoning of the biodiversity offset area to E2 Environmental Conservation was gazetted on 18 December 2020, providing long-term security for the asset.
2019 AEMR Section 3.3 Action c)	Continuing to work with DPIE to finalise the current modification request to Part 3A Approval No. 07_0020	Still in progress. Currently with DPIE for final assessment since 20 October 2020.

## 3.3 Proposed Improvement Actions

The following actions have been identified by LCC to improve the environmental performance of the project:

- (a) Continuation of groundwater data collection to establish 12 data points for each monitoring well;

- 
- (b) Continuation of surface water data collection to establish 8 data points for each sampling location;  
and
  - (c) Continuation of work with DPIE to finalise the current modification request to Part 3A Approval No.07\_0020.





## 4. Conclusion

This Annual Environmental Monitoring Report (AEMR) has been prepared in response to Schedule 5 Condition 11 of the Blakebrook Quarry Part 3A Approval No. 07\_0020 (Mod 1). Each condition of approval has been reproduced in full and followed by a compliance statement addressing the findings.

Overall, this AEMR has found a high level of compliance with the conditions of approval.

Three non-compliances were identified:

- Truck movements: There was one occasion where the daily truck movement limit of 100 laden trucks was exceeded. On 8 September 2020, one additional laden truck was dispatched from the quarry.
- Deposited dust exceedance: During the 16 November 2020 to 14 December 2020 monitoring period, exceedance of the air quality criteria for deposited dust (ash > 4 g/m<sup>2</sup>/month) occurred on at monitoring location D2 (6.7 g/m<sup>2</sup>/month).
- Surface Water Monitoring Parameters: During the March and June 2020 surface water monitoring rounds of receiving waterways, some of the required parameters (i.e. turbidity, nutrients, and oil and grease) were not monitored or reported.

Each non-compliance was appropriately reported and investigated. Relevant actions have been implemented and no further action is recommended in this AEMR.

The following actions to improve the overall environmental performance of the project are ongoing:

- Continuation of groundwater data collection to establish 12 data points for each monitoring well;
- Continuation of surface water data collection to establish 8 data points for each sampling location; and
- Continuation of work with DPIE to finalise the current modification request to Part 3A Approval No.07\_0020.



## References

Environmental Resources Management Australia (ERM), (2018a). *Blakebrook Quarry Air Quality Management Plan (Rev 3.1)*. August 2018 for Lismore City Council.

ERM, (2018b). *Blakebrook Quarry Noise & Blast Management Plan (Rev 3.1)*. August 2018 for Lismore City Council.

ERM, (2019). *Blakebrook Quarry Biodiversity & Rehabilitation Management Plan (Rev 4.1)*. March 2019 for Lismore City Council.

Gilbert & Sutherland, (2019). *Soil & Water Management Plan (Rev 4)*. February 2019 for Lismore City Council.



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## Appendix A

### Part 3A Approval No.07\_0020 (Mod 1)

# Notice of Modification

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

As delegate of the Minister for Planning, I modify the project approval referred to in Schedule 1, as set out in Schedule 2.

*Howard Reed*

Howard Reed  
Director Resource Assessments

Sydney

*18th September* 2017

### SCHEDULE 1

The Project Approval (MP 07\_0020) for the Blakebrook Quarry Project granted by the delegate for the Minister for Planning on 24 November 2009

### SCHEDULE 2

1. Delete all words after Schedule 1 and replace with:

#### TABLE OF CONTENTS

<b>DEFINITIONS</b> .....	<b>3</b>
<b>ADMINISTRATIVE CONDITIONS</b> .....	<b>4</b>
Obligation to Minimise Harm to the Environment .....	4
Terms of Consent.....	4
Limits on Approval.....	4
Structural Adequacy.....	4
Demolition .....	4
Protection of Public Infrastructure .....	5
Operation of Plant and Equipment .....	5
Section 94 Contributions .....	5
Production Data .....	5
Compliance .....	5
Identification of Boundaries .....	5
<b>SPECIFIC ENVIRONMENTAL CONDITIONS</b> .....	<b>6</b>
Noise .....	6
Blasting .....	7
Air Quality.....	8
Soil and Water.....	9
Transport.....	10
Aboriginal Heritage.....	11
Biodiversity and Rehabilitation .....	11
Visual .....	13
Waste.....	13
Liquid Storage.....	13
Dangerous Goods .....	14
Bushfire.....	14
<b>ADDITIONAL PROCEDURES</b> .....	<b>15</b>
Notification of Landowners .....	15
Independent Review .....	15

Property Inspections.....	15
Property Investigations .....	15
<b>ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING .....</b>	<b>16</b>
Environmental Management.....	16
Community Consultative Committee .....	17
Reporting.....	18
Independent Environmental Audit.....	18
Access to Information .....	19
<b>APPENDIX 1: PROJECT LAYOUT PLAN .....</b>	<b>20</b>
<b>APPENDIX 2: STATEMENT OF COMMITMENTS .....</b>	<b>21</b>
<b>APPENDIX 3: RECEIVER LOCATION PLAN.....</b>	<b>35</b>
<b>APPENDIX 4: BIODIVERSITY OFFSET STRATEGY .....</b>	<b>36</b>
<b>APPENDIX 5: NOISE COMPLIANCE ASSESSMENT .....</b>	<b>37</b>

## DEFINITIONS

Aboriginal item or object	Any item or object that provides evidence of the use of an area by Aboriginal people, as defined under the <i>National Parks and Wildlife Act 1974</i>
Annual Review	The review required by condition 11 of Schedule 5.
AHD	Australian Height Datum
BCA	Building Code of Australia
Biodiversity Offset Strategy	The conservation and enhancement program as described in the EA (see also Table 5 and Appendix 4).
CCC	Community Consultative Committee
Council	Lismore City Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
OEH	Office of Environment and Heritage
Department	Department of Planning and Environment
DPI Water	Department of Primary Industries - Water
DRG	Division of Resources and Geoscience of the Department
EA	Environmental Assessment titled <i>Blakebrook Quarry Expansion, Environmental Assessment Report, Final Report</i> , January 2009, and the Proponent's response to submissions titled <i>Blakebrook Quarry Expansion, Response to Submissions, Final Report</i> , August 2009
EA (Mod 1)	Environmental Assessment titled <i>Blakebrook Quarry Modification Application August 2017</i>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build
Incident	A set of circumstances that: <ul style="list-style-type: none"> <li>• causes or threatens to cause material harm to the environment; and/or</li> <li>• breaches or exceeds the limits or performance measures/criteria in this approval</li> </ul>
INP	<i>NSW Industrial Noise Policy</i> (NSW EPA, 2000)
Laden	Trucks transporting quarry products from the site and/or trucks transporting topsoil or mulch to the site
Land	As defined in the EP&A Act, except where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this approval, where it is defined as the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the project
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Proponent (or its subsidiary)
Project	The project as described in the documents listed in condition 2(a) of Schedule 2
Proponent	Lismore City Council, or its successors in title
Quarrying operations	The extraction, processing, stockpiling and transportation of extractive materials carried out on the site and the associated removal of vegetation, topsoil and overburden
Quarry products	Includes all saleable quarry products, but excludes tailings, other wastes and rehabilitation material
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.
RMS	Roads and Maritime Services
SEPP 44	<i>State Environmental Planning Policy No. 44 – Koala Habitat Protection</i>
Secretary	Secretary of the Department, or nominee
Site	The land referred to in Schedule 1

## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.

### TERMS OF APPROVAL

2. The Proponent must carry out the project:
  - (a) generally in accordance with the EA and EA (Mod 1); and
  - (b) in accordance with the conditions of this approval, Project Layout Plan and the Statement of Commitments.

*Notes:*

- *The Project Layout Plan is shown in Appendix 1;*
- *The Statement of Commitments is reproduced in Appendix 2.*

3. If there is any inconsistency between the documents in condition 2(a), the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent must comply with any written 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 approval (including any stages of these documents);
  - (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this approval;
  - (c) and the implementation of any actions or measures contained in these documents.
5. By 30 June 2010, the Proponent shall surrender development consent DA 95/239 to the relevant consent authority to the satisfaction of the Secretary.

### LIMITS ON APPROVAL

6. The Proponent may carry out quarrying operations on the site until 31 December 2039.

*Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional requirements and undertakings to the satisfaction of the Secretary. Consequently, this approval will continue to apply in all respects other than the right to conduct quarrying operations until the rehabilitation of the site and those requirements and undertakings have been carried out to the standard required by the applicable conditions.*

7. The Proponent must not undertake quarrying operations below 55 m AHD in the northern pit or 105 m AHD in the southern pit.

*Note: Drainage sumps may be constructed below this level with the agreement of the Secretary.*

8. The Proponent must not:
  - (a) transport more than 600,000 tonnes of quarry materials from the site per calendar year; or
  - (b) dispatch more than 100 laden trucks from the site on any calendar day.

*Note: Dispatch of laden trucks is also controlled under condition 1 of Schedule 3.*

### STRUCTURAL ADEQUACY

9. The Proponent 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.

*Notes:*

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

### DEMOLITION

10. The Proponent 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.



## **PROTECTION OF PUBLIC INFRASTRUCTURE**

11. Unless the Proponent and the applicable authority agree otherwise the Proponent must:
  - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
  - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

*Note: This condition does not apply to damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition 13 of Schedule 2.*

## **OPERATION OF PLANT AND EQUIPMENT**

12. The Proponent must ensure that all the plant and equipment used at the site, or to monitor the performance of the project is:
  - (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

## **SECTION 94 CONTRIBUTIONS**

13. The Proponent must pay Council an annual financial contribution toward the maintenance of local roads used for haulage of quarry products. The contribution must be determined in accordance with the *Lismore City Council Section 94 Contribution Plan, 2004*, or any subsequent relevant contributions plan adopted by Council.

## **PRODUCTION DATA**

14. The Proponent must:
  - (a) from the commencement of quarrying operations provide calendar year annual quarry production data to DRG using the standard form for that purpose; and
  - (b) include a copy of this data in the Annual Review.

## **COMPLIANCE**

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

## **IDENTIFICATION OF BOUNDARIES**

16. The Proponent must ensure that the boundaries of the approved limits of extraction are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

**SCHEDULE 3  
SPECIFIC ENVIRONMENTAL CONDITIONS**

**NOISE**

**Hours of Operation**

1. The Proponent must comply with the operating hours set out in Table 1.

*Table 1: Operating hours*

<b>Activity</b>	<b>Permissible Hours</b>
Quarrying operations including loading and dispatch of laden trucks	7 am to 6 pm Monday to Friday
	7 am to 3 pm Saturday
	At no time on Sundays or public holidays
Blasting	10 am to 3 pm Monday to Friday (except public holidays)
	At no time on Sundays or public holidays
Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence

2. The following activities may be carried out outside the hours specified in condition 1 above:
  - (a) delivery or dispatch of materials as requested by Police or other public authorities; and
  - (b) emergency work to avoid the loss of lives, property or to prevent environmental harm.

In such circumstances, the Proponent must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.

3. The Proponent must ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land.

*Table 2: Noise criteria dB(A)*

<b>Receiver</b>	<b>Day</b> <i>L<sub>Aeq</sub> (15 minute)</i>
Location 2	36
All other locations	35

Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the *NSW Industrial Noise Policy*. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, the noise criteria in Table 2 do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

**Operating Conditions**

4. The Proponent must:
  - (a) implement best practice management to minimise the construction, operational and road transportation noise of the project;
  - (b) minimise the noise impacts of the project during meteorological conditions when the noise criteria in this approval do not apply (see Appendix 5);
  - (c) carry out noise monitoring (at least every 3 months or as otherwise agreed with the Secretary) to determine whether the project is complying with the relevant conditions of this approval; and
  - (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Secretary.

*Note: Required frequency of noise monitoring may be reduced if approved by the Secretary.*

**Noise Management Plan**

5. The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be prepared in consultation with the EPA;

- (b) be submitted to the Secretary within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
- (c) describe the measures to be implemented to ensure:
  - compliance with the noise criteria and operating conditions of this approval;
  - best practice management is being employed; and
  - the noise impacts of the project are minimised during meteorological conditions under which the noise criteria in this approval do not apply (see Appendix 5);
- (d) describe the proposed noise management system; and
- (e) include a monitoring program to be implemented to measure noise from the project against the noise criteria in Table 2.

The Proponent must implement the Noise Management Plan as approved from time to time by the Secretary.

## BLASTING

### Blasting Impact Assessment Criteria

- 6. The Proponent must ensure that blasting on site does not cause any exceedance of the criteria in Table 3.

Table 3: 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

However, these criteria do not apply if the Proponent has a written agreement with the relevant owner to exceed the limits in Table 3, and the Proponent has advised the Department in writing of the terms of this agreement.

### Blasting Frequency

- 7. The Proponent may carry out a maximum of 2 blasts per month, unless an additional blast is required following a blast misfire. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site.

*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.*

### Operating Conditions

- 8. During blasting operations, the Proponent must:
  - (a) implement best practice management to:
    - protect the safety of people and livestock;
    - protect public or private infrastructure and property from damage; and
    - minimise the dust and fume emissions;
  - (b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and
  - (c) carry out regular monitoring to determine whether the project is complying with the relevant conditions of this approval, to the satisfaction of the Secretary.

### Blast Management Plan

- 9. The Proponent must prepare a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:
  - (a) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
  - (b) describe the measures to be implemented to ensure compliance with the blast criteria and operating conditions of this approval;
  - (c) include measures to manage flyrock to ensure the safety of people and livestock and to protect property;
  - (d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this approval;
  - (e) include local community notification procedures for the blasting schedule, in particular to nearby residences; and

- (f) include a protocol for investigating and responding to complaints related to blasting operations.

The Proponent must implement the Blast Management Plan as approved from time to time by the Secretary.

## AIR QUALITY

### Air Quality Impact Assessment Criteria

10. The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.

Table 4: Air quality criteria

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

Notes to Table 4:

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

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

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

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

e "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 11, 12 and 13 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.

### Operating Conditions

11. The Proponent must:
- implement best practice management to minimise the dust emissions of the project;
  - regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this approval;
  - minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 4);
  - monitor and report on compliance with the relevant air quality conditions in this approval; and
  - minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.

### Air Quality Management Plan

12. The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:
- be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
  - describe the measures to be implemented to ensure:
    - compliance with the air quality criteria and operating conditions of this approval;
    - best practice management is being employed; and
    - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events;
  - describe the proposed air quality management system;
  - include an air quality monitoring program that:
    - is capable of evaluating the performance of the project;
    - includes a protocol for determining any exceedances of the relevant conditions of approval; and
    - effectively supports the air quality management system.

The Proponent must implement the approved Air Quality Management Plan as approved from time to time by the Secretary.

### **Meteorological Monitoring**

13. For the life of the project, the Proponent 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 and Analysis of Air Pollutants in New South Wales* guideline.

### **Greenhouse Gas Emissions**

14. The Proponent must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.

### **SOIL AND WATER**

#### **Water Supply**

15. The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations under the approval to match its available water supply, to the satisfaction of the Secretary.

#### **Water Discharges**

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

#### **Groundwater Assessment**

17. The Proponent must undertake a detailed groundwater assessment to the satisfaction of the Secretary. This assessment must be:
- (a) prepared by a suitably qualified expert in consultation with DPI Water;
  - (b) submitted to the Secretary for approval by 30 December 2018;
  - (c) approved by the Secretary before any extraction below 105 m AHD in the northern pit or below 118.5 m AHD in the southern pit;
  - (d) adequately assess groundwater resources affected by the northern and southern pits, to the proposed full extraction depths of those pits;
  - (e) adequately assess all groundwater impacts associated with proposed extraction;
  - (f) provide data for predicted groundwater pit inflows during and following extraction; and
  - (g) propose management measures to address pit inflows and impacts to groundwater resources.

The Proponent must implement the management measures proposed in the groundwater assessment to the satisfaction of the Secretary.

#### **Soil and Water Management**

18. If groundwater is encountered during quarrying operations in the South Pit under EA (Mod 1), the Proponent must cease quarrying operations until authorised to recommence by the Secretary.
19. The Proponent must prepare a Soil and Water Management Plan for the project 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 DPI Water;
  - (c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary; and
  - (d) include a:
    - (i) Site Water Balance that includes:
      - details of:
        - sources and security of water supply;
        - water use and management on site;
        - any off-site water transfers; and
        - reporting procedures; and
      - measures to be implemented to minimise clean water use on site;
    - (ii) Surface Water Management Plan, that includes:
      - a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the project;
      - a detailed description of the surface water management system on site including the:
        - clean water diversion system;
        - erosion and sediment controls;
        - dirty water management system; and

- water storages; and
- a program to monitor and report on:
  - any surface water discharges;
  - the effectiveness of the water management system,
  - the quality of water discharged from the site to the environment;
  - surface water flows and quality in local watercourses;
- (iii) Groundwater Management Plan that includes:
  - a provision that requires the Proponent to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the quarry from the quarry face or floor; and
  - a monitoring program to manage potential impacts, if any, on any alluvium and associated surface water source near the proposed extraction area that includes:
    - identification of a methodology for determining threshold water level criteria;
    - contingency measures in the event of a breach of thresholds; and
    - a program to regularly report on monitoring.

The Proponent must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.

## **TRANSPORT**

### **Monitoring of Product Transport**

20. The Proponent must keep accurate records of all laden truck movements to and from the site (including time of arrival and dispatch) and publish a summary of records on its website every 6 months.

### **Road Upgrades**

21. The Proponent must undertake the following road upgrade works generally in accordance with the recommendations in the EA, and to the satisfaction of the RMS:
- (a) upgrade the intersection of the Quarry Access and Nimbin Road to a 'Type AUR Intersection Treatment', prior to 31 December 2010;
  - (b) upgrade the guard rails on the approaches to Booerie Creek Bridge prior to 31 December 2010;
  - (c) upgrade the Booerie Creek Road and Nimbin Road intersection to a 'Type BAR Right Turn Treatment on the Through Road' prior to 31 December 2010;
  - (d) upgrade the Wilson Street and Nimbin Road intersection to a 'Type CHR Right Turn Bay Treatment' prior to 31 December 2010; and
  - (e) re-align Nimbin Road and the Quarry Access intersection to meet the AUSTRROADS sight distance requirements for vehicles travelling in both directions through the intersection prior to 31 December 2011.

*Note: The road works must be constructed in accordance with the relevant RMS or AUSTRROADS standards, and signposted and lit in accordance with AS:1742 – Manual of Uniform Traffic Control Devices and AS/NZ 1158:2005 – Lighting for Roads and Public Spaces.*

### **Operating Conditions**

22. The Proponent must:
- (a) restrict truck movements from the quarry to an average of 50 laden trucks a day until all road upgrades works required by condition 20 of Schedule 3, are met or unless otherwise approved by the Secretary;
  - (b) ensure that all laden trucks entering or exiting the site have their loads covered, with the exception of loads consisting solely of boulders greater than one tonne in weight;
  - (c) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site; and
  - (d) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the project so they can be easily identified by road users.

### **Traffic Management Plan**

23. The Proponent must prepare a Traffic Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the RMS and Council;
  - (b) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
  - (c) describe the processes in place for the control of truck movements entering and exiting the site;
  - (d) 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;

- (e) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and
- (f) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry.

The Proponent must implement the approved Traffic Management Plan as approved from time to time by the Secretary.

## ABORIGINAL HERITAGE

### Aboriginal Heritage Management Plan

24. The Proponent must prepare an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. The plan must:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;
  - (b) be prepared in consultation with OEH and the Registered Aboriginal Parties;
  - (c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary; and
  - (d) include a description of the measures that would be implemented to:
    - protect, monitor and manage known sites of archaeological significance;
    - manage any new Aboriginal objects or relics that are discovered;
    - store Aboriginal heritage items salvaged on site; and
    - ensure ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.

The Proponent must implement the approved Aboriginal Heritage Management Plan as approved from time to time by the Secretary.

25. If any item or object of Aboriginal heritage significance is identified on site, the Proponent must ensure that:
- (a) all work in the immediate vicinity of the suspected Aboriginal item or object ceases immediately;
  - (b) a 10 m buffer area around the suspected item or object is cordoned off; and
  - (c) the OEH is contacted immediately.

Work in the immediate 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*.

## BIODIVERSITY AND REHABILITATION

### Biodiversity Offset Strategy

5. The Proponent must:
- (a) implement the Biodiversity Offset Strategy (see Table 5);
  - (b) ensure that adequate resources are dedicated towards the implementation of this strategy;
  - (c) provide appropriate long term security for the offset area; and
  - (d) provide a timetable for the implementation of the offset strategy prior to 30 June 2010, or as otherwise agreed by the Secretary,
- to the satisfaction of the Secretary.

Table 5: Biodiversity Offset Strategy

Offset Areas	Minimum Size
On-site offset (Protection Zone in Appendix 4)	17.6 hectares
Off-site offset (within Lismore local government area, and not already within a conservation area)	45 hectares
Total	62.6 hectares

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

### Rehabilitation Objectives

26. The Proponent must rehabilitate the site 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.

Table 6: Rehabilitation Objectives

<b>Feature</b>	<b>Objective</b>
<i>All areas of the site affected by the project</i>	<ul style="list-style-type: none"> <li>• Safe</li> <li>• Hydraulically and geotechnically stable</li> <li>• Non-polluting</li> <li>• Fit for the intended post-mining land use(s)</li> <li>• Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>
<i>Surface Infrastructure</i>	<ul style="list-style-type: none"> <li>• Decommissioned and removed, unless otherwise agreed by the Secretary</li> </ul>
<i>Quarry benches and pit floor</i>	<ul style="list-style-type: none"> <li>• Landscaped and vegetated using native tree and understorey species</li> </ul>
<i>Final Void</i>	<ul style="list-style-type: none"> <li>• Minimise the size, depth and slope of the batters of the final void</li> <li>• Minimise the drainage catchment of the final void</li> </ul>

### Progressive Rehabilitation

27. The Proponent must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.

*Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance.*

### Biodiversity and Rehabilitation Management Plan

28. The Proponent must prepare a Biodiversity and Rehabilitation Management Plan for the project to the satisfaction of the Secretary. This plan must:
- be prepared by a suitably qualified expert;
  - be prepared in consultation with OEH and Council;
  - be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;
  - provide details of the conceptual final landform and associated land uses for the site;
  - describe how the implementation of the Biodiversity Offset Strategy will be integrated with the overall rehabilitation of the site;
  - include a Koala Management Plan prepared in accordance with SEPP 44;
  - include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and rehabilitation of the site (including progressive rehabilitation), including triggers for any necessary remedial action;
  - describe the short, medium and long term measures to be implemented to:
    - manage remnant vegetation and habitat on site, including within the Biodiversity Offset Strategy area; and
    - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this approval;
  - include a detailed description of the measures described in paragraph (h) to be implemented over the next 3 years (to be updated for each 3 year period following initial approval of the plan) including the procedures to be implemented for:
    - maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation;
    - restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features;
    - protecting vegetation and fauna habitat outside the approved disturbance area on-site, including core Koala habitat;
    - minimising the impacts on native fauna, including undertaking pre-clearance surveys;
    - establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;
    - ensuring minimal environmental consequences for threatened species, populations and habitats;
    - collecting and propagating seed;
    - controlling weeds and feral pests;
    - controlling erosion; and
    - managing bushfire risk;



- (j) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
- (k) identify the potential risks to the successful implementation of the Biodiversity Offset Strategy, and include a description of the contingency measures to be implemented to mitigate these risks; and
- (l) include details of who is responsible for monitoring, reviewing, and implementing the plan.

The Proponent must implement the Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.

### **Biodiversity and Rehabilitation Bond**

29. Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Proponent must lodge a Biodiversity and Rehabilitation Bond with the Department to ensure that the Biodiversity Offset Strategy and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and the relevant conditions of this approval. The sum of the bond must be determined by:
- (a) calculating the full cost of implementing the Biodiversity Offset Strategy;
  - (b) calculating the cost of rehabilitating all disturbed areas of the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and
  - (c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.

*Notes:*

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

30. Within 3 months of each Independent Environmental Audit (see condition 12 of Schedule 5), the Proponent must review, and if necessary revise, the sum of the Biodiversity and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:
- (a) effects of inflation;
  - (b) likely cost of implementing the Biodiversity Offset Strategy and rehabilitating all disturbed areas of the site (taking into account the likely surface disturbance over the next 3 years of the project); and
  - (c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date.

### **VISUAL**

31. The Proponent must implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project to the satisfaction of the Secretary.

### **WASTE**

32. The Proponent 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 project;
  - (c) ensure that the waste generated by the project 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.
33. Except as expressly permitted in an EPL, the Proponent must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.

### **LIQUID STORAGE**

34. The Proponent must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.

## **DANGEROUS GOODS**

35. The Proponent 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*.

## **BUSHFIRE**

36. The Proponent must:
- (a) ensure that the project is suitably equipped to respond to any fires on site; and
  - (b) assist the Rural Fire Service and emergency services to the extent practicable if there is a fire in the vicinity of the site.

## **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 criteria in Schedule 3, the Proponent must notify the affected landowners in writing of the exceedance, and provide regular monitoring results, at least every 3 months, to each affected landowner until the project is again complying with the relevant criteria; and
  - (b) an exceedance of any air quality criteria in Schedule 3, the Proponent 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 project 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 project on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent must:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and
  - if the project is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review; and
- (c) comply with any written requests made by the Secretary to implement any findings of the review.

### **PROPERTY INSPECTIONS**

3. Prior to 30 June 2010, the Proponent must advise all owners of privately-owned land within 2 kilometres of proposed blasting activities, and any other landowner nominated by the Secretary, that they are entitled to a property inspection to establish the baseline condition of the property.
4. If the Proponent receives a written request for a property inspection from any such landowner, the Proponent must:
  - (a) commission a suitably qualified person, whose appointment has been approved by Secretary, to inspect and report on the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and
  - (b) give the landowner a copy of this property inspection report.

*Note: It is preferable for the property inspection to be carried out prior to the commencement of blasting activities on the site, and the Proponent should facilitate this occurring wherever possible.*

### **PROPERTY INVESTIGATIONS**

5. If any owner of privately-owned land within 2 kilometres of proposed blasting activities, or any other landowner nominated by the Secretary, claims that his/her property, including vibration-sensitive infrastructure such as water supply or underground irrigation mains, has been damaged as a result of blasting at the project, the Proponent shall within 3 months of receiving this request:
  - (a) commission a suitably qualified person whose appointment has been approved by the Secretary to investigate the claim and prepare a property investigation report; and
  - (b) give the landowner a copy of the report.

If this independent investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damage to the satisfaction of the Secretary.

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

**SCHEDULE 5  
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

**ENVIRONMENTAL MANAGEMENT**

**Environmental Management Strategy**

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

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

**Evidence of Consultation**

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

**Management Plan Requirements**

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

- (h) a protocol for periodic review of the plan.

*Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*

#### **Application of Existing Management Plans**

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

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

4. Within 3 months of the submission of an:
- (a) incident report under condition 9 below;
  - (b) Annual Review under condition 11 below;
  - (c) audit report under condition 12 below; and
  - (d) any modifications to this approval,
- the Proponent must review the strategies, plans and programs required under this approval, to the satisfaction of the Secretary. The proponent must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.

*Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.*

#### **Updating and Staging of Strategies, Plans or Programs**

5. To ensure that strategies, plans or programs required under this approval are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the project, the Proponent may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Proponent may also submit any strategy, plan or program required by this approval on a staged basis.

The Secretary may approve a revised strategy, plan or program required under this approval, or the staged submission of any of these documents, at any time. With the agreement of the Secretary, the Proponent may prepare the revised or staged strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this approval.

While any strategy, plan or program may be submitted on a staged basis, the proponent will need to ensure that the operations associated with the project are covered by suitable strategies, plans or programs at all times.

If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the project to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.

#### **Adaptive Management**

6. The Proponent must assess and manage project-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 approval 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 Proponent must as soon as becoming aware of any exceedance:

- (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);
  - (c) within 14 days of the exceedance occurring, submit a report to the Secretary describing these remediation options and any preferred remediation measures or other course of action; and
  - (d) implement remediation measures as directed by the Secretary;
- to the satisfaction of the Secretary.

#### **COMMUNITY CONSULTATIVE COMMITTEE**

7. The Proponent must establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. The CCC must be operated in general accordance with the Department's *Community Consultative Committee Guidelines, November 2016* (or later version).

*Notes:*

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
- *In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council and the local community.*

## **REPORTING**

### **Incident Reporting**

8. The Proponent must immediately notify the Secretary (using the contact name, email address and phone number provided by the Department from time to time) and any other relevant agencies of any incident.
9. Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested. This report must include the time and date of the incident, details of the incident, measures implemented to prevent re-occurrence and must identify any non-compliance with this approval.

### **Regular Reporting**

10. The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

### **Annual Review**

11. By the end of March each year, or other timing as may be agreed by the Secretary, the Proponent must submit a review to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must:
  - (a) describe the project (including any progressive rehabilitation) that was carried out in the previous calendar year, and the project that is proposed to be carried out over the current calendar year;
  - (b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the:
    - relevant statutory requirements, limits or performance measures/criteria;
    - requirements of any plan or program required under this approval;
    - monitoring results of previous years; and
    - relevant predictions in the documents listed in condition 2(a) of Schedule 2;
  - (c) evaluate and report on:
    - the effectiveness of the air quality and noise management systems; and
    - compliance with the performance measures, criteria and operating conditions in this approval.
  - (d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;
  - (e) identify any trends in the monitoring data over the life of the project;
  - (f) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies;
  - (g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.

The Proponent must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 7 of Schedule 5) and any interested person upon request.

## **INDEPENDENT ENVIRONMENTAL AUDIT**

12. Within three years of the date of grant of this project approval, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must:
  - (a) be led and 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 and the CCC;
  - (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or necessary water licences for the project (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 project, 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.
13. Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Proponent must implement these recommendations, to the satisfaction of the Secretary.

#### **ACCESS TO INFORMATION**

14. Within 3 months of the determination of Modification 1, until the completion of all works, including rehabilitation and remediation the Proponent must:
- (a) make the following information publicly available on its website:
    - the documents listed in condition 2(a) of Schedule 2;
    - current statutory approvals for the project;
    - all approved strategies, plans and programs required under the conditions of this approval;
    - a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;
    - a complaints register, updated monthly;
    - the annual reviews of the project;
    - any independent environmental audit as described in condition 12 above, and the Proponent's response to the recommendations in any audit; and
    - any other matter required by the Secretary; and
  - (b) keep this information up-to-date, to the satisfaction of the Secretary.

APPENDIX 1  
PROJECT LAYOUT PLAN

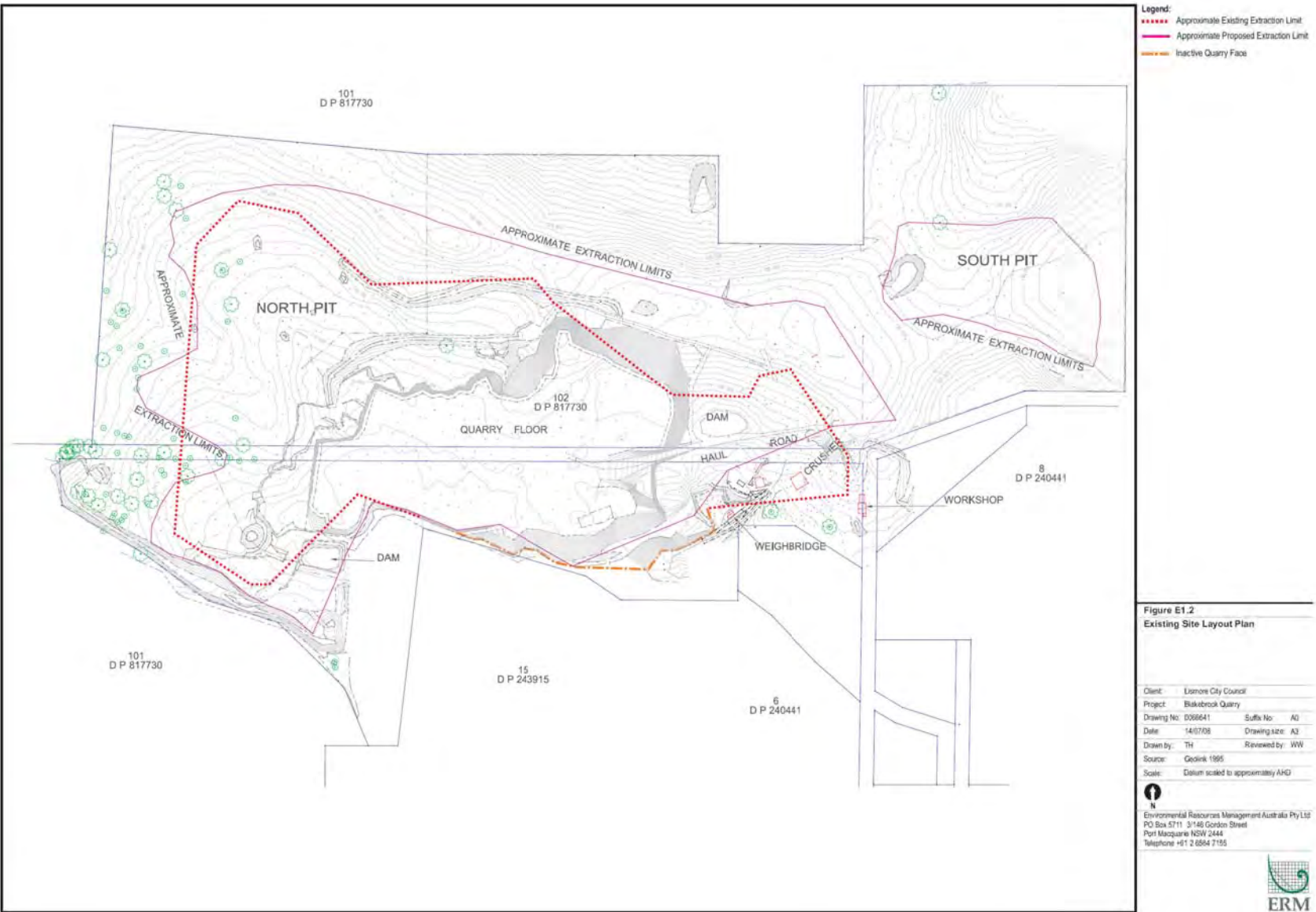


Figure E1.2  
Existing Site Layout Plan

Client:	Lismore City Council
Project:	Blakelock Quarry
Drawing No:	006641
Date:	14/07/08
Drawn by:	TH
Scale:	Geotek 1995
Scale:	Datum scaled to approximately AMG

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**Table 3.1 Statement of Commitments**

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA  
006644/FINAL/17 AUGUST 2009

Item Number	Item	Commitment	Responsibility	Timing
1	Scope of Development			
1.1		<p>The development will be carried out as outlined in the documentation and plans listed below, except where amended by other items of this Statement of Commitments.</p> <ul style="list-style-type: none"> <li>• Environmental Assessment (EA), prepared by ERM, 2009 and supporting reports; and</li> <li>• Quarry Plans (refer <i>Figures 2.3 to 2.5</i> of the EA (ERM, 2009).</li> </ul>	Lismore City Council and/or its successors	Ongoing
2	Roads			
2.1		The proponent shall provide the following roadworks with associated stormwater drainage structures that have been designed and constructed in accordance with Council's Development, Design and Construction Manual (as amended). The proponent shall be responsible for any costs, including maintenance, for a period of six months from the date of approval of completion of the work. Required roadworks include:	Lismore City Council	Prior to the operation of the expanded quarry.
2.1.1		Construction of a type CHR intersection layout at the junction of the quarry access and Nimbin Road in accordance with AUSTROADS Pt 5 "Intersections at Grade" giving particular attention to sight distance. The access road will remain sealed from at least 50m back from Nimbin Road to prevent fouling of the road surface, as per existing conditions.	Lismore City Council	Prior to the operation of the expanded quarry.
2.1.2		Construction of a type CHR intersection layout at the junction of Nimbin Road and Wilson Street in accordance with AUSTROADS Pt 5 "Intersections at Grade".	Lismore City Council	Prior to the operation of the expanded quarry.

Item Number	Item	Commitment	Responsibility	Timing
2.1.3		Construction of a 1m wide gravel shoulder and repair existing pavement of Nimbin Road for a length of 200 metres at a location 2.8 kilometres north of the intersection of Nimbin Road and Wilson Street as recommended within Appendix G, Traffic Impact Study, of the Environmental Assessment.	Lismore City Council	Prior to the operation of the expanded quarry.
2.1.4		Installation of guard rail in accordance with the relevant standard at Booerie Creek Bridge approaches as recommended within Appendix G, Traffic Impact Study, of the Environmental Assessment.	Lismore City Council	Prior to the operation of the expanded quarry.
2.1.5		Works identified in Tables 1 and 2 of Appendix G, Traffic Impact Study, of the Environmental Assessment that have not been individually detailed within conditions of consents.	Lismore City Council	Prior to the operation of the expanded quarry.
2.2		<p><b>Prior to the operation of the expanded quarry</b> the applicant shall obtain a certificate of completion for the above works from Council. Prior to obtaining this certificate a practicing qualified surveyor or engineer shall submit to Council for approval, a "works-as-executed" set of plans, completed asset record forms and construction certification. The certification shall certify that all roads, drainage and civil works required by this development consent and the approved design plans have been completed in accordance with Council's Development and Construction Manual (as amended).</p> <p>The proponent shall provide the following roadworks with associated stormwater drainage structures that have been designed and constructed in accordance with Council's Development, Design and Construction Manual (as amended). The proponent shall be responsible for any costs, including maintenance, for a period of six months from the date of approval of completion of the work. Required roadworks include:</p>		
2.2.1		Construction of a type BAR intersection layout at the junction of Nimbin Road and Booerie Creek Road in accordance with AUSTROADS Pt 5 "Intersections at Grade".	Lismore City Council	Once production rates reach 350,000 tonnes/ annum.

**Prior to exceeding an annual extraction rate of 350,000 tonnes in any one year** the applicant shall obtain a certificate of completion for the above works from Council. Prior to obtaining this certificate a practicing qualified surveyor or engineer shall submit to Council for approval, a "works-as-executed" set of plans, completed asset record forms and construction certification. The certification shall certify that all roads, drainage and civil works required by this development consent and the approved design plans have been completed in accordance with Council's Development and Construction Manual (as amended).

Item Number	Item	Commitment	Responsibility	Timing
2.3		Prior to the operation of the expanded quarry a review of the Road Safety Audit contained within Tables 1 and 2 of Appendix G, Traffic Impact Study, of the Environmental Assessment shall be undertaken. All required works identified within the review that are not individually detailed within conditions of consents shall be completed prior to operation of the expanded quarry.	Lismore City Council	Prior to the operation of the expanded quarry.
2.4		Prior to the operation of the expanded quarry hinged "Truck Entering" warning signage, W5-22 signs, shall be erected at suitable locations, approximately 200 metres either side of the access, upon Nimbin Road advising of the traffic hazard. Signs shall be displayed during hours of haulage operations only.	Lismore City Council	Prior to the operation of the expanded quarry.
2.5		<b>Prior to the commencement of works required by the above conditions</b> the applicant shall obtain approval under section 138 of the Roads Act for the works upon the public road. For this approval full design plans of the proposed engineering works required upon the public road shall be submitted to and approved by Council. Plans shall include details of works required to satisfy condition(s) RD1. Such plans shall be accompanied with the fee, as adopted at the time of the relevant payment as indicated in Councils Fees and Charges.	Lismore City Council	Prior to the commencement of works required by the above conditions.
2.6		<b>Prior to the issue of the section 138 approval for works upon the public road</b> the proponent shall have approved by Council a plan of management for the construction of all civil works outside the real property boundaries of the proposed development. The plan shall table scheduling of works so as to be completed in the shortest possible time with minimal impact on the general community. Such plan shall include a Traffic Control Plan prepared by an RTA accredited person. All works shall comply with the Occupational Health and Safety Act.	Lismore City Council	Prior to the issue of the section 138 approval for works upon the public road.
2.7		The plan of management for the operation of the quarry shall incorporate a code of practice for trucking operations associated with the development. This code shall include a requirement for the use of CB radios for communication with buses and garbage trucks within all haulage vehicles as recommended within Appendix G, Traffic Impact Study, of the Environmental Assessment.	Lismore City Council	Prior to the issue of the section 138 approval for works upon the public road.

Item Number	Item	Commitment	Responsibility	Timing
2.8		The development shall provide adequate on site parking for all vehicles, plant and equipment associated with the development.	Lismore City Council	Prior to the operation of the expanded quarry.
2.9		The proposed access shall be sealed for the first 50 metre length from Nimbin Road. Driveways, access aisles and parking areas shall be provided with a suitable pavement, constructed and maintained in accordance with Council's Development, Design and Construction Manual (as amended).	Lismore City Council	Prior to the operation of the expanded quarry.
2.10		All loading and unloading shall take place within the property boundaries, as will the parking of construction and private vehicles associated with the development.	Lismore City Council	Ongoing.
2.11		Vehicles using any off street loading/unloading and/or parking area must enter and leave in a forward direction in accordance with Councils Development Control Plan No.1, Part A, Chapter 7 - Off Street Parking Requirements. All driveways and turning areas shall be kept clear of obstructions that prevent compliance with this condition.	Lismore City Council	Ongoing.
2.12		The proponent shall provide Council, on or before January 31, April 30, July 31 and October 31 in each year, with extraction figures detailing quantities of all material removed from the site for the previous quarter of operations.	Lismore City Council	Ongoing.
2.13		Annual payment of contributions levied under Section 94 of the Environmental Planning and Assessment Act and Lismore City Council S94 Contributions Plan 2004 (as amended) are required. Such levies shall contribute towards the provision of public services and/or amenities identified. Such levies shall be calculated utilising extraction returns as required by the above condition. The rates and amounts applying at the date of this notice for the approved extraction rate of 600,000 tonnes, totalling \$560,628 annually, have been calculated as set out below for your information.  Levies set out below shall be increased in accordance with the percentage increase as notified by the Consumer Price Index (Sydney) annually. Levies shall be paid within 30 days of the Council issuing an assessment for the preceding year.	Lismore City Council	Ongoing

Item Number	Item	Commitment	Responsibility	Timing
		<p>The contributions set out in the schedule are exclusive of any GST (if any) and where the provision of any services or the construction of any infrastructure or any other thing with those contributions occurs, then in addition to the amount specified above the Applicant will pay to the Council the GST (as defined below) which is payable by the Council in respect of the provision of such services or the construction of any infrastructure or any other thing.</p> <p>GST means any tax levy charge or impost under the authority of any GST law (as defined by the GST Act) and includes GST within the meaning of the GST Act.</p> <p>The GST Act means A New Tax System (Goods and Services Tax) Act 1999 or any amending or succeeding legislation.</p> <p>The levy shall be calculated in accordance with Councils adopted section 94 plan as at this date and be based on the following information:</p> <ul style="list-style-type: none"> <li>Road construction cost of \$369,000 per kilometre indexed for CPI annually from December 2003)</li> <li>Average haulage distance of 15 kilometres</li> <li>For use in calculations a conversion factor of 1.7 from m<sup>3</sup> to tonnes has been adopted</li> <li>The first 5,000m<sup>3</sup> (8,500 tonnes) per annum shall be exempt from levies.</li> </ul> <p>Levy calculation for yearly extraction will be:</p> $(\$369,000/6.74 \times 10^6) \times 15\text{km} \times (\text{Annual tonnage extracted} - 8,500) \times 1.025 \times \text{CPI}$ $= (369,000/6.74 \times 10^6) \times 15\text{km} \times (600,000 - 8,500) \times 1.025 \times 1.126$ $= \$560,628$		

Item Number	Item	Commitment	Responsibility	Timing
2.14	A Traffic Noise Management Strategy (TNMS) be developed by the proponent to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following:	Lismore City Council	Lismore City Council	Prior to the operation of the expanded quarry.
2.14.1	Driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers;			
2.14.2	Best noise practice in the selection and maintenance of vehicle fleets;			
2.14.3	Movement scheduling where practicable to reduce impacts during sensitive times of the day;			
2.14.4	Communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provision of the TNMS are implemented;			
2.14.5	A system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS;			
2.14.6	Specific procedures to minimise impacts to identified sensitive receivers;			
2.14.7	Clauses in conditions of employment, or in contracts, of drivers that require adherence to noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.			
3	<b>Ecological Considerations</b>			
3.1	The vegetation on the site will be cleared and managed in accordance with the Vegetation and Habitat Management Plan provided as Appendix 4 to the <i>Ecological Site Assessment</i> (Conacher Environmental Group, 2008) (refer to <i>Appendix F</i> ), including the following: <ul style="list-style-type: none"> <li>• Revegetation in <i>Management Area A</i>;</li> <li>• Regeneration in <i>Management Area B</i>;</li> <li>• Protected Habitat in <i>Management Area C</i>; and</li> </ul>		Lismore City Council	Ongoing.

Item Number	Item	Commitment	Responsibility	Timing
3.2	Vegetation removal in <i>Management Area D</i> . The Koala Plan of Management prepared by Conacher Travers (2006) (refer to <i>Appendix F</i> ) will be implemented including:	<ul style="list-style-type: none"> <li>• Habitat protection works;</li> <li>• Habitat restoration works;</li> <li>• Traffic management controls;</li> <li>• Dog/ Feral Animal Management measures; and</li> <li>• Bushfire Management.</li> </ul>	Lismore City Council	Ongoing.
3.3		Lismore City Council will provide at least 45 hectares of mature, vegetated land to be retained to offset the 10.2 hectares to be lost as a result of the proposed development. The offset will be provided at a rate of approximately 4:1. The 45 hectares will be the same vegetation type as that to be removed (Tall Open Forest) or a type of higher ecological significance (such as Lowland Rainforest EEC or Koala Habitat) and may be located at a single site or numerous sites that Council own in the LGA, which are suitable to be set aside for ecological preservation. Lismore City Council will undertake ecological assessments of any land proposed to be identified as a vegetation offset site and develop an offset strategy for submission to the DoP and DECC for approval, taking into consideration DECC's document <i>Principles for the Use of Biodiversity Offsets in NSW</i> .	Lismore City Council	Prior to the removal of the existing vegetation.
4	<b>Aboriginal Heritage</b>			
4.1		The provision of nest and roost boxes will only be a short term measure, that is, provided as a measure for the protection and conservation of fauna during felling of hollow-bearing trees.		
		All site employees/contractors will undergo site induction training that includes stop work procedures if archaeological sites are discovered.	Lismore City Council	Ongoing.

Item Number	Item	Commitment	Responsibility	Timing
4.2		Information regarding heritage requirements will be made available on site for employees/contractors.	Lismore City Council	Ongoing.
4.3		If an Aboriginal item is found all work will cease and the police, relevant Aboriginal community groups and a suitably qualified archaeologist contacted.	Lismore City Council	Ongoing.
5	Noise			
5.1		The quarry will operate according to the following hours: <ul style="list-style-type: none"> <li>Monday to Friday: 7.00am to 6.00pm; and</li> <li>Saturday: 7.00am to 3.00pm.</li> </ul> No work will be undertaken on Sundays or public holidays.	Lismore City Council	Ongoing.
5.2		Speed limits within the quarry site will be restricted to 40km/h and compression braking prohibited.	Lismore City Council	Ongoing.
5.3		4 metre earth bunds will be constructed to the north east and south west of the southern quarry pit and a 5 metre earth bund will be constructed to the south of the existing Jaw Crusher as illustrated in Figures C.2 and C.3 in Annex C of the revised Noise Assessment (ERM, 2009 <sup>(9)</sup> ) provided as Annex B to the report. During the short construction period for these bunds, the noise limits will be relaxed. Nearby residents will be notified when this work will take place.	Lismore City Council	Prior to the operation of the expanded quarry.
5.4		Attended noise monitoring and plant equipment audits will be undertaken.	Lismore City Council	Annually.
5.5		Plant will be relocated to greater pit depths as the floor of the quarry gets deeper.	Lismore City Council	Ongoing.



Item Number	Item	Commitment	Responsibility	Timing
5.6	<p>Noise Management Plan - the licensee must develop a Noise Management Plan for the quarry which must incorporate but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• noise compliance;</li> <li>• noise limits;</li> <li>• blasting noise; and</li> <li>• road traffic noise.</li> </ul>	<p>Noise Management Plan for the quarry which must incorporate but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• noise compliance;</li> <li>• noise limits;</li> <li>• blasting noise; and</li> <li>• road traffic noise.</li> </ul>	Lismore City Council	Prior to the operation of the expanded quarry.
5.7	<p>A noise compliance assessment (including airblast overpressure and ground vibration from blasting) shall be submitted to the DECC within three (3) months of commencement of expanded operations at the premises. The assessment shall be prepared by a suitable qualified and experienced acoustical consultant and shall assess compliance with noise and blasting limits presented in conditions 5.8 and 6.1 - 6.4.</p>	<p>A noise compliance assessment (including airblast overpressure and ground vibration from blasting) shall be submitted to the DECC within three (3) months of commencement of expanded operations at the premises. The assessment shall be prepared by a suitable qualified and experienced acoustical consultant and shall assess compliance with noise and blasting limits presented in conditions 5.8 and 6.1 - 6.4.</p>	Lismore City Council	Within 3 months of commencement of expanded operations.

Item Number	Item	Commitment	Responsibility	Timing
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5.8 Noise from the premises must not exceed the sound pressure level (noise) limits presented in the Table below. Note: the limits represent the sound pressure level (noise) contribution at the nominated receiver locations in the table.

Location (1)	Noise Limits (dB(A))				
	Day(3)		Evening(4)		Night(5)
	L <sub>1</sub> Aeq(15 minute)	38	L <sub>1</sub> Aeq(15 minute)	N/A	L <sub>1</sub> Aeq(15 minute)
1 Nimbin Road, Blakebrook & Keerrong Road, Blakebrook					N/A
145 Finchin Road, Coolmanger, Keerrong Road, Blakebrook, 365 Booverie Creek Road, Booverie Creek, 210 Booverie Creek Road & 484 Nimbin Road, Blakebrook.					N/A

- (1) Receiver locations as identified in Blakebrook Quarry Expansion – Environmental Assessment Report – Final Report Volume 1 (Report No. 0066641), Appendix C ERM 2008.
- (2) Noise limits may be exceeded by no more than 2dB(A) for a maximum of ten days in any reporting period during operation of the permanent jaw crusher.
- (3) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;
- (4) Evening is defined as the period from 6pm to 10pm on any day;
- (5) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.

Item Number	Item	Commitment	Responsibility	Timing
5.9	Noise from Blakebrook Quarry is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Condition 5.8 unless otherwise stated.		Lismore City Council	Ongoing.
5.10	Where it can be demonstrated that direct measurement of noise from the Blakebrook Quarry is impractical, the DECC may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.		Lismore City Council	Ongoing.
5.11	The noise emission limits identified in Condition 5.8 apply under meteorological conditions of wind speed up to 3 metres per second at 10 metres above ground level.		Lismore City Council	Ongoing.
6	<b>Blasting Limits</b>			
6.1	The overpressure level from blasting operations at the Blakebrook Quarry must not exceed 115dB (Lin Peak) for more than 5 per cent of the total blasts over each reporting period of 12 months. Error margins associated with any monitoring equipment used to measure this area are not to be taken into account in determining whether or not the limit has been exceeded.		Lismore City Council	Ongoing.
6.2	The overpressure level from blasting operations at the Blakebrook Quarry must not exceed 120dB (Lin Peak) at any time. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.		Lismore City Council	Ongoing.
6.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than 5 per cent of the total number of blasts over each reporting period of 12 months. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.		Lismore City Council	Ongoing.

Item Number	Item	Commitment	Responsibility	Timing
6.4		<p>Blasting operations at the premises may only take place between 9.00am-5.00pm Monday to Friday. (Where compelling safety reasons exist, the Authority may permit a blast to occur outside the abovementioned hours. Prior written (or facsimile) notification of any such blast must be made to the Authority.</p> <p>To determine compliance with Conditions 6.1-6.4:</p> <p>a) airblast overpressure and ground vibration levels must be measured and electronically recorded at the closest and potentially most exposed receiver location in L6.1 to the blast activity for all blasts carried out in or on the premises; and</p> <p>b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.</p>	Lismore City Council	Ongoing.
7	<b>Air Quality</b>			
7.1		All unsealed haul routes on the site will be watered at a rate of 2 l/m <sup>2</sup> /minute as required.	Lismore City Council	Ongoing.
7.2		Water sprays will be used on all mobile crushing, stockpiles and screening equipment to minimise airborne particulate matter.	Lismore City Council	Ongoing.
7.3		All road trucks must have tarpaulin covers in place prior to leaving the weighbridge.	Lismore City Council	Ongoing.
7.4		A dust deposition gauge network will be developed to ensure compliance with cumulative dust deposition criteria.	Lismore City Council	At or before production rates at the quarry reach 337,500 tonnes/ annum.
7.5		Stockpiles are to be seeded to minimize the potential for fugitive dust.	Lismore City Council	Ongoing.
8	<b>Groundwater Management</b>			

Item Number	Item	Commitment	Responsibility	Timing
8.1		A detailed groundwater assessment will be undertaken prior to the commencement of vertical extraction. This will involve the installation of nested ground water monitoring wells. The wells will be installed to at least two depths at a minimum of three separate locations around the perimeter of the quarry in order to intercept identified distinct water bearing zones.	Lismore City Council	Following approval of the quarry expansion and prior to the commencement of vertical extraction
8.2		A quarterly groundwater monitoring program will be undertaken as detailed in <i>Section 8.4.1</i> of the EA (ERM, 2009) and will involve analysis by a NATA laboratory.	Lismore City Council	Quarterly following approval of the quarry expansion and prior to the commencement of vertical extraction
8.3		Should it be determined that environmental flows from springs are being reduced by extraction activities, investigation will commence on supplementing flows using water collected in the quarry pit. Water collected in the quarry will have to meet water quality criteria before it is discharged, with discharge to be licensed under the DECC.	Lismore City Council	Ongoing.
9	<b>Surface Water Management</b>			
9.1		Clean run-off from the surround small sub-catchments will be diverted away from the quarry pits to existing ephemeral water courses. Water collected within the pits will be stored in in-pit dams and used for processing and dust suppression purposes. No quarry water is proposed to be discharged from the site as part of the proposed expansion activities.	Lismore City Council	Ongoing.

Item Number	Item	Commitment	Responsibility	Timing
10	Quarry Rehabilitation			
10.1		A progressive rehabilitation approach will be undertaken to make safe the site and to rehabilitate the site and benches to tie into the surrounding woodland. All on-site infrastructure will be removed.	Lismore City Council	Ongoing and on completion of quarrying.
10.2		Lismore City Council will commit to the ongoing allocation of funds for the progressive rehabilitation of the Quarry in the determination of its annual operational budget. The allocation of funds will be tied to demand and the output of the Quarry, with the allocation to be in the order of \$30 000 to \$50 000. The allocated money will be accumulated pending the availability of areas to be rehabilitated. The budget allocation may also be increased over the lifetime of the quarry to reflect inflationary changes and rehabilitation needs as necessary.	Lismore City Council	Ongoing and on completion of quarrying
10.3		A suitably qualified and experienced professional will be engaged to carry out on-going maintenance and monitoring. This will involve activities such as bushland rehabilitation, weed removal and nest box erection.	Lismore City Council	Upon commencement of rehabilitation activities and upon completion of quarrying.
10.4		The success of the rehabilitation program will be monitored in accordance with the <i>Mine Rehabilitation Handbook</i> .	Lismore City Council	Upon commencement of rehabilitation activities and upon completion of quarrying.

## APPENDIX 3 RECEIVER LOCATION PLAN



**Legend**

- Noise Logger
- Noise Assessment Locations

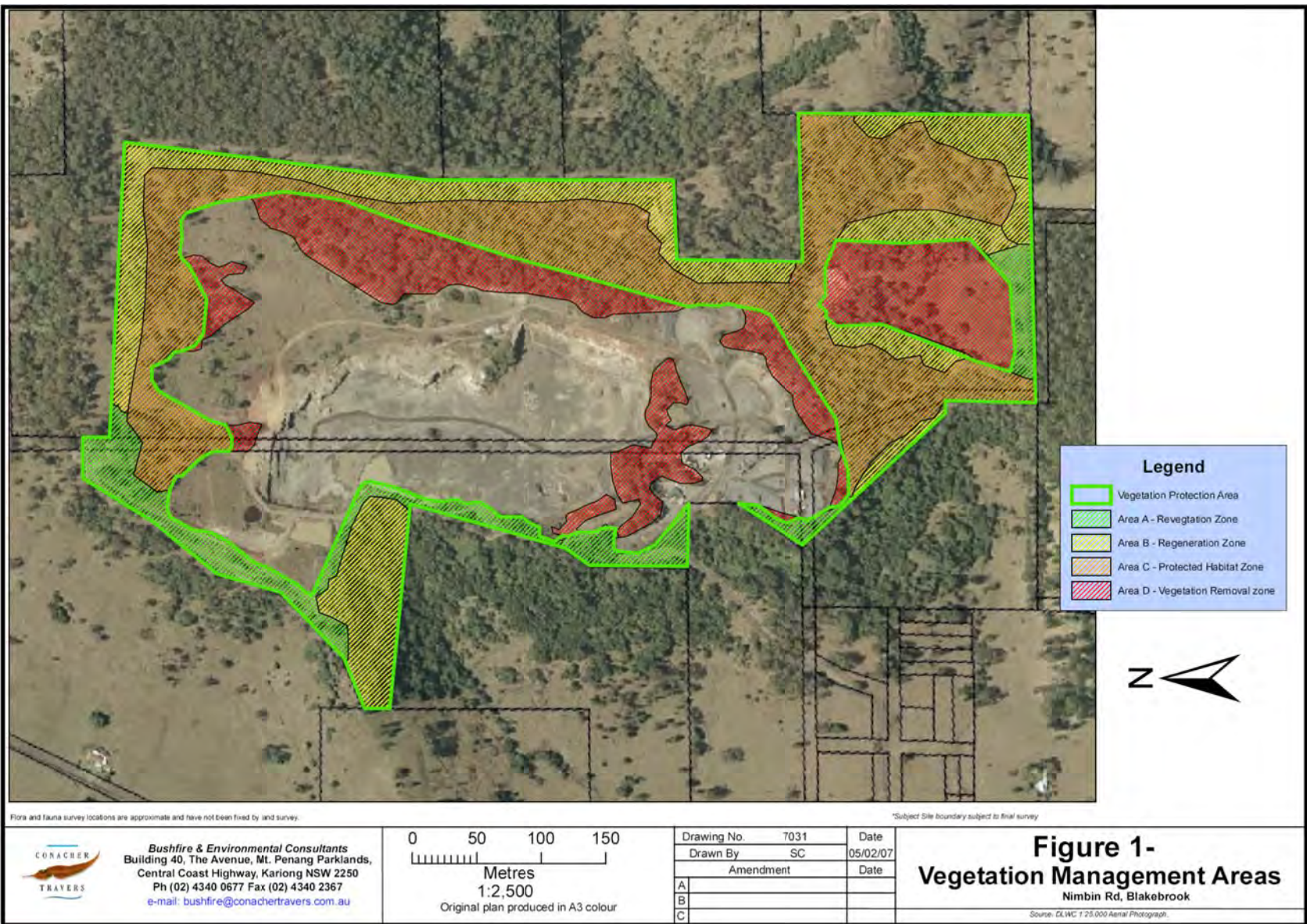
**Figure 2.1**

**Noise Assessment and Logging Locations**

Client: Lismore City Council	
Project: Blakebrook Quarry Noise Assessment	
Drawing No: 0066641s_01_R1	
Date: 11/06/2009	Drawing size: A4
Drawn by: GC	Reviewed by: MS
Source: -	
Scale: Not to Scale	

Environmental Resources Management Australia Pty Ltd  
Building C, 33 Saunders St, Pyrmont, NSW 2009  
Telephone +61 2 8584 8888







## **APPENDIX 5 NOISE COMPLIANCE ASSESSMENT**

### **Applicable Meteorological Conditions**

1. The noise criteria in Table 2 are to apply under all meteorological conditions except the following:
  - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
  - (b) temperature inversion conditions between 1.5°C and 3°C/100 m and wind speed greater than 2 m/s at 10 m above ground level; or
  - (c) temperature inversion conditions greater than 3°C/100 m.

### **Determination of Meteorological Conditions**

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station required under condition 13 of Schedule 3.

### **Compliance Monitoring**

3. A noise compliance assessment must be undertaken within two months of commencing mining operations under EA (Mod 1). The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and must assess compliance with the noise criteria in Table 2. A report must be provided to the Secretary and EPA within 1 month of the assessment.
4. Unless the Secretary agrees otherwise, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to:
  - (a) monitoring locations for the collection of representative noise data;
  - (b) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment;
  - (c) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration; and
  - (d) the use of an appropriate modifying factor for low frequency noise to be applied during compliance testing at any individual residence if low frequency noise is present (in accordance with the INP) and before comparison with the specified noise levels in the approval.



## Appendix B

# DPIE Comments on 2019 AEMR



[REDACTED]  
Lismore City Council  
PO Box 23A  
LISMORE NSW 2480

17/04/2020

**Blakebrook Quarry (MP 07\_0020)  
Annual Review 2019**

Dear [REDACTED]

Reference is made to the Annual Review for the period 1 January 2019 to 31 December 2019, submitted to the Department of Planning and Environment (the "Department") as required under Schedule 5, Condition 11 of MP 07\_0020 (the approval, as modified).

The Department has reviewed the Annual Review and considers it to satisfy the reporting requirements of the approval and the Department's *Annual Review Guideline* (October 2015). Please make publicly available a copy of the 2019 Annual Review, on the company website.

Please note that the Department's acceptance of this Annual Review is not endorsement of the compliance status of the project. Non-compliances identified in the Annual Review will be assessed in accordance with the Department's Compliance Policy. Further correspondence may be sent in relation to non-compliances.

Should you need to discuss the above, please contact Phillip Rose as per the details provided above.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Shelley McPhee'.

Shelley McPhee  
Compliance Team Leader  
Compliance  
As nominee of the Secretary



## Appendix C

# EPA Licence 3384

# Environment Protection Licence

Licence - 3384

<b><u>Licence Details</u></b>	
Number:	3384
Anniversary Date:	17-January

<b><u>Licensee</u></b>
LISMORE CITY COUNCIL
PO BOX 23A
GOONELLABAH NSW 2480

<b><u>Premises</u></b>
LISMORE OR BLAKEBROOK QUARRY
NIMBIN ROAD
BLAKEBROOK NSW 2480

<b><u>Scheduled Activity</u></b>
Extractive activities

<b><u>Fee Based Activity</u></b>	<b><u>Scale</u></b>
Extractive activities	> 100000-500000 T annually extracted or processed

<b><u>Region</u></b>
Regional North - Grafton
NSW Govt Offices, 49 Victoria Street
GRAFTON NSW 2460
Phone: (02) 6640 2500
Fax: (02) 6642 7743
PO Box 498
GRAFTON NSW 2460



# Environment Protection Licence

Licence - 3384

<b>INFORMATION ABOUT THIS LICENCE</b>	4
Dictionary	4
Responsibilities of licensee	4
Variation of licence conditions	4
Duration of licence	4
Licence review	4
Fees and annual return to be sent to the EPA	4
Transfer of licence	5
Public register and access to monitoring data	5
<b>1 ADMINISTRATIVE CONDITIONS</b>	6
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	6
A3 Other activities	6
A4 Information supplied to the EPA	7
<b>2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</b>	7
P1 Location of monitoring/discharge points and areas	7
<b>3 LIMIT CONDITIONS</b>	7
L1 Pollution of waters	7
L2 Concentration limits	8
L3 Waste	9
L4 Noise limits	9
L5 Blasting	9
L6 Hours of operation	10
<b>4 OPERATING CONDITIONS</b>	10
O1 Activities must be carried out in a competent manner	10
O2 Maintenance of plant and equipment	11
O3 Dust	11
O4 Processes and management	11
<b>5 MONITORING AND RECORDING CONDITIONS</b>	12
M1 Monitoring records	12
M2 Requirement to monitor concentration of pollutants discharged	12
M3 Testing methods - concentration limits	13
M4 Environmental monitoring	13
M5 Recording of pollution complaints	13

# Environment Protection Licence

Licence - 3384



M6	Telephone complaints line	14
M7	Blasting	14
M8	Other monitoring and recording conditions	14
<b>6</b>	<b>REPORTING CONDITIONS</b>	<b>14</b>
R1	Annual return documents	14
R2	Notification of environmental harm	16
R3	Written report	16
<b>7</b>	<b>GENERAL CONDITIONS</b>	<b>17</b>
G1	Copy of licence kept at the premises or plant	17
<b>DICTIONARY</b>		<b>18</b>
	General Dictionary	18

# Environment Protection Licence

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Licence - 3384



## Information about this licence

### Dictionary

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

### Responsibilities of licensee

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

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

### Variation of licence conditions

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

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

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

### Duration of licence

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

### Licence review

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

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

For each licence fee period you must pay:

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



# Environment Protection Licence



Licence - 3384

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

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

## Transfer of licence

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

## Public register and access to monitoring data

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

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

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

## This licence is issued to:

<b>LISMORE CITY COUNCIL</b>
<b>PO BOX 23A</b>
<b>GOONELLABAH NSW 2480</b>

subject to the conditions which follow.

# Environment Protection Licence

Licence - 3384

## 1 Administrative Conditions

### A1 What the licence authorises and regulates

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

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

Scheduled Activity	Fee Based Activity	Scale
Extractive activities	Extractive activities	> 100000 - 500000 T annually extracted or processed

A1.2 This licence regulates water pollution resulting from the activity/ies carried out at the premises specified in A2.

A1.3 Notwithstanding the maximum scale at condition A1.1, the maximum scale of extractive activity authorised under this licence must not exceed the extraction limit approved by the current development consent granted under the *Environmental Planning and Assessment Act 1979* for the premises specified in condition A2.

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

A2.1 The licence applies to the following premises:

Premises Details
LISMORE OR BLAKEBROOK QUARRY
NIMBIN ROAD
BLAKEBROOK
NSW 2480
LOT 201 DP 1227138

### A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Ancillary Activity
Bitumen Pre-mix or Hot-mix Industries

# Environment Protection Licence

Licence - 3384



## A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

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

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

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

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

P1.1 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

#### *Water and land*

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Wet weather overflow	Wet weather overflow	Spillway of the settlement dam at the southern end of the site nearest the weighbridge as identified on site map entitled Blake Brook Quarry Water Management dated 21 July 2005

## 3 Limit Conditions

### L1 Pollution of waters

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

L1.2 Discharge of TSS to waters from Point 1 is permitted when the discharge occurs solely as a result of rainfall at the premises exceeding a total of 60.2 millimetres over any consecutive five day period.

# Environment Protection Licence

Licence - 3384



L1.3 The licensee must take all practical measures to avoid or minimise generation of total suspended solids

## L2 Concentration limits

L2.1 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.

L2.2 Water and/or Land Concentration Limits

### POINT 1

Pollutant	Units of Measure	50 Percentile concentration limit	90 Percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Oil and Grease	Visible				Nil
pH	pH				6.5 -8.5
Total suspended solids	milligrams per litre				50

L2.3 For each monitoring/discharge point or utilisation area specified in the table\ below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.4 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L2.5 The concentration limits in the table above do not apply to any discharge from the sediment pond(s) solely arising from a rainfall event exceeding 60.2 mm (the 90 percentile 5 day rain event) in total falling over any consecutive five day period.

L2.6 If the licensee uses turbidity (NTU) in place of TSS to determine compliance with Condition L2.2, the licensee must develop a statistical correlation which identifies the relationship between NTU and TSS for water quality in the sediment basin/s in order to determine the NTU equivalent of 50 mg/L TSS before its use.

L2.7 The licensee must provide the EPA with a copy of the statistical correlation assessment methodology and results before using NTU in place of TSS.

L2.8 The licensee must develop and implement a method to enable the ongoing verification of the relationship between NTU and TSS.

# Environment Protection Licence



Licence - 3384

- L2.9 The licensee must provide the EPA with any amendments the licensee makes to the statistical correlation as a result of the ongoing verification required by Condition L2.8 before using the revised statistical correlation.
- L2.10 Controlled discharges from any sediment basins must not exceed a 100th percentile limit for Total Suspended Solids concentration of 50mg/L. All discharges are to fall within the pH range of between 6.5 and 8.5. There is to be no visible oils and greases in any controlled discharges from sediment basins.

## L3 Waste

- L3.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal, excluding the following:
  - a) Glass sand recovered from the Lismore Recycling and Recovery Centre.

## L4 Noise limits

- L4.1 Noise from the licenced premise must not exceed an LAeq (15 minute) noise emission criterion of 36db(A) at Location 2 and 35db(A) at all other sensitive receivers, except as expressly provided by this licence.
  - L4.2 Noise from the premises is to be measured at the most affected noise sensitive receiver who has not given written permission for an exceedance of condition L4.1 to determine compliance with this condition.
- Note: Noise sensitive locations means buildings used as a residence, hospital, school, childcare centre, places of public worship and nursing homes. A noise sensitive location includes the land within 30m of the building.
- L4.3 The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following:
    - a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
    - b) Temperature inversion conditions up to 3°C/100m and wind speeds greater than 2 metres/second at 10 metres above ground level; or
    - c) Temperature inversion conditions greater than 3°C/100m.

## L5 Blasting

- L5.1 The airblast overpressure level from blasting operations in or on the premises must not exceed:
  - a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
  - b) 120 dB (Lin Peak) at any time.as measured at the nearest sensitive receiver
- L5.2 The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
  - a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each

# Environment Protection Licence



Licence - 3384

reporting period; and  
b) 10 mm/s at any time.

At the most affected residence or noise sensitive location that is not owned by the licensee or subject to a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative ground vibration level .

L5.3 All sensitive receivers are to be given at least 24 hours notice when blasting is to be undertaken.

L5.4 The licensee must report any exceedance of the licence blasting limits to the EPA within 24 hours of the exceedance becoming known to the licensee or to one of the licensee's employees or agents.

## L6 Hours of operation

L6.1 Activities covered by this licence must be in accordance with the operating hours set out in the table below

Activity	Permissible Hours
Quarrying activities including loading and dispatch of trucks	07:00 to 18:00 Monday to Friday; 07:00 to 15:00 on Saturday and at no time on Sundays and Public Holidays
Blasting	10:00 to 15:00 Monday to Friday and at no time on Saturday, Sunday and Public Holidays
Asphalt plant	06:00 to 17:30 Monday to Saturday and at no time on Sundays and Public Holidays
Maintenance	May be conducted at any time provided that these activities are not audible at any privately-owned residence

L6.2 The following activities may be carried out outside the hours specified in Condition L6.1 above:

- delivery or despatch of material outside the hours of as requested by police or other public authorities
- emergency work to avoid the loss of lives, property or to prevent environmental harm
- operation of the asphalt plant with the permission of Lismore City Council for emergency or specific works where a traffic management problem is involved.

In such circumstances, prior notification must be provided to the EPA and affected residents as prior to undertaking the activity or as soon as possible thereafter.

Note: Where a blast failure has occurred or there are compelling safety reasons, the EPA may permit a blast to occur outside the above hours. The licensee must provide prior notice of any such blast to the EPA by contacting 131 555.

## 4 Operating Conditions

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

# Environment Protection Licence

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Licence - 3384

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

This includes:

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

## O2 Maintenance of plant and equipment

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

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

## O3 Dust

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

## O4 Processes and management

O4.1 Sediment Basins shall be treated, if required, to reduce the Total Suspended Solids level to the licenced concentration limit of 50mg/L before being released to the environment. Treatment can be with gypsum or any other material that has been approved by the EPA.

O4.2 The licensee must maximise the diversion of run-on waters from lands upslope and around the site whilst land disturbance activities are being undertaken.

O4.3 The licensee must maximise the diversion of stormwater runoff containing suspended solids to sediment basins installed on the premises.

O4.4 Where sediment basins are necessary, all sediment basins and associated drainage must be installed and commissioned prior to the commencement of any clearing or grubbing works within the catchment area of the sediment basin that may cause sediment to leave the site.

O4.5 The licensee must ensure the design storage capacity of the sediment basins installed on the premises is reinstated within 5 days of the cessation of a rainfall event that causes runoff to occur on or from the premises.

O4.6 The licensee must ensure that sampling point(s) for water discharged from the sediment basin(s) are provided and maintained in an appropriate condition to permit:

- a) the clear identification of each sediment basin and discharge point;
- b) the collection of representative samples of the water discharged from the sediment basin(s); and
- c) access to the sampling point(s) at all times by an authorised officer of the EPA.

O4.7 The licensee must endeavour to maximise the reuse of captured stormwater on the premises.

# Environment Protection Licence



Licence - 3384

- O4.8 Each sedimentation basin must have a marker (the “sedimentation basin marker”) that identifies the upper level of the sediment storage zone.
- O4.9 Whenever the level of liquid and other material in any sedimentation basin exceeds the level indicated by the sedimentation basin marker, the licensee must take all practical measures as soon as possible to reduce the level of liquid and other material in the sedimentation basin.
- O4.10 The sediment basins must meet the design and operational standards of Managing Urban Stormwater Soils and Construction: Volume 1 and Volume 2 E. Mines and quarries. The sediment basin sizes have been calculated to total 20.05 ML as outlined in the Blakebrook Quarry Expansion - Soil and Water Management Sub-Plan - April 2011, prepared by Environmental Resources Management Australia on behalf of Lismore City Council
- O4.11 The sites sediment basin(s) must be maintained and operated to ensure that:
- All 5-day rainfall events up to 60.2 mm (the 90th percentile 5 day rain event) are captured.
  - Any discharge from the sediment basin that occurs as a result of rainfall below the 5-day total of 60.2 mm must meet the limit conditions specified in condition L2.2.
- O4.12 All liquid chemicals, fuels and oils must be stored in tanks or containers inside suitable bund(s). Bund(s) are to be designed, constructed and maintained in accordance with the relevant Australian Standard for the Storage and Handling of Flammable and Combustible Liquids.

## 5 Monitoring and Recording Conditions

### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
- a) in a legible form, or in a form that can readily be reduced to a legible form;
  - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- a) the date(s) on which the sample was taken;
  - b) the time(s) at which the sample was collected;
  - c) the point at which the sample was taken; and
  - d) the name of the person who collected the sample.

### M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee



# Environment Protection Licence

Licence - 3384

must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

## M2.2 Water and/ or Land Monitoring Requirements

### POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Oil and Grease	Visible	Special Frequency 1	Visual Inspection
pH	pH	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample

M2.3 For the purposes of the table(s) above Special Frequency 1 means the collection of samples once during each discharge event arising from rainfall not exceeding the 90 percentile five day rainevent of 60.2mm falling in total over a period of up to five days..

## M3 Testing methods - concentration limits

M3.1 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

## M4 Environmental monitoring

M4.1 The licensee is required to install and maintain a rainfall depth measuring device.

M4.2 Rainfall at the premises must be measured and recorded in millimetres per 24 hour period, at the same time each day.

## M5 Recording of pollution complaints

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

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

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;

# Environment Protection Licence



Licence - 3384

- d) the nature of the complaint;
- e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the licensee, the reasons why no action was taken.

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

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

## M6 Telephone complaints line

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

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

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

## M7 Blasting

M7.1 To determine compliance with condition(s) L5.2 and L5.3:

- a) Airblast overpressure and ground vibration levels must be measured at the most affected residence or noise sensitive location that is not owned by the licensee or subject to a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative level - for all blasts carried out in or on the premises; and
- b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standard AS 2187.2-2006.

## M8 Other monitoring and recording conditions

M8.1 Noise monitoring must be carried out in accordance with Australian Standard AS 2659.1 – 1998: Guide to the use of sound measuring equipment – Portable sound level meters, and the compliance monitoring guidance provided in the NSW Industrial Noise Policy.

## 6 Reporting Conditions

### R1 Annual return documents

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

1. a Statement of Compliance,

# Environment Protection Licence



Licence - 3384

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

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

- R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.
- R1.3 Where this licence is transferred from the licensee to a new licensee:
- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
  - b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.
- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
  - b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.
- R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
- a) the licence holder; or
  - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.
- R1.8 The licensee must report any exceedence of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedence becomes known to the licensee or to one of the licensee's employees or agents.

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

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

- R1.9 The licensee must also include the following information with the Annual Return:

# Environment Protection Licence

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Licence - 3384

- A statement detailing the total volume of material extracted from the quarry for the reporting period; and
- The total volume of extracted material transported from the premises for the reporting period.

## **R2 Notification of environmental harm**

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

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

## **R3 Written report**

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
- a) where this licence applies to premises, an event has occurred at the premises; or
  - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
- a) the cause, time and duration of the event;
  - b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
  - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
  - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
  - f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
  - g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

# Environment Protection Licence

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Licence - 3384



## 7 General Conditions

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

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

# Environment Protection Licence

Licence - 3384

## Dictionary

### General Dictionary

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

# Environment Protection Licence

Licence - 3384

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

# Environment Protection Licence



Licence - 3384

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

Mr Nigel Sargent

Environment Protection Authority

(By Delegation)

Date of this edition: 28-August-2000



# Environment Protection Licence

Licence - 3384



## End Notes

- 1 Licence varied by notice 1012134, issued on 02-Apr-2002, which came into effect on 27-Apr-2002.
- 2 Licence varied by notice 1017834, issued on 03-Jun-2002, which came into effect on 28-Jun-2002.
- 3 Licence varied by notice 1020616, issued on 12-Sep-2002, which came into effect on 07-Oct-2002.
- 4 Licence varied by notice 1026159, issued on 31-Mar-2003, which came into effect on 25-Apr-2003.
- 5 Licence varied by notice 1031250, issued on 03-Oct-2003, which came into effect on 28-Oct-2003.
- 6 Licence varied by notice 1045315, issued on 11-Mar-2005, which came into effect on 05-Apr-2005.
- 7 Licence varied by notice 1049382, issued on 25-Aug-2005, which came into effect on 19-Sep-2005.
- 8 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 9 Licence varied by notice 1508293 issued on 22-Aug-2012
- 10 Licence varied by notice 1525659 issued on 30-Nov-2015
- 11 Licence varied by notice 1558031 issued on 27-Nov-2017
- 12 Licence varied by notice 1568156 issued on 06-Aug-2018
- 13 Licence format updated on 13-Feb-2019
- 14 Licence varied by notice 1577148 issued on 11-Mar-2019
- 15 Licence varied by notice 1598877 issued on 16-Sep-2020



## Appendix D

# Extractive Materials Return – July 2019 – June 2020



RETURN FOR EXTRACTIVE MATERIALS: YEAR ENDED 30 JUNE 2020

Quote RIMS ID in all correspondence

Quarry Id: <b>1116001</b> Rims ID: <b>400286</b> Operators Name: <b>Lismore City Council</b> Address: <b>PO Box 23A LISMORE NSW 2480</b> Email: <b>Council@lismore.nsw.gov.au</b> (Attn: <b>[REDACTED]</b> ) <b>[REDACTED]</b> Quarry Name: <b>Blakebrook Quarry</b> Quarry Address: <b>540 Nimbin Road BLAKEBROOK NSW 2480</b>	<b>Inquiries</b> please telephone: (02) 4063 6713  <b>Completed or Nil Returns</b> Email – <a href="mailto:mineral.royalty@planning.nsw.gov.au">mineral.royalty@planning.nsw.gov.au</a> Postal Address (see below)	<b>2 0 1 9 - 2 0 2 0</b>
<b>Please amend name, postal address and location of mine or quarry if incorrect or incomplete.</b>		

The return should be completed and forwarded to **Senior Advisory Officer, RESOURCE ECONOMICS, RESOURCE PLANNING & PROJECTS, DEPARTMENT OF REGIONAL NSW, PO BOX 344 HUNTER REGION MAIL CENTRE NSW 2310 on or before 31 October 2020.** 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: **Lismore**

Local Council Name: **Lismore City Council**

Deposited Plan and Lot Number/s of Quarry: **LOT: 53 DP: 1254990**

Email Address of Operator: **Council@lismore.nsw.gov.au** **[REDACTED]**  
**[REDACTED]**

Name of Owner or Licensee: **Lismore City Council**

Postal Address of Licensee: **PO Box 23A, LISMORE NSW 2480**

Licence/Lease Number/s (if any)  
From Mineral Resources NSW (Industry & Investment NSW): **N/A**  
  
From Department of Lands or another Department: **N/A**

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** \_\_\_\_\_ **DATE:** 27 August 2020
- **NAME:** David Hanna (*Commercial Services Manager, Lismore City Council*)
- **CONTACT PERSON for this return:** **[REDACTED]**
- **NAME:** **[REDACTED]** **TELEPHONE:** **[REDACTED]**

**SALES During 2019-2020**

*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
<b>Virgin Materials</b>		
• <b>Crushed Coarse Aggregates</b>		
Over 75mm	rockfill & raw feed	618.8
Over 30mm to 75mm	Drainage aggregates	7219.66
5mm to 30mm	20mm, 14mm, 10mm & 7mm aggregates	28313.27
Under 5mm	Coarse and fine crusher dust	21688.49
Natural Sand		0
Manufactured Sand		0
Prepared Road Base & Sub Base	Crusher Run, DGS40, RB40, RB20, RB30, DGB20, DGS20 & Select fill CAT B	37361.59
Other Unprocessed Materials	Large rock & overburden	30894.68
<b>Recycled Materials</b>		
• <b>Crushed Coarse Aggregates</b>		
Over 75mm		
Over 30mm to 75mm		
5mm to 30mm		
Under 5mm		
Natural Sand		
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
• <b>River Gravel</b>		
Over 30mm		
5mm to 30mm		
Under 5mm		
• <b>Construction Sand</b>	Excluding Industrial	
• <b>Industrial Sand</b>		
Foundry, Moulding		
Glass		
Other (Specify)		
• <b>Dimension Stone</b>	Building, Ornamental, Monumental	
Quarried in Blocks		
Quarried in Slabs		
• <b>Decorative Aggregate</b>	Including Terrazzo	
• <b>Loam</b>	Soil for Topdressing, Garden soil, Horticultural purposes)	
• <b>TOTAL SITE PRODUCTION</b>		<b>126096.49Tonnes</b>
• <b>Gross Value (\$) of all Sales</b>	\$2828851.80	
• <b>Type of Material</b>	Basalt	
• <b>Number of Full-Time Equivalent (FTE) Employees</b>	Employees: 5	Contractors



## Appendix E

# Stockpile and Production Report –2020

# Quarry Stockpile Report - 1 January to 31 December 2020



Product Name	Nett Weight Tonnes
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## Location Name: Pit 1 - Main

Crushing - 10mm Aggregate	(8,310.67)
Crushing - 14mm Aggregate	(6,963.78)
Crushing - 20mm Aggregate	(4,697.57)
Crushing - 20mm Roadbase	(2,296.58)
Crushing - 30mm minus	(141.35)
Crushing - 5mm Aggregate	(1,709.05)
Crushing - 7mm Aggregate	(3,939.58)
Crushing - Coarse Dust	(8,783.47)
Crushing - Fine Dust	(8,920.50)
Crushing - Scalps	(3,185.15)
Crushing Cobble	(1,065.90)
NRQA DGB20 Roadbase	(1,721.35)
NRQA Metal dust - Coarse	(430.60)
NRQA Metal dust - Fine	(545.50)
Location Name: Pit 1 - Main	(52,711.05)
	(52,711.05)



## Appendix F

# 2020 Quarry Truck Movements

Date	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
1st	HOLS		33	40	1	15	23		91	4	46	10
2nd	HOLS	60	2	27		48	28	29	100	2	15	4
3rd	HOLS	8	6	31	22	33	21	8	100		7	0
4th	HOLS	7	8		2	13	0	18	99	117	15	4
5th	0	5	7	114	8	17	116	2		PH	7	
6th	2	0	13	38	3		14	3	490	2	3	18
7th	0	0		34		126	25	2	100	0		0
8th	1		36	15	12	PH	17		101	0	47	6
9th	0	20	10	2		17	7	33	74	3	4	4
10th	0	1	7	PH	25	10	8	1	0		3	5
11th		1	3		4	6		3	4	5	10	5
12th	3	0	5	89	20	7	71	5		4	29	
13th	0	0		PH	8		8	9	279	4	24	20
14th	1	0		17	11	40	40	4	0	1		2
15th	2	0	25	30	15	20	41		91	4	70	3
16th	1	2	0	17		6	15	22	81	10	18	3
17th	0	6	11	13	58	11	8	92	62		12	1
18th		0	13	0	13	14		69	51	23	0	5
19th	4	3	21	77	7	1	112	100	0	7	0	0
20th	6	8	15	23	6		4	77	285	0	22	14
21st	23	9		40	19	52	1	89	85	2		0
22nd	0		60	51	14	16	9		59	9	52	0
23rd	0	26	5	51		7	3	427	56	3	2	0
24th	1	14	2	22	59	12	3	97	11		29	0
25th		1	17	PH	8	10		88	56	21	4	PH
26th	30	4	19	187	22	8	20	85		1	6	PH
27th	PH	9	5	11	21		4	87	267	2	0	0
28th	1	5		8	24	53	4	88	60	19		PH
29th	14		48	1	2	14	6		45	6	41	0
30th	27		12	1		30	14	445	6	18		0
31st	18		4		77		1	100				0
Total	127	81	185	472	220	315	304	1027	1332	101	210	52
Avg	4.70	3.24	7.12	18.15	8.46	12.12	11.26	39.50	51.23	3.74	8.08	1.93





## Appendix G

# DPIE Post Approval – Truck Exceedance



**Post Approval**

**Proponent Details**

**Personal Details**

Title	[REDACTED]
[REDACTED]	[REDACTED]
Last name	[REDACTED]
[REDACTED]	[REDACTED]
Phone	[REDACTED]
Role/Position	Compliance Coordinator
Address	60 BRUNSWICK STREET LISMORE New South Wales 2480 AUS

**Company Details**

Applying as a company/business?

Yes

Company Name	LISMORE CITY COUNCIL
ABN	60080932837
Branch Name	

**Primary Contact**

Title	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
Role/Position	Compliance Coordinator

**Post Approval Details**

Project:

Blakebrook Quarry - MP07\_0020-PA-2

Name of Document

Council Response Letter - Truck Exceedance

Related matter

Compliance Report, Annual Review, Audit Report

Type of Document Lodgement

New Document

Description of the document and reason for submission / Overview of changes made to existing documents

Council letter providing details around the recent truck exceedance non compliance

**Applicable Conditions**

Schedule	Condition
5	8

**Consultation through the Major Projects portal**

Consultation required as part of the preparation of the document?

No

**Attachment of Post Approval application**

File Name	Category
LCC to DPIE - Exceedance of Laden Truck Movements - Blakebr.pdf	Post Approval Document



## Appendix H

# LCC Letter to DPIE – Exceedance of Truck Movements



Our ref: [REDACTED]

Your ref: [REDACTED]

Contact: [REDACTED]

16 September 2020

NSW Department of Planning Industry and Environment  
Planning Services, Far Northern Region  
ATTN: Phillip Rose  
PO BOX 72  
**MURWILLUMBAH NSW 2484**

Dear Mr Rose

**RE: Blakebrook Quarry – Laden Truck Movement Exceedance - 8 September 2020**

Lismore City Council (Council) identified that an additional 1 laden truck was dispatched from the Blakebrook Quarry site on Tuesday 8 September 2020. As per Schedule 5 Condition 8 of Project Approval MP 07\_0020, the truck exceedance was reported to the Department of Planning Industry and Environment (the Department) as soon as practicable via email on Wednesday 9 September 2020.

Council takes this matter seriously and would like to outline to the Department that there was no malicious intent for the error. The exceedance was reported to the Department promptly and without delay. Blakebrook Quarry is permitted to dispatch 100 laden trucks per day, however on this occasion dispatched 101 laden trucks (Attachment 1). Council has investigated the matter and determined that the exceedance occurred due to internet disruptions that caused a data delay to the Mandalay server (weighbridge system) at a crucial time of the afternoon. Once the Mandalay reporting software updated accurately and the Weighbridge Operator realised the error, no additional loads left the site.

Subsequently, Council has submitted an urgent and high priority ticket to Council's internal IT Help Desk to investigate the internet issues at the Quarry. A ticket has also been logged with Mandalay Software developer to investigate if the issue resides with their software or server.

Should you require any further information, please do not hesitate to contact [REDACTED] Commercial Services Compliance Coordinator on [REDACTED] or via [REDACTED]

Yours faithfully

David Hanna  
**Manager Commercial Services**



## Appendix I

### Section 94 Levies 2020

Ledger Account	Date	Posting Year	Posting Period	Type	Reference	Actual	Total Value	Account Name	Transaction Description
lgr_acc	trn_dte	pst_yer	pst_per	trn_cde	trn_ref	act_val	tot_val	acc_nme	trn_des
001721.0785.9915	31/01/2020	2020	7	9901	12458/2020	2524.79	2524.79	Internal Charges - Expenses	Blakebrook Quarry S94 Levies January 2020
001721.0785.9915	29/02/2020	2020	8	9901	12494/2020	1216.61	1216.61	Internal Charges - Expenses	Section 94 Levies Quarry February 2020
001721.0785.9915	31/03/2020	2020	9	9901	12537/2020	3384.21	3384.21	Internal Charges - Expenses	S94 Levies Blakebrook Quarry March 2020
001721.0785.9915	30/04/2020	2020	10	9901	12582/2020	9260.49	9260.49	Internal Charges - Expenses	Quarry S 94 Levies Blakebrook April 2020
001721.0785.9915	31/05/2020	2020	11	9901	12637/2020	4125.7	4125.7	Internal Charges - Expenses	Section 94 Levies Blakebrook Quarry May 2020
001721.0785.9915	30/06/2020	2020	12	9901	12701/2020	6748.86	6748.86	Internal Charges - Expenses	Sectin 94 Levies Quarry June 2020
001721.0785.9915	31/07/2020	2021	1	9901	12875/2021	6329.7	6329.7	Internal Charges - Expenses	Blakebrook Quarry S 94 Levies July 2020
001721.0785.9915	31/08/2020	2021	2	9901	12962/2021	33554.53	33554.53	Internal Charges - Expenses	S94 Levies Contribution Quarry August 2020
001721.0785.9915	30/09/2020	2021	3	9901	13019/2021	0.92	0.92	Internal Charges - Expenses	S94 Quarry ADJ for increaese in PPI July 2020
001721.0785.9915	30/09/2020	2021	3	9901	13019/2021	36.85	36.85	Internal Charges - Expenses	S94 Quarry ADJ for increaese in PPI July 2020
001721.0785.9915	30/09/2020	2021	3	9901	13019/2021	4.89	4.89	Internal Charges - Expenses	S94 Quarry ADJ for increaese in PPI July 2020
001721.0785.9915	30/09/2020	2021	3	9901	13019/2021	195.36	195.36	Internal Charges - Expenses	S94 Quarry ADJ for increaese in PPI July 2020
001721.0785.9915	30/09/2020	2021	3	9901	13020/2021	44770.36	44770.36	Internal Charges - Expenses	Quarry S94 Levies September 2020
001721.0785.9915	31/10/2020	2021	4	9901	13053/2021	2367.51	2367.51	Internal Charges - Expenses	Section 94 Levies October 2020
001721.0785.9915	30/11/2020	2021	5	9901	13078/2021	4072.92	4072.92	Internal Charges - Expenses	Section 94 Levies November 2020
001721.0785.9915	31/12/2020	2021	6	9901	13123/2021	1068.09	1068.09	Internal Charges - Expenses	Section 94 Levies December 2020



## Appendix J

# Noise Monitoring Report 2020

## Ambience Audio Services

Acoustic Measurement and Analysis

15 Tamarind Close  
Richmond Hill NSW 2480

Phone: 02 6625 1733  
Mobile: 0429 405 070

### **Results of Noise Monitoring**

**Blakebrook Quarry  
550 Nimbin Road  
Blakebrook NSW 2480**

Prepared for

**Ecoteam  
13 Ewing Street  
Lismore NSW 2480**

Prepared by  
Garry Hall  
December 4<sup>th</sup> 2020



**Table of Contents**

- 1 INTRODUCTION ..... 3**
- 2 NOISE MONITORING REQUIREMENTS ..... 3**
- 3 MEASUREMENT PROCEDURE AND RESULTS ..... 8**
  - 3.1 Instrumentation ..... 8
  - 3.2 Measurement Procedures ..... 8
  - 3.3 Weather Conditions ..... 9
  - 3.3 Measurement Results ..... 10
- 4 DISCUSSION OF RESULTS ..... 12**
- 5 SUMMARY ..... 13**
- APPENDIX A ..... 14**
  - Definitions of Terms ..... 14
- APPENDIX B ..... 17**
  - Comparison of Sound Pressure Levels ..... 17
- APPENDIX C ..... 18**
  - Quarry Operations 1<sup>st</sup> Dec 2020 ..... 18

# 1 INTRODUCTION

Ambience Audio Services have been engaged by Ecoteam to conduct noise monitoring at Blakebrook Quarry, 550 Nimbin Road, Blakebrook NSW.

Noise monitoring was conducted on the 1<sup>st</sup> of December 2020 with the quarry operating and suitable weather conditions.

Quarry operations while noise monitoring was conducted included: crushing, screening and stockpiling on the southern side of the quarry floor, asphalt production at the mobile plant at the top of the quarry, and trucks and loader on the quarry floor and internal haul roads. A diagram of equipment operating on the quarry floor during noise monitoring at residential receivers is provided in Appendix C.

To assist with the interpretation of some of the terminology used in this report, Appendix A provides definitions of acoustic terms. Appendix B is a chart of everyday sound pressure levels.

## 2 NOISE MONITORING REQUIREMENTS

The noise monitoring requirements for the Blakebrook Quarry are outlined in Section 2.2, Sections 7.1, 7.2, 7.4, 7.5 and 7.7 of the Noise and Blast Management Plan Revision 3.1 (Aug 2018) prepared by Environmental Resources Management Australia Pty Ltd (ERM).

Extracts of the relevant parts are copied below.

### Section 2.2

*3. The Proponent must ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land.*

Table 2: Noise criteria dB(A)

Receiver	Day L <sub>Aeq</sub> (15 minute)
Location 2	36
All other locations	35

*Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.*

*However, the noise criteria in Table 2 do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of this agreement.*

#### L6.1 Noise from the premises must not exceed:

(a) 35dB(A) L<sub>Aeq</sub>(15 minute) during the day (7am to 6pm) Monday to Saturday;

*Where L<sub>Aeq</sub> means the equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.*

## 7.1 MONITORING OBJECTIVES

The noise measurement procedures employed throughout the monitoring program shall be guided by the requirements of AS 1055-1997 "Acoustics - Description and Measurement of Environmental Noise" and the NSW EPA Noise Policy for Industry (EPA, 2017).

## 7.2 MONITORING LOCATIONS

The Noise Assessment (ERM, 2009) included seven noise monitoring locations that were used throughout the assessment, based on proximity to nearby potentially sensitive receptors. Given the proximity between monitoring locations and the location of anticipated noise-generating plant and equipment, the monitoring locations have been revised and separated into **primary** and **supplementary** acoustic monitoring locations for the purposes of this NBMP.

Primary and supplementary acoustic monitoring locations are identified in *Figure 1.3*. Primary acoustic monitoring locations consist of **locations 2, 4 and 8**, with the remainder consisting of supplementary acoustic monitoring locations.

An agreement was reached with the landowner located along Nimbin Road (previously identified as location 8, ERM 2009) in April 2016, wherein the landowner has agreed to exceedances in noise levels from quarry operations. As such the location has been removed as a primary acoustic monitoring location, and a new monitoring location selected.

Primary monitoring locations will be utilised during noise compliance monitoring and are considered representative in determining compliance with the relevant Conditions of Approval.

## 7.4 METHODOLOGY

### Noise

Operator attended noise measurements shall be conducted at all primary acoustic measurement locations (Locations 2, 4 and 9 - refer *Figure 1.3*) to quantify and characterise the maximum (L<sub>Amax</sub>), the energy equivalent (L<sub>Aeq</sub>), and background (L<sub>A90</sub>) noise levels from ambient noise sources and quarrying operations over a 15 minute measurement period.

The operator shall quantify noise emissions and estimate the L<sub>Aeq</sub> (Period) noise contribution during day time activities from each of the quarrying operations, as well as the overall level of ambient noise.

During attended monitoring, digital recordings will be conducted to allow for additional post analysis of the quarry noise levels and source identification.

All acoustic instrumentation employed throughout the monitoring program shall meet with the requirements of AS 1259.2-1990, "Sound Level Meters".

Instrument calibration shall be checked before and after each measurement survey, with the variation in calibrated levels not exceeding ±0.5 dBA.

Adverse meteorological conditions have the potential to increase noise levels, for example wind speeds up to 3m/s or temperature inversions, however wind speeds above 5m/s (and rainfall) have the potential to generate extraneous and erroneous noise events, which reduce the accuracy and confidence in measured data.

As such, meteorological parameters will be evaluated prior to undertaking works on site, to gain an understanding of the weather conditions and the potential for variations in noise levels.

All noise measurements shall be accompanied by both qualitative description (including cloud cover, approximate wind direction and speed) and quantitative measurements of prevailing local weather conditions throughout the survey period. Rainfall data will be collected from the rain gauge located on-site. All other weather data for the monitoring period will be purchased from the Bureau of Meteorology (BoM) website for the Lismore Observation Station, which is programmed to continuously record the meteorological parameters as shown in *Table 7.1*.

**Table 7.1** Meteorological Measurement Parameters

Measured Parameter	Unit	Sample Interval
Mean Wind Speed	m/s	15 minutes
Mean Wind Direction	degrees	15 minutes
Aggregate Rainfall	Mm	15 minutes
Mean Air Temperature	C°	15 minutes

## Modifying Factor Corrections

Factor	Assessment and Measurement	When to Apply	Correction	Comment
Tonal Noise	One-third octave or narrow band analysis.	<p>Level of one-third octave band exceeds the level of the adjacent bands on both sides by:</p> <ul style="list-style-type: none"> <li>5 dB or more if the centre frequency of the band containing the tone is above 400 Hz.</li> <li>8 dB or more if the centre frequency of the band containing the tone is 160 to 400 Hz inclusive.</li> <li>15 dB or more if the centre frequency of the band containing the tone is below 160 Hz.</li> </ul>	5 dB	Narrow-band frequency analysis may be required to precisely detect occurrence.
Low Frequency Noise	Measurement of C-weighted and A-weighted level.	Measure/assess C and A weighted levels over same time period. Correction to be applied if the difference between the two levels is 15 dB or more.	5 dB	C-weighting is designed to be more responsive to low-frequency noise.

Section 7.4 (Methodology – Noise) in the ERM NBMP v3.1 indicates noise monitoring to be conducted at receiver locations 2, 4 and 9, and refers to figure F1.3. Monitoring was conducted at receiver location 8 instead of Receiver 9 as F1.3 identifies Receiver 8 as the primary receiver and receiver 9 as a supplementary receiver.

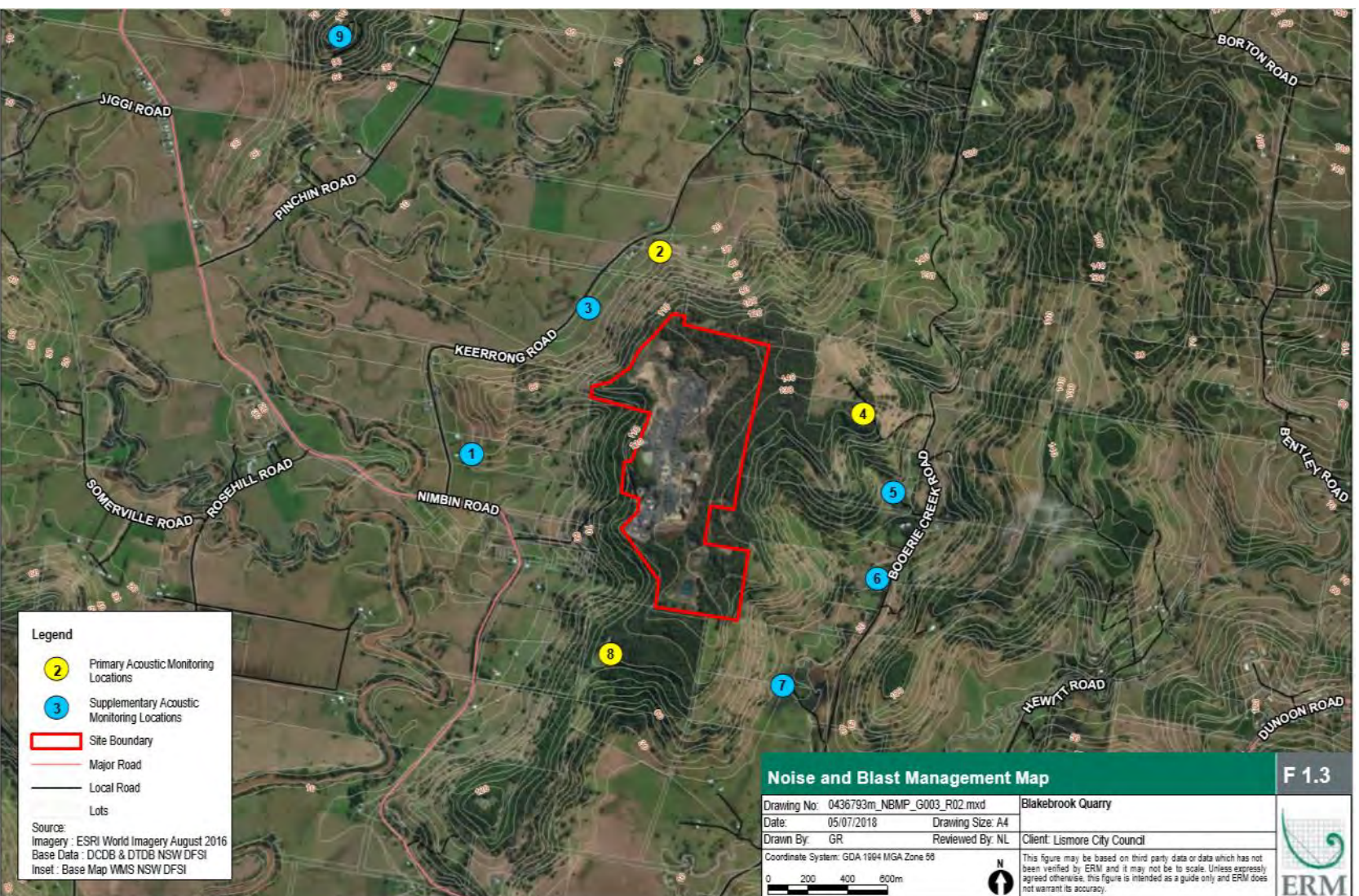
Noise monitoring at locations 2 and 4 were conducted within 30m of the residential dwelling in the direction of the quarry.

Noise monitoring at Receiver 8 was conducted approximately 40m from the residential dwelling in the direction of the quarry due to a horse in the paddock near the dwelling.

**Table 2.1 Primary Receiver Noise Monitoring Locations**

Primary Receiver Locations	
Receiver	Street Address
2	[REDACTED]
4	[REDACTED]
8	[REDACTED]

Figure 2.1 Noise Monitoring Locations NBMP v3.1



### 3 MEASUREMENT PROCEDURE AND RESULTS

#### 3.1 Instrumentation

**Table 3.1 Instrumentation for Noise Monitoring**

<b>Instrument</b>	<b>Serial #</b>	<b>Calibration Date</b>
Brüel and Kjær 2250L Sound Level Meter	3006868	July 2019
Brüel and Kjær 2250 Sound Level Meter	3028735	January 2020
SVAN SV30 Acoustic Calibrator	3849	September 2020

The sound level meters (SLM) used during the noise survey conform to Australian Standard 1259 "Acoustics - Sound Level Meters", (1990) as type 1 precision sound level meters, and have an accuracy suitable for both field and laboratory use. The meters' calibrations were checked before and after the measurement periods with a SVAN SV30 acoustic calibrator. No significant system drift occurred over the measurement periods.

The SLMs and calibrators have been checked, adjusted and aligned to conform to the factory specifications and issued with conformance certificates by a certified NATA facility.

#### 3.2 Measurement Procedures

Measurements were made in general accordance with procedures laid down in:

1. Australian Standard AS 1055 : 2018 *Acoustics - Description and measurement of environmental noise*
2. The NSW Government *Noise Policy for Industry* (EPA Oct 2017)

The microphone of a B&K 2250L SLM was mounted on a 1.5m high tripod and a Brüel and Kjær outdoor windscreen fitted to the microphone. The SLM was located above the cliff face where the working equipment was operating, to monitor noise levels while measurements were being conducted at the receiver locations. The SLM was set to record continuously for the duration of receiver monitoring with 1 second samples. A sound recording was conducted simultaneously.

The microphone of a B&K 2250 SLM was mounted on a 1.5m high tripod and a Brüel and Kjær outdoor windscreen fitted to the microphone. The SLM was used at the various receiver locations to monitor noise levels while the quarry was operating.

A 15 minute period was recorded at each receiver location with 1 second samples with a simultaneous sound recording.

### 3.3 Weather Conditions

Weather conditions were generally good for acoustic measurements. Observations were taken at each receiver location with a Kestrel 3000 pocket weather meter.

**Table 3.2 Observed Weather Conditions at Receiver Locations**

Receivers Weather Summary 01/12/2020						
Time	Receiver	Temp	Relative Humidity	Wind	Wind Dir	Cloud Cover
		°C	%	Speed (m/s)		
10:15am	4	27	61	0 - 0.15	N	6/8
11:40am	8	29	56	0 - 1.0	N	7/8
12:20pm	2	32	58	0 - 1.0	NE	2/8

Data from the local weather station near the weighbridge at Blakebrook Quarry is presented in Table 3.3.

**Table 3.3 Blakebrook Quarry Local Weather Station**

Blakebrook Quarry Local Weather Station 01/12/2020					
Time	Temp °C	Relative Humidity %	Wind		
			Dir.	Speed	
				(km/h)	(m/s)
09:00am	24.2	80	ENE	0	0.0
09:30am	25.6	75	ESE	0	0.0
10:00am	27.2	71	NE	0	0.0
10:30am	28.2	66	NE	0	0.0
11:00am	28.3	66	ENE	1.6	0.4
11:30am	30.4	58	ESE	1.6	0.4
12:00pm	30.6	60	WNW	1.6	0.4
12:30pm	31.7	54	W	1.6	0.4
1:00pm	33.9	50	W	1.6	0.4

The meteorological data for Lismore Airport (approximately 7kms to the south) for the monitoring period was downloaded from the Bureau of Meteorology website and is provided in Table 3.4.



**Table 3.4 Weather Observations at Lismore Airport**

Lismore Airport Weather 01/12/2020					
Time	Temp °C	Relative Humidity %	Wind		
			Dir.	Speed	
				(km/h)	(m/s)
09:00am	24.1	69	S	7	1.9
09:30am	24.8	66	N	6	1.7
10:00am	25.6	62	N	9	2.5
10:30am	26.3	61	NW	6	1.7
11:00am	27.8	56	NNW	6	1.7
11:30am	28.6	56	NNE	9	2.5
12:00pm	28.5	53	NNE	13	3.6
12:30pm	29.7	48	E	9	2.5
1:00pm	31.0	51	ENE	7	1.9

### 3.3 Measurement Results

**Table 3.5 Measurement Results**

Measurement Summary 01/12/2020							
Measurement	Start Time	Elapsed Time (h:mm:ss)	L <sub>AFmax</sub> [dB]	L <sub>Zeq</sub> [dB]	L <sub>Aeq</sub> [dB]	L <sub>AF10</sub> [dB]	L <sub>AF90</sub> [dB]
Receiver 4	10:17:36	0:15:00	82.2	60.2	44.7	29.2	24.8
Receiver 8	11:42:51	0:15:00	70.5	52.0	44.4	43.8	36.2
Receiver 2	12:20:33	0:15:00	65.3	63.6	45.3	45.7	29.8
Top of Quarry	9:42:37	3:14:09	85.7	79.7	69.1	71.5	66.0

**Note:**

*The above results are the ambient noise levels and includes noise from the rural surroundings and quarry noise if audible.*

**Table 3.6 Noise Observations at Receiver Locations**

Noise Observations at Receiver Locations (All measurements 15 mins)			
Receiver	Start Time	Observed Noise Sources	Quarry Noise
4	10:17	Generally, very quiet background noise. Occasional birds, occasional insects, occasional frogs, distant aircraft	Quarry not audible
8	11:42	Birds, wind in trees, distant traffic on Nimbin Rd, nearby horse, occasional dog barking, insects	Generally, quarry not audible. Low frequency of loader just audible at times.
2	12:20	Birds, insects, occasional wind in trees, occasional local traffic on Keerrong Rd, distant cattle, occasional insects, distant aircraft	Quarry not audible

## 4 DISCUSSION OF RESULTS

The measurements were undertaken while the quarry was operating. It was noted that there was less crushing equipment operating compared to last year and no rock hammers. The quarry management indicated that there was less material to crush and were waiting for a blast in a few weeks to obtain more material for crushing. The noise logger above the quarry indicated that there was consistent quarry noise during the measurement periods at receiver locations.

**Receiver 2** - quarry noise was not audible. The  $L_{A90,15\text{min}}$  was 29.8 dB(A). The  $L_{Aeq,15\text{min}}$  of the quarry operations is estimated to be below 30 dB(A).

**Receiver 4** - quarry noise was not audible. The background was very quiet at this location. The  $L_{A90,15\text{min}}$  was 24.8 dB(A). The  $L_{Aeq,15\text{min}}$  of the quarry operations is estimated to be below 25 dB(A).

The resident noted at times the quarry was audible and mainly dependent on the wind. There was an object dropped near the sound level meter which increased the  $L_{Aeq}$ .

**Receiver 8** - quarry noise was barely audible. The  $L_{A90,15\text{min}}$  was 36.2 dB(A) and mainly attributed to distant traffic on Nimbin Road and wind in trees. Low frequency from the loader was just audible occasionally. The measurement was undertaken in a downwind condition from the quarry operations and represents a worst-case for this particular day. The  $L_{Aeq,15\text{min}}$  of the quarry operations is estimated to be below 35 dB(A).

The resident noted that the quarry was audible at times depending on wind conditions and the equipment being used.

No tonal or low frequency noise characteristics were observed at the receiver locations.

## 5 SUMMARY

A noise monitoring survey was conducted to assess compliance of quarry operational noise levels at Blakebrook Quarry, Blakebrook, via Lismore NSW. Measurements were undertaken with calibrated noise monitoring equipment on the 1<sup>st</sup> of December 2020 and conducted in general accordance with procedures laid down in Australian Standard AS 1055:2018 and the NSW Noise Policy for Industry.

The Blakebrook Quarry operates under EPL No. 3384. Condition L6.1 stipulates that noise from the premises must not exceed 35dB(A)  $L_{Aeq,15min}$  during the day (7am to 6pm) Monday to Saturday at residential receiver locations. The current Noise and Blast Management Plan v3.1 (Aug 2018) allows a limit of 36dB(A)  $L_{Aeq,15min}$  at Receiver 2.

Measurements were conducted at the 3 primary receiver locations while the quarry was operating. The quarry operations were not audible at receiver locations 2 and 4, and occasional low frequency was observed at Receiver 8.

The quarry operational noise levels ( $L_{Aeq,15min}$ ) were not able to be accurately assessed at residential receiver monitoring locations, as the quarry noise was not audible, or barely audible against other noise sources such as distant traffic, insects, birds or moving foliage.

It is estimated from the recorded  $L_{A90,15min}$  levels and observations, that the quarry noise levels are below the Project Specific Noise Level of 35 dB(A)  $L_{eq,15min}$  at receiver locations 4 and 8, and below the Project Specific Noise Level of 36 dB(A)  $L_{eq,15min}$  at receiver location 2.

The current crushing, screening, rock hammering and stock piling operations are on the main pit floor, which provides a substantial noise barrier to receivers. If crushing, screening, rock hammering and stock piling operations change to a higher ground level, then there is potential for increased noise impact at receivers and it is recommended that noise monitoring be conducted at residential receivers.

Receiver 8 is close to the southern cell. It is recommended that noise monitoring be conducted at Receiver 8 when work in the southern cell is undertaken, to assess the noise impact at Receiver 8.

Garry Hall



Acoustic Consultant  
Ambience Audio Services

## APPENDIX A Definitions of Terms

**Sound pressure level ( $L_p$ ):** A measurable quantity of the size or amplitude of the pressure fluctuations (sound waves) above and below normal atmospheric pressure compared to a reference pressure. Sound pressure levels are measured in decibels whereas sound pressure is measured in pascals ( $N/m^2$ ).

**Decibels (dB):** a ratio of energy flows. When used for sound measurement, it is the ratio between a measured quantity of sound pressure and an agreed reference sound pressure. The dB scale is logarithmic and uses the threshold of hearing of 20  $\mu Pa$  (micro pascals) as the reference pressure. This reference level is defined as 0 dB.

**Frequency (Hz):** The number of pressure variations per second (cycles per second) is called the **frequency** of sound and is measured in **Hertz (Hz)**. The rumble of distant thunder has a low frequency, while a whistle has a high frequency. The normal range of hearing for a healthy young person extends from approximately 20Hz up to 20 000 Hz (20 kHz) while the range from the lowest to highest note on a piano is approximately 27.5 Hz to 4.2 kHz.

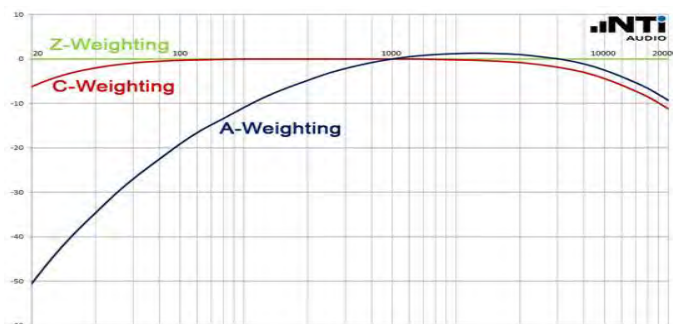
**Spectral characteristics:** The frequency content of noise.

**Octave:** a logarithmic unit for ratios between frequencies, with one octave corresponding to a doubling of frequency. For example, the frequency one octave above 40 Hz is 80 Hz.

**1/3 Octave:** a logarithmic unit of frequency ratio equal to one third of an octave.

**“A” frequency weighting:** The method of frequency weighting the electrical signal within a noise-measuring instrument to give a very approximate simulate to the human perception of loudness. The symbols for the noise parameters often include the letter “A” (e.g.,  $L_{Aeq}$ , dBA) to indicate that frequency weighting has been included in the measurement. “A” weighting is most commonly used with regard to noise control issues, regulations and environmental standards.

**“C” frequency weighting:** The filters used in C weighting captures lower frequencies than A weighting as indicated in the chart below.



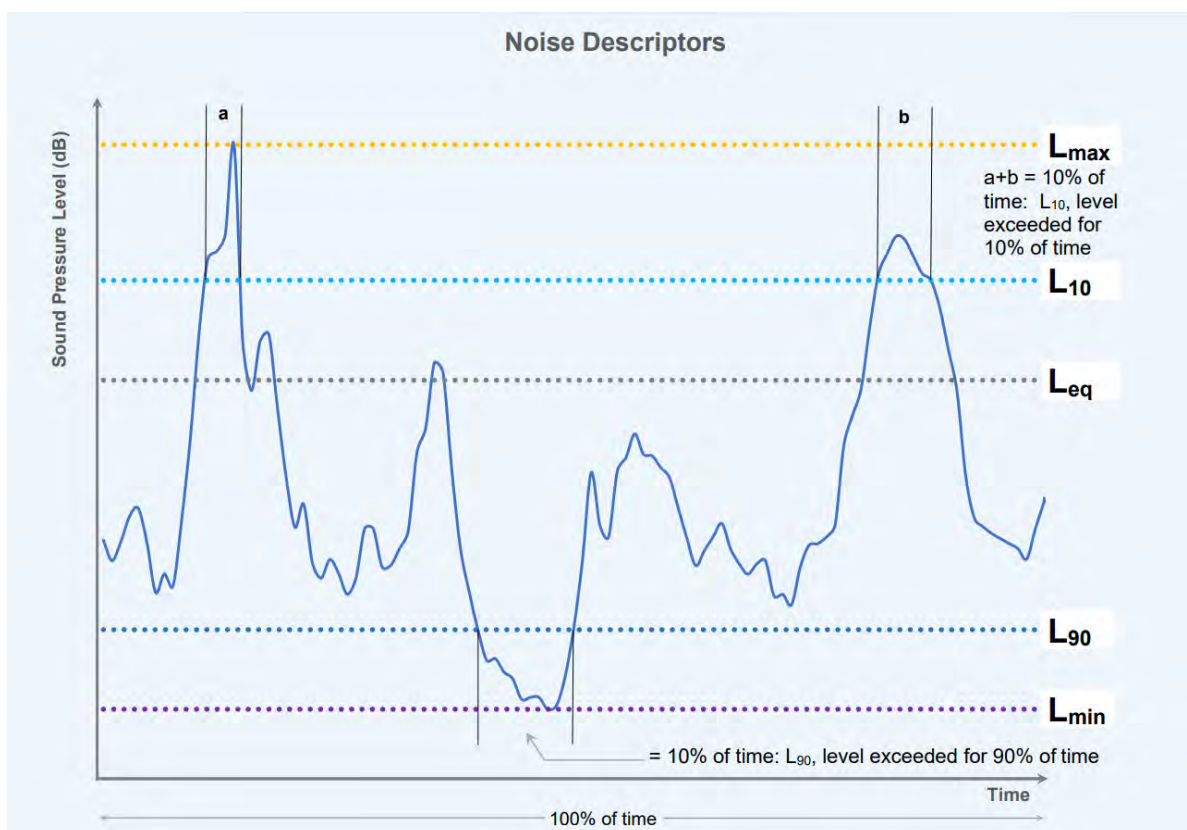
The A-weighting curve is used extensively for general purpose noise measurements but the C-weighting correlates better with the human response to high noise levels.

**Fast, Slow and Impulse time weightings:** Standardised root-mean-square (rms) averaging times to help define fluctuating noise levels. Impulsive noises have high peak levels with a very short duration (e.g., gun shot), or a sequence of such peaks. The 'Slow' time weighting averages the fluctuations over a one second time base whilst the 'Fast' time weighting averages the fluctuations over a one-eighth of a second time base. Environmental assessment standards usually specify the time weighting (**F**, **S**, or **I**) to be used.

**L<sub>Aeq</sub>:** The A-weighted equivalent continuous noise level. A widely used noise descriptor which provides an average of the energy of a constant level of noise which is the same as the varying noise signal being measured. The time in which the measurement was sampled, is indicated with a subscripted number e.g. L<sub>Aeq,15 minute</sub> is a 15-minute sample.

**Percentile Levels L<sub>N</sub>:** The sound pressure level that is exceeded for N per cent of the time over which a given sound is measured. e.g. L<sub>A90</sub> is the A-weighted sound pressure level that is exceeded for 90% of the time over which a given sound is measured.

L<sub>A90</sub> is commonly used to describe the **background noise level** for community noise assessments.



**Ambient noise:** The all-encompassing noise associated within a given environment. It is the composite of sounds from many sources, both near and far.

**Extraneous noise:** Noise resulting from activities that are not typical of the area. Atypical activities may include construction, and traffic generated by holiday periods and by events such as concerts or sporting events. Normal daily traffic is not to be considered extraneous.

**Background noise:** The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is described using the **LA90** descriptor, fast time weighting.

**Intrusive Noise:** Refers to noise that intrudes above the background level by more than 5 decibels.

**Noise limits:** Enforceable noise levels that appear in consents and licences. The noise limits are based on achievable noise levels, which the proponent has predicted can be met during the environmental assessment. Exceedance of the noise limits can result in the requirement for either the development of noise management plans or legal action.

#### **References:**

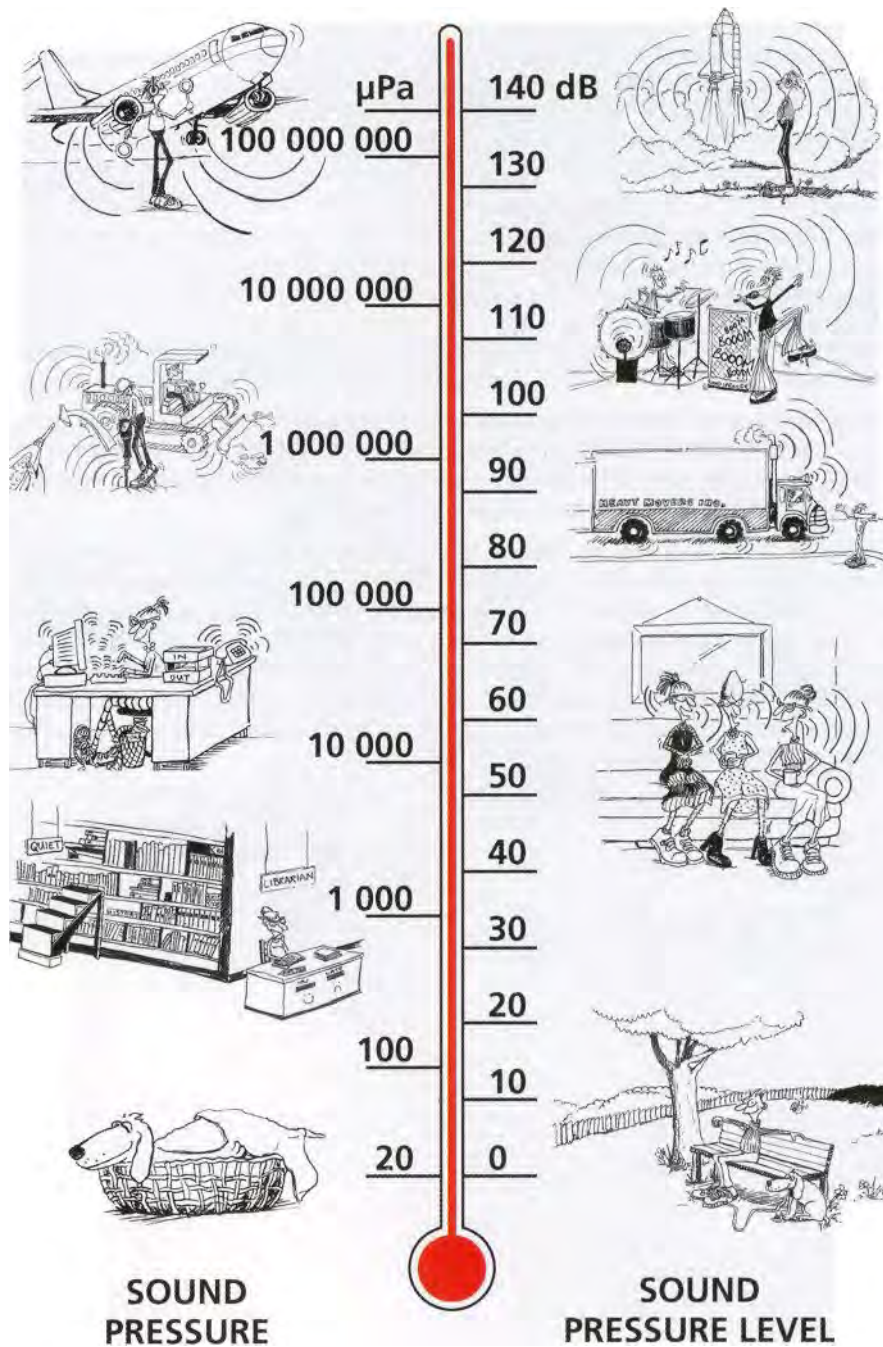
*Measuring Sound* Brüel and Kjær Sound & Vibration Measurements A/S  
September 1984

*Environmental Noise* Brüel and Kjær Sound & Vibration Measurements A/S  
2000, 2001

*New South Wales Industrial Noise Policy* NSW Environment Protection  
Authority January 2000

<https://www.nti-audio.com/en/support/know-how/frequency-weightings-for-sound-level-measurements>

## APPENDIX B Comparison of Sound Pressure Levels



Our hearing covers a wide range of sound pressures – a ratio of over a million to one. The dB scale makes the numbers manageable.

Reproduced from

*Environmental Noise* Brüel and Kjær Sound & Vibration Measurements A/S  
2000, 2001



**Appendix C**  
**Quarry Operations 1<sup>st</sup> Dec 2020**



Source – Google Earth – Image Date 13/02/2019  
Note : Aerial photo not of operations on 1<sup>st</sup> Dec 2020

## Quarry Pit Floor Operations 1<sup>st</sup> December 2020



### Equipment in use during noise monitoring

- 1 XR400 Pegson jaw crusher
- 1 MAXTRACK cone crusher
- 1 2100 power screen
- 1 Cat 329D excavator
- 1 front end loader
- 1 water truck
- various haul trucks
- various service vehicles

The mobile asphalt plant was also operating at times



## Appendix K

# Blast Reports 2020

**Date/Time** Vert at 2:59:37 PM March 2, 2020  
**Trigger Source** Geo: 0.910 mm/s  
**Range** Geo: 254.0 mm/s  
**Record Time** 6.0 sec at 1024 sps

**Serial Number** BE13371 V 10.72-1.1 Minimate Blaster  
**Battery Level** 6.1 Volts  
**Unit Calibration** June 25, 2019 by Saros Int.  
**File Name** O3711CQC.BD0

**Client:** NRQA  
**Monitor:** [REDACTED]  
**Monitor Operator:** Rick Cavanaugh

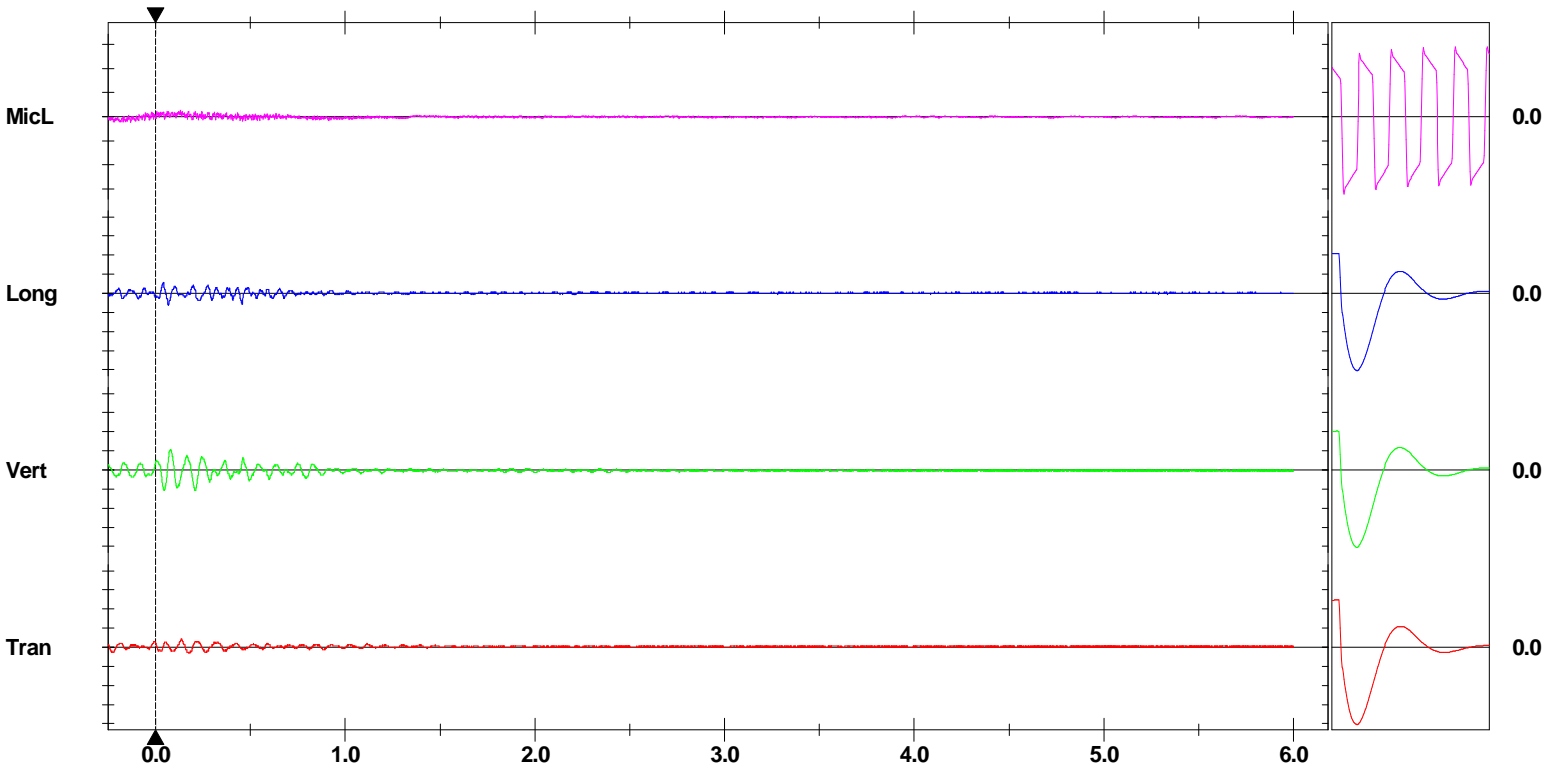
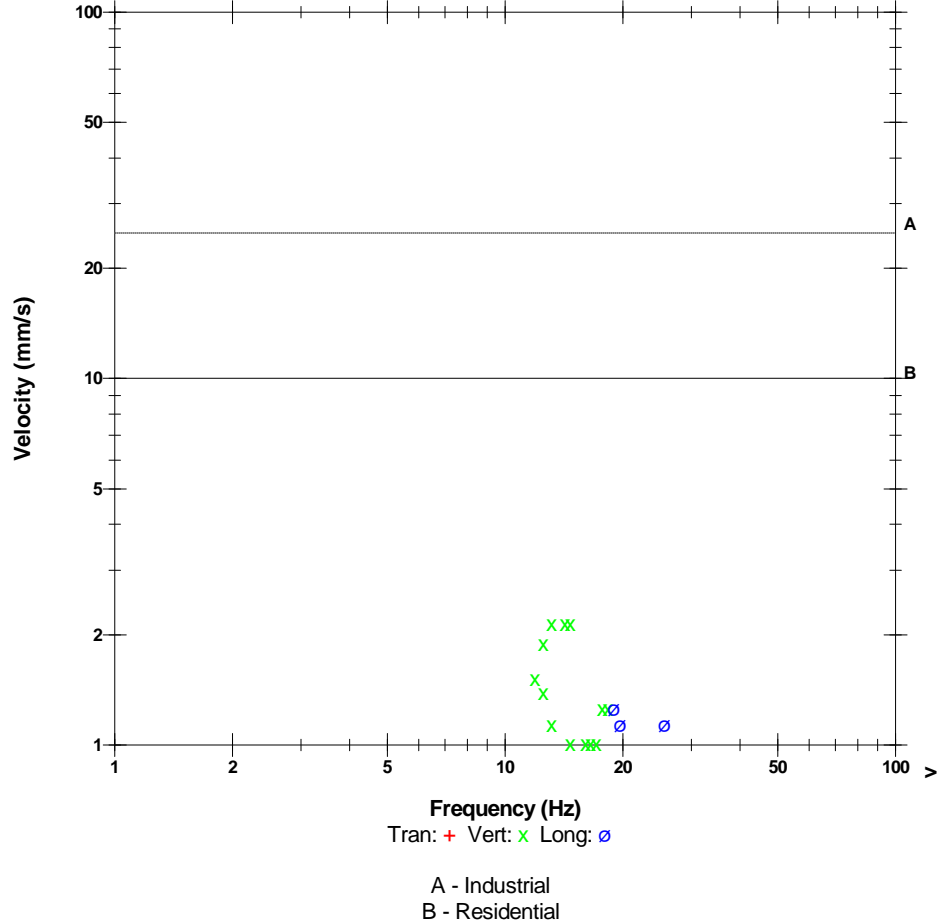
**Shot ID:** BLA38

**Microphone** Linear Weighting  
**PSPL** 102.8 dB(L) 2.750 pa.(L) at 0.130 sec  
**ZC Freq** 20 Hz  
**Channel Test** Passed (Freq = 20.1 Hz Amp = 496 mv)

	Tran	Vert	Long	
PPV	0.889	2.159	1.270	mm/s
ZC Freq	13	15	19	Hz
Time (Rel. to Trig)	0.136	0.043	0.066	sec
Peak Acceleration	0.013	0.027	0.027	g
Peak Displacement	0.010	0.025	0.010	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.4	7.6	7.5	Hz
Overswing Ratio	3.8	3.5	3.6	

**Peak Vector Sum** 2.366 mm/s at 0.043 sec

## Australia 2187.2-1993



**Time Scale:** 0.50 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 10.000 pa.(L)/div  
**Trigger =** [Symbol]

Sensor Check

**Date/Time** Vert at 2:59:52 PM March 2, 2020  
**Trigger Source** Geo: 0.910 mm/s  
**Range** Geo: 254.0 mm/s  
**Record Time** 6.0 sec at 1024 sps

**Serial Number** BE13371 V 10.72-1.1 Minimate Blaster  
**Battery Level** 6.1 Volts  
**Unit Calibration** June 25, 2019 by Saros Int.  
**File Name** O3711CQC.BS0

**Client:** NRQA  
**Monitor Location:** [REDACTED]  
**Monitor Operator:** Rick Cavangha

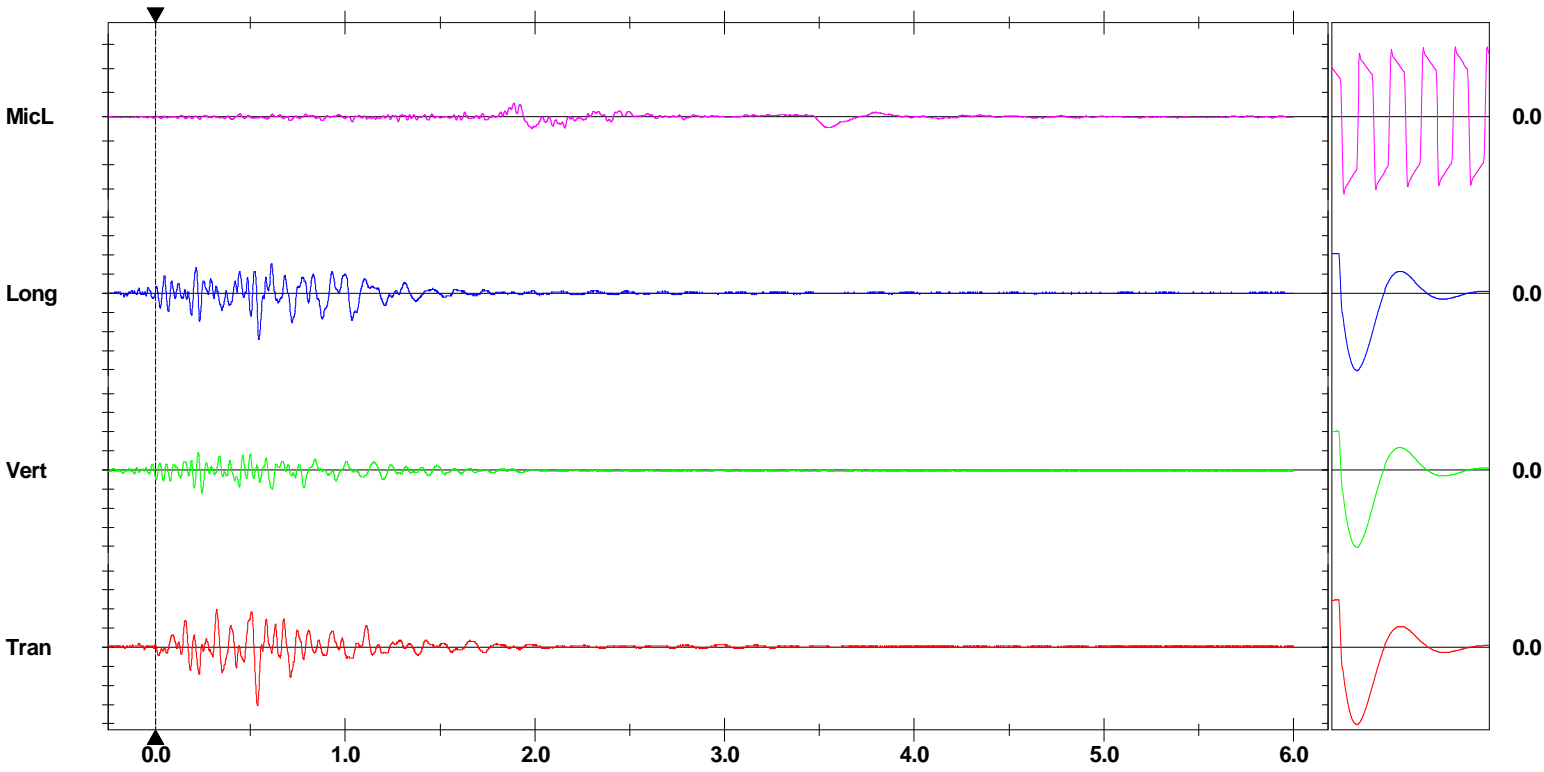
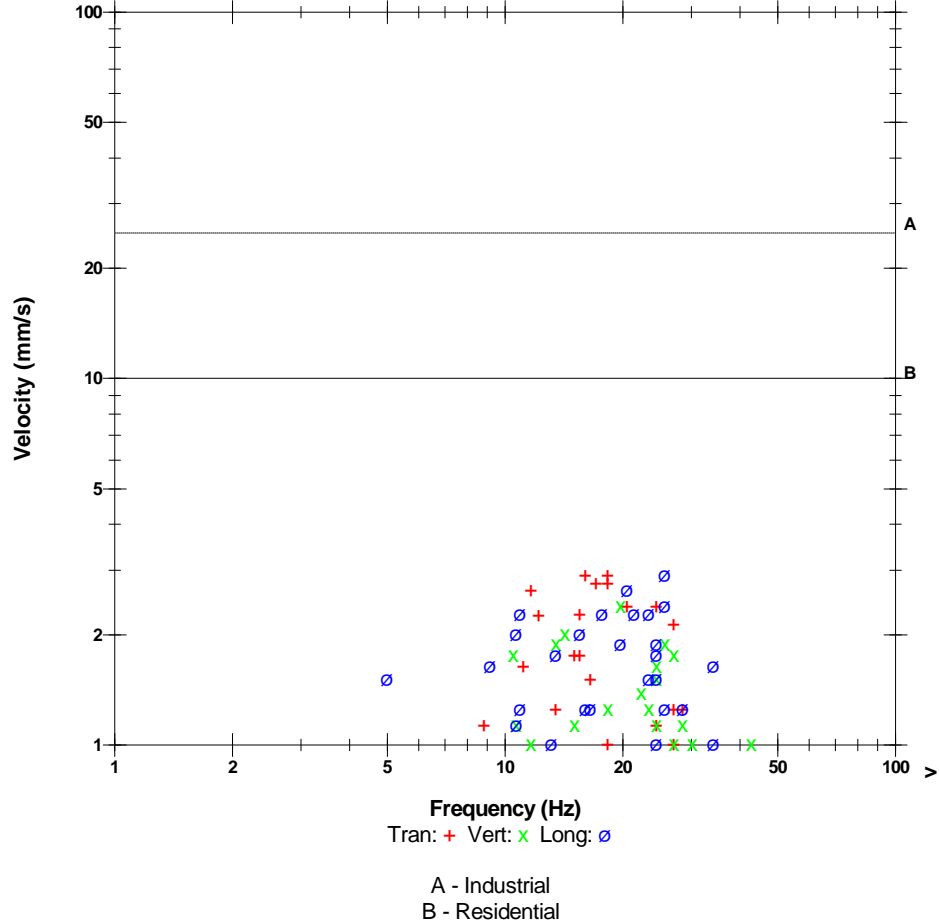
**Shot ID:** BLA38

**Microphone** Linear Weighting  
**PSPL** 108.8 dB(L) 5.500 pa.(L) at 1.887 sec  
**ZC Freq** 4.6 Hz  
**Channel Test** Passed (Freq = 20.1 Hz Amp = 496 mv)

	Tran	Vert	Long	
PPV	3.096	2.413	3.826	mm/s
ZC Freq	14	20	12	Hz
Time (Rel. to Trig)	0.536	0.244	0.544	sec
Peak Acceleration	0.053	0.040	0.080	g
Peak Displacement	0.065	0.024	0.054	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.4	7.6	7.5	Hz
Overswing Ratio	3.8	3.5	3.6	

**Peak Vector Sum** 4.066 mm/s at 0.541 sec

## Australia 2187.2-1993



**Time Scale:** 0.50 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 10.000 pa.(L)/div  
**Trigger =** [Left Arrow] [Right Arrow]

Sensor Check



## Appendix L

# Dust Monitoring Data 2020

Sample Point	Exposure Period	Sample Comments	Sampling Days (days)	Sample Volume	Deposit Rate of Insoluble Solids		Deposit rate of:			
					Total Suspended Solids (TSS)		Ash	Combustible Matter	Soluble Matter	Total Solids
					(g/m <sup>2</sup> /month)	(mg/m <sup>2</sup> /day)	(g/m <sup>2</sup> /month)	(g/m <sup>2</sup> /month)	(g/m <sup>2</sup> /month)	(g/m <sup>2</sup> /month)
<b>Air Quality Criteria</b>			<b>30 +/- 2</b>				<b>4.0</b>			
D1	16/12/19 - 13/01/20	Fine org. matter	28	0.35	1.4	47	1.0	0.4	0.4	1.8
D1	13/01/20 - 10/02/20	Fine organic matter present	28	5.00	2.3	76	0.5	1.8	2.2	4.5
D1	10/02/20 - 09/03/20	Fine organic matter present	28	5.00	1.1	37	0.2	0.9	2.2	3.3
D1	09/03/20 - 06/04/20	..	29	0.60	1.3	44	0.9	0.4	1.5	2.8
D1	06/04/20 - 04/05/20	..	30	0.36	2.6	85	1.4	1.2	1.1	3.7
D1	04/05/20 - 01/06/20	Yellow, Ants	29	0.64	0.8	26	0.4	0.4	1.0	1.7
D1	01/06/20 - 29/06/20	..	28	1.50	0.6	19	0.2	0.4	1.6	2.2
D1	29/06/20 - 27/07/20	..	28	1.20	0.3	8	0.1	0.2	0.8	1.1
D1	27/07/20 - 24/08/20	..	29	0.28	0.3	10	0.1	0.2	0.5	0.8
D1	24/08/20 - 21/09/20	..	28	0.77	0.2	8	0.1	0.2	1.2	1.5
D1	21/09/20 - 19/10/20	Yellow	28	0.37	1.5	49	0.9	0.6	0.8	2.2
D1	19/10/20 - 16/11/20	Brown, spiders	28	0.75	0.7	25	0.4	0.4	1.0	1.8
D1	16/11/20 - 14/12/20	Cloudy	28	4.60	5.3	176	2.5	2.8	3.8	9.1
D2	16/12/19 - 13/01/20	Fine org. matter	28	0.55	1.4	47	1.1	0.3	0.5	1.9
D2	13/01/20 - 10/02/20	Fine organic matter present	28	5.00	1.1	35	0.6	0.5	2.5	3.6
D2	10/02/20 - 09/03/21	Fine organic matter present	28	5.00	3.0	101	0.8	2.2	9.9	12.9
D2	09/03/20 - 06/04/20	..	29	0.50	1.6	55	1.2	0.5	7.1	8.8
D2	06/04/20 - 04/05/20	..	30	0.38	3.9	131	1.1	2.8	3.0	7.0
D2	04/05/20 - 01/06/20	..	29	0.90	0.3	8	0.1	0.1	0.7	0.9
D2	01/06/20 - 29/06/20	..	28	1.53	0.4	13	0.2	0.2	0.9	1.3
D2	29/06/20 - 27/07/20	..	28	1.50	0.3	10	0.0	0.3	0.5	0.8
D2	27/07/20 - 24/08/20	..	29	0.35	0.4	12	0.2	0.1	0.0	0.4
D2	24/08/20 - 21/09/20	Cloudy	28	0.72	2.4	79	1.6	0.8	2.0	4.4
D2	21/09/20 - 19/10/20	..	28	0.53	1.1	36	0.6	0.5	0.3	1.4
D2	19/10/20 - 16/11/20	Cloudy	28	1.45	1.5	49	0.8	0.7	15.7	17.2
D2	16/11/20 - 14/12/20	Cloudy	28	3.90	14.2	473	<b>6.7</b>	7.4	106.3	120.5
D3	16/12/19 - 13/01/20	Fine org. matter	28	0.30	1.3	45	1.0	0.3	0.7	2.0
D3	13/01/20 - 10/02/20	Fine organic matter present	28	5.00	0.9	30	0.6	0.3	2.4	3.3
D3	10/02/20 - 09/03/22	Fine organic matter present	28	5.00	3.2	106	1.1	2.0	13.8	17.0
D3	09/03/20 - 06/04/20	..	29	0.65	0.5	16	0.2	0.3	1.2	1.7
D3	06/04/20 - 04/05/20	..	30	0.32	4.3	145	1.9	2.5	2.5	6.9
D3	04/05/20 - 01/06/20	..	29	0.96	1.0	32	0.6	0.4	0.9	1.8
D3	01/06/20 - 29/06/20	..	28	1.50	1.0	34	0.5	0.5	3.6	4.6
D3	29/06/20 - 27/07/20	..	28	1.50	2.6	86	0.8	1.8	1.2	3.8
D3	27/07/20 - 24/08/20	..	29	0.25	0.7	23	0.3	0.3	0.4	1.1
D3	24/08/20 - 21/09/20	..	28	0.74	0.6	19	0.3	0.2	1.0	1.6
D3	21/09/20 - 19/10/20	Brown	28	0.46	2.3	76	1.0	1.3	0.0	2.3
D3	19/10/20 - 16/11/20	Cloudy	28	1.45	1.5	49	0.8	0.7	1.5	2.9
D3	16/11/20 - 14/12/20	Cloudy	28	4.10	6.5	218	2.0	4.6	66.2	72.8



## Appendix M

# Dust Exceedance Incident Report (Dec 2020)





# INCIDENT REPORT

(DUST EXCEEDANCE)

550 NIMBIN ROAD BLAKEBROOK

**Reporting Period:**

16 November 2020 – 14 December 2020

**23 December 2020**

# Dust Exceedance Report

FOR

Blakebrook Quarry

AT

550 Nimbin Road  
BLAKEBROOK NSW 2480

## Lismore City Council

43 Oliver Avenue, Goonellabah NSW 2480  
PO Box 23A, Lismore, 2480 | T [1300 878 387](tel:1300878387)  
Email: [council@lismore.nsw.gov.au](mailto:council@lismore.nsw.gov.au) | Website: [www.lismore.nsw.gov.au](http://www.lismore.nsw.gov.au)

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ABN: 60 080 932 837

Document No	Issue	Description	Author	Approved by
██████████	23 December 2020	Final	██████████	██████████

Contents

SECTION 1 - INTRODUCTION ..... 4

    1.1 Background..... 4

    1.2 Site Description..... 4

    1.3 Licensing and Management Plan Requirements ..... 5

SECTION 2 – NON-COMPLIANCE DETAILS ..... 7

    2.1 Non-conformance details ..... 7

    2.2 Dust Exceedance Notification ..... 7

    2.3 Investigation Findings ..... 7

    2.4 Mitigation Actions..... 7



# SECTION 1 - INTRODUCTION

---

## 1.1 Background

Lismore City Council (Council) is the owner and operator of Blakebrook Quarry, a State Significant Development (SSD). Blakebrook Quarry currently operates pursuant to the Minister’s Conditions of Approval MP07-0020, dated 18 September 2017, otherwise known as the development approval. As part of the original approval process, an Environmental Impact Statement (EIS) was prepared and submitted to the NSW Department of Planning (now known as the NSW Department of Planning and Environment (DPE)).

The Blakebrook Quarry presently holds an environmental protection licence (EPL) issued by the NSW Environmental Protection Authority (EPA), authorising extractive activities of up to 500,000 tonnes per annum, including asphalt production as an ancillary activity. Blakebrook Quarry excavates aggregate material for use on infrastructure development and maintenance with its primary product being basalt. This basalt is primarily utilised as a road base and aggregate. An asphalt plant currently resides within the Blakebrook Quarry footprint area and operates pursuant to a standard Council development approval (DA) DA90/341. As part of this development approval process an EIS was prepared and submitted to Lismore City Council, Planning Unit. The existing DA permits an average production of 15,000 tonnes of asphalt per annum Blakebrook Quarry has an identified resource of approximately 13.6 million tonnes which based on extraction rate of 600,000 tonnes per annum, would allow for quarrying for approximately 22 years.

## 1.2 Site Description

The site is located approximately seven kilometres north west of Lismore on the Nimbin Road on Lot 53 DP 1254990 (**Figure 1**). Blakebrook Quarry is surrounded by 17.6 ha of dedicated onsite vegetation along with recently acquired and dedicated 45 ha of offsite biodiversity offset land.



**Figure 1. Site Location**

## 1.3 Licensing and Management Plan Requirements

The development approval prescribes the following Air Quality Assessment Criteria:

### AIR QUALITY

#### Air Quality Impact Assessment Criteria

10. The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.

Table 4: Air quality criteria

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

Notes to Table 4:

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

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

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

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

e "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 11, 12 and 13 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.

### REPORTING

#### Incident Reporting

8. The Proponent must immediately notify the Secretary (using the contact name, email address and phone number provided by the Department from time to time) and any other relevant agencies of any incident.
9. Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested. This report must include the time and date of the incident, details of the incident, measures implemented to prevent re-occurrence and must identify any non-compliance with this approval.

The approved Air Quality Management Plan prescribes the following routine dust monitoring criteria. Site locations are shown in **Figure 2**.

Table 8.1 Summary of Monitoring Program

Site	Parameter	Averaging Period	Sampling Period	Sample Collection	Equipment
D1	Deposited Dust	1 Month	Continuous	Every 30 days (± 2 days)	Dust Depreciation Gauge
D2	Deposited Dust	1 Month	Continuous	Every 30 days (± 2 days)	Dust Depreciation Gauge
D3	Deposited Dust	1 Month	Continuous	Every 30 days (± 2 days)	Dust Depreciation Gauge

To assist in determining compliance with the impact assessment criteria in Table 8.4, assessment of the 'ash' component of the dust sample will also be undertaken. Due to the nature and composition of the hard rock resource, and the many pollutants that can make up 'insoluble solids', ash will be used as an indicator of quarry dust contribution. This will ensure that organic pollutants such as bird dropping, pollen, wind-blown vegetation and the like will not be confused with the inorganic dust contribution, of which, a proportion would be from the quarry operations.

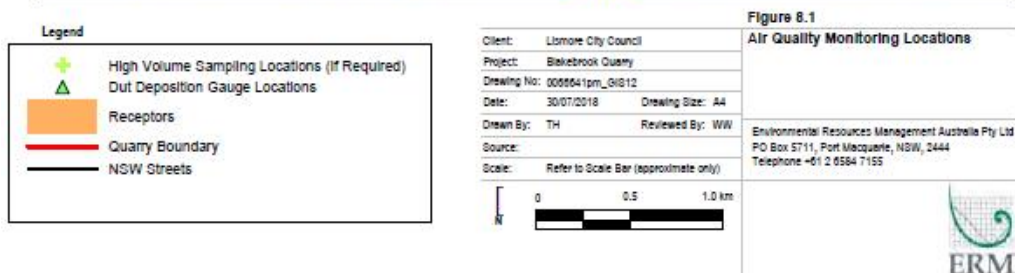
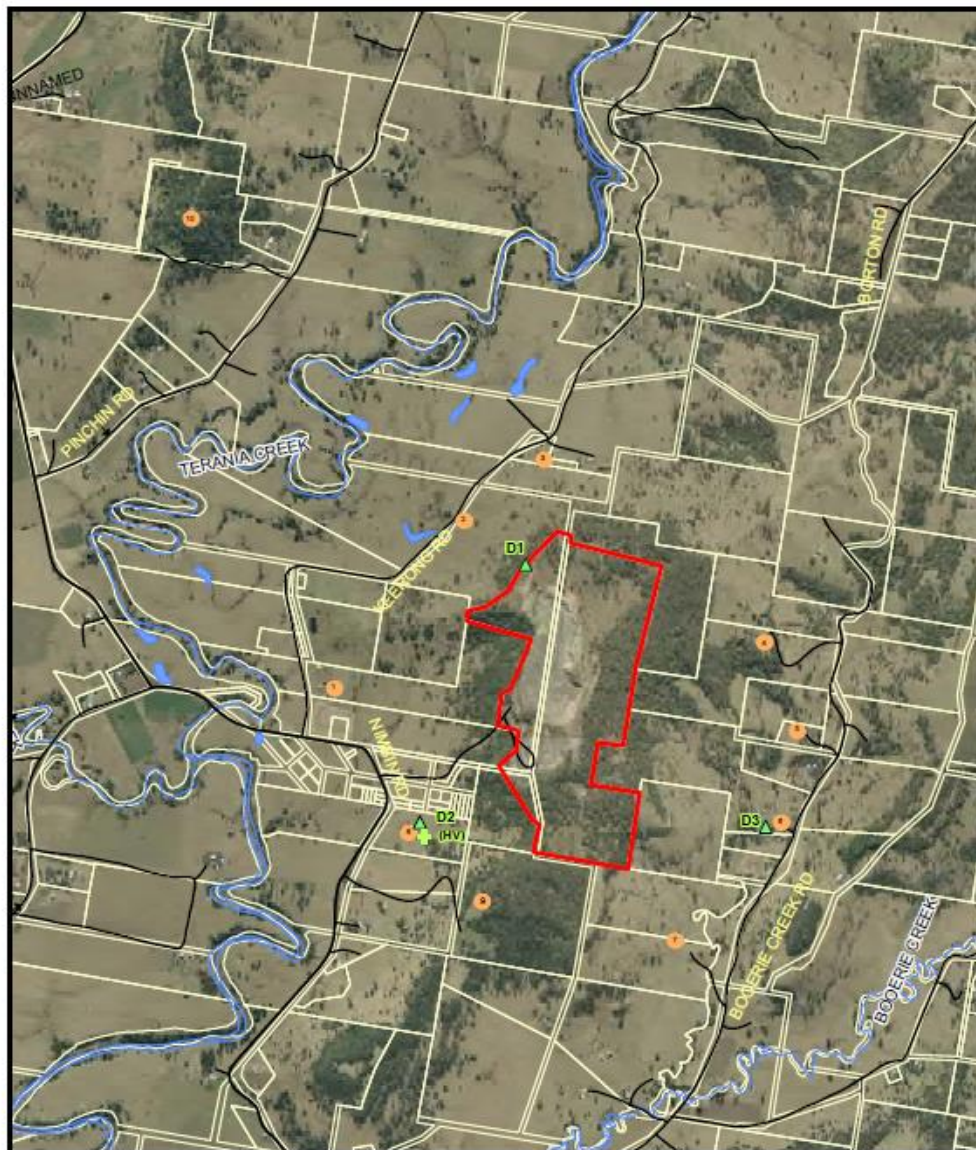


Figure 2. Air quality monitoring locations.

## SECTION 2 – NON-COMPLIANCE DETAILS

---

### *2.1 Non-conformance details*

Blakebrook Quarry routine monthly dust monitoring results were received by the laboratory on Tuesday 22 December 2020. A non-compliant dust result was identified at monitoring location D2 (monitoring period being 16 November 2020 to 14 December 2020) as outlined below. Council immediately notified the department via email (and portal notification) as per Schedule 5 Condition 8.

### *2.2 Dust Exceedance Notification*

Council reported the exceedance to the Department of Planning, Industry and Environment (DPIE) via the Major Projects Planning Portal on Tuesday 22 December 2020.

### *2.3 Investigation Findings*

Council has investigated this exceedance and reviewed environmental and operational conditions that may have contributed to the exceedance.

The closest sensitive receivers to monitoring point D2 are:

- [REDACTED] (located approximately 150 metres west of the location in question), and
- [REDACTED] (located approximately 150 metres south of the location in question).

There have been no complaints against the Quarry received by the public or neighbours during this time.

A discussion with [REDACTED] on 22 December 2020 (where the D2 monitoring station is located), indicated that the dry and windy weather conditions had created dust in his paddock during the monitoring period. [REDACTED] did not identify the Quarry as generating excessive or nuisance dust during the reporting period.

Weather records for the reporting period were dry and hot, with average rainfall for November well below the mean of 93.7 mm, at 4.2 mm for the month. Of the 28-day reporting period, 13 days were above 30°C, up to 38.2°C in November and 37.1°C in December. Wind direction varied over the course of the monitoring period. The additional east and north west dust monitoring locations were consistent with previous monitoring results and were below the limit.

Operational activity at the site has been minimal and consistent (50% of allowable production limit). This has been in response to Council's current fiscal circumstances and existing quarry investigation for long term operational viability. There has been no blasting or active extraction undertaken on the site for more than 9 months. All loads are covered before they leave the operational area, monitored closely by the Weighbridge Operator.

### *2.4 Mitigation Actions*

Operational staff have been notified. The Quarry is now closed for the holiday period, reopening on 4 January 2021. Operational staff will be consulted upon reopening to reiterate dust mitigation practices onsite to minimise any generated dust and impacts from the Quarry.



## Appendix N

# Water Access Licence – Notice of Decision





## Application details

---

<b>Application number</b>	D1018857
<b>Application type</b>	New water access licence - controlled allocation (s65) under the <i>Water Management Act 2000</i> .
<b>Applicant/s</b>	LISMORE CITY COUNCIL

## Decision

---

### Decision

**Granted, subject to conditions**

This decision was made under section 63 of the *Water Management Act 2000*.

For the terms and conditions of the new water access licence, see Schedule 1.

<b>Reference number</b>	30AL324037
<b>Date of decision</b>	25 June 2020
<b>Date of notice</b>	25 June 2020
<b>Registration expiry date</b>	24 December 2020
<b>Determining officer</b>	Estelle Avery

by delegation from the Minister administering the *Water Management Act 2000* under the *Instrument of Delegation (Water Management Act) 2011*

## Reasons for decision

---

This water access licence was granted on the basis DPI Water is satisfied adequate arrangements are in force to ensure that no more than minimal harm will be done to any water source as a consequence of water being taken from the water source under the licence.

Any conditions identified with the first letter "D" were applied for the purpose of protecting the environment from impacts associated with the licence, or to give effect to any agreement between the applicant and a person who objected to the application.

## Right of appeal

---

Section 368 of the *Water Management Act 2000* provides a right of appeal to the Land and Environment Court in certain circumstances:

- The applicant/s may appeal against a decision **imposing certain conditions** on an access licence or **fixing the term** of an access licence.  
Conditions identified with the first letter “D” can be appealed during the appeal period. This right of appeal also applies to conditions which are amended or added after an access licence is granted.
- A person who objected to the granting of the water access licence under section 62 of the *Water Management Act 2000* may appeal against a decision **granting** the water access licence.

If you wish to make an appeal you must do so **within 28 days** from the date of this notice.

## Schedule 1 – Terms and conditions of water access licence

**Important: This water access licence will take effect when it is recorded in the Water Access Licence Register.**

<b>WAL number</b>	The WAL number will be issued when this water access licence is recorded in the Water Access Licence Register.
<b>Reference number</b>	30AL324037
<b>Name of holder/s</b>	<b>1. Holder/s</b> <hr/> <b>1.1 Water access licence holder/s</b> LISMORE CITY COUNCIL
<b>Date of effect</b>	<b>2. Terms of this water access licence</b> <hr/> <b>2.1 Duration</b> This water access licence takes effect when it is recorded in the Water Access Licence Register.
<b>Expiry</b>	This water access licence continues to be in force until it is cancelled.  <p>Note. In accordance with section 77A(2) of the <i>Water Management Act 2000</i>, the Minister is to cancel this water access licence if the Minister is of the opinion that the purpose for which this water access licence was granted no longer exists.</p>
<b>Category/subcategory</b>	<b>2.2 Category</b> LOCAL WATER UTILITY  <p>Note. This category or subcategory of water access licence is a specific purpose access licence. A specific purpose access licence can only be used for the purpose for which it was granted.</p>
<b>Water sharing plan</b>	<b>2.3 Share component</b> <i>North Coast Fractured and Porous Rock Groundwater Sources 2016</i>

<b>Water source</b>	North Coast Volcanics Groundwater Source
<b>Specified shares (ML/units)</b>	70
	<b>2.4 Extraction component</b>
<b>Times, rates circumstances</b>	At any time or rate.
<b>Areas or locations</b>	Extraction from: River, lake or surface water runoff
	Extraction zone: Whole Water Source
	<b>2.5 Nominated water supply work/s</b>
	This water access licence does not nominate any water supply works.
	<b>3. Conditions of this water access licence</b>
	<hr/>
	This water access licence is subject to the following conditions.
	<b>Plan conditions</b>
<b>Water sharing plan</b>	<i>North Coast Fractured and Porous Rock Groundwater Sources 2016</i>
	<b>Take of water</b>
	<hr/>
<b>MW0604-00001</b>	Water allocations remaining in the account for this access licence must not be carried over from one water year to the next water year.
	<hr/>
<b>MW0603-00001</b>	The total volume of water taken under this access licence in any water year must not exceed a volume equal to:
	A. the sum of water in the account from the available water determination for the current year, plus
	B. the net amount of water assigned to or from the account under a water allocation assignment, plus
	C. any water re-credited by the Minister to the account.
	<b>Use of water</b>
	<hr/>
<b>MA2455-00001</b>	Water must be used for town water supply purposes.

## Monitoring and recording

---

**MW2338-00001** The completed logbook must be retained for five (5) years from the last date recorded in the logbook.

---

**MW2339-00001** A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.

---

**MW2337-00001** The following information must be recorded in the logbook for each period of time that water is taken:

- A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and
- B. the access licence number under which the water is taken, and
- C. the approval number under which the water is taken, and
- D. the volume of water taken for domestic consumption and/or stock watering.

---

**MW0606-00001** The volume of water taken in the water year must be recorded in the logbook at the end of each water year. The maximum volume of water permitted to be taken in that water year must also be recorded in the logbook.

---

## Reporting

---

**MW6037-00002** Once the water access licence holder becomes aware of a breach of any condition on this water access licence, the water access licence holder must notify the Minister as soon as practicable. The Minister must be notified by:

- A. email: [nrar.enquiries@nrar.nsw.gov.au](mailto:nrar.enquiries@nrar.nsw.gov.au), or
- B. telephone: 1800 633 362. Any notification by telephone must also be confirmed in writing within seven (7) days of the telephone call.

---

## Other conditions

*No other conditions applicable*

## Glossary

**available water determination** - An Available water determination (AWD) is a water allocation which specifies the amount of water that can be taken during the water year. AWDs are made for each access licence category in each water source. AWDs are defined under the Water Management Act 2000, s. 59.

**domestic consumption** - Domestic consumption is the use of water for normal household purposes in domestic premises situated on the land.

**licensor** - WaterNSW or DPI Water, depending on which organisation administers your licences and/or approvals

**logbook** - A logbook is a document, electronic or hard copy, that records specific required information.

**metered water supply work** - A metered water supply work is a water supply work fitted with a data logger and a water meter that complies with Australian Standard AS 4747: Meters for non-urban water supply.

**stock watering** - Stock watering is the use of water for stock animals being raised on the land. It does not include the use of water for the raising of stock animals on an intensive commercial basis (kept in feedlots or buildings for all, or a substantial part, of the period during which the stock animals are being raised).

**water allocation assignment** - A water allocation assignment is where licence holders assign water allocations from one licence to another licence; the water allocation account of one licence is debited by a volume and the water allocation account of the receiving licence is credited by that volume.

**water year** - A water year starts on 1 July and ends on 30 June in the following year.

Note. All conditions on a water access licence require compliance. An appeal to the Land and Environment Court against a decision to impose certain conditions on a water access licence can be made **within 28 days** after the date the decision is made. Conditions identified with the first letter "D" are those that can be appealed during the appeal period.

Certain dealings and other matters relating to this water access licence or a holding in this water access licence must be registered in the Access Register in accordance with section 71A of the *Water Management Act 2000*. For information about the Access Register, contact Land and Property Information (<http://www.lpi.nsw.gov.au>).





## Appendix O

# Water Access Licence – Certificate



NSW LAND REGISTRY SERVICES - INTEGRATED TITLING SYSTEM

CERTIFICATES OF TITLE DELIVERED

on 20/1/2021 7:10:17 AM

1W SHELLEY OLDHAM  
PO BOX 23A  
LISMORE 2480

<u>Dealing</u>	<u>Certificate(s) of Title</u>	<u>Lodging Party Reference</u>	<u>Invoice</u>
AQ558382 WP	WAL43542	30AL324037	D1347002

CERTIFICATE(S) OF TITLE: 1

MULTI PAGE CERTIFICATE(S) OF TITLE: 0

BOX 1W  
(AQ558382)



NEW SOUTH WALES  
**CERTIFICATE OF TITLE**

WATER MANAGEMENT ACT, 2000



WAL TITLE REFERENCE	
WAL43542	
EDITION	DATE OF ISSUE
1	19/1/2021
CERTIFICATE AUTHENTICATION CODE	
VCRN-YS-MZ7S	



This certificate is issued under s87B of the Water Management Act, 2000.

WARNING NOTE: INFORMATION ON THIS REGISTER IS NOT GUARANTEED

TENURE TYPE: SPECIFIC PURPOSE

HOLDER(S)

-----

LISMORE CITY COUNCIL

ENCUMBRANCES

-----

1. TERM TRANSFER: NIL

ACCESS LICENCE DETAILS

-----

CATEGORY: LOCAL WATER UTILITY

SHARE COMPONENT:

SHARE - 70 MEGALITRES PER YEAR

WATER SOURCE - NORTH COAST VOLCANICS GROUNDWATER SOURCE

WATER SHARING PLAN - NORTH COAST FRACTURED AND POROUS ROCK  
GROUNDWATER SOURCES 2016

EXTRACTION COMPONENT:

TIMES/RATES/CIRCUMSTANCES - SUBJECT TO THE CONDITIONS OF THE WATER  
ACCESS LICENCE

EXTRACTION FROM - RIVER, LAKE OR SURFACE WATER RUNOFF

EXTRACTION ZONE - WHOLE WATER SOURCE

NOMINATED WORKS:

WORK APPROVAL NUMBER(S) - NIL

INTERSTATE TAGGING ZONE - NIL

CONDITIONS

-----

LICENCE CONDITIONS FORM A PART OF THIS LICENCE AND AFFECT THE SHARE  
AND EXTRACTION COMPONENTS. CONDITION STATEMENTS ARE AVAILABLE FROM  
WATERNSW

NOTES

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A WATER LICENCE INFORMATION SHEET IS AVAILABLE FROM THE WATERNSW  
WEBSITE AND SHOULD BE REFERRED TO IN INTERPRETING THIS LICENCE.  
WATERNSW PHONE 1300 662 077, EMAIL CUSTOMER.HELPDESK@WATERNSW.COM.AU  
LICENCE REFERENCE NUMBER: 30AL324037

\*\*\*\* END OF CERTIFICATE \*\*\*\*

ANY ATTEMPT TO ALTER THIS CERTIFICATE COULD RESULT IN HEAVY FINES OR IMPRISONMENT (S.141 REAL PROPERTY ACT).

Water Access Licence Certificate

Water Access Licence Certificate



## Appendix P

# Surface Water Laboratory Results 2020

## RESULTS OF WATER ANALYSIS

12 samples supplied by Ground Water Data Collection Service on 3/03/2020 . Lab Job No. J1370.

Samples submitted by Mathew Baker. Your Job: Blakebrook Quarry

2 Tildon Drive CLUNESNSW 2480

Parameter	Methods reference	Sample 10	Sample 11	Sample 12
		BQSW1	BQSW2	BQSW3
	Job No.	J1370/10	J1370/11	J1370/12
pH	APHA 4500-H <sup>+</sup> -B	7.51	7.22	7.31
Conductivity (EC) (dS/m)	APHA 2510-B	0.316	0.132	0.143
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	215	90	97
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	33	87	31
Bicarbonate (Alkalinity) (mg/L CaCO <sub>3</sub> equivalent)	** Total Alkalinity - APHA 2320	..	..	..
Total Oils and Grease (mg/L)	APHA 5520-D (hexane extractable)	..	..	..
Phosphate (mg/L P)	APHA 4500 P-G	..	..	..
Nitrate (mg/L N)	APHA 4500 NO <sub>3</sub> -F	..	..	..
Nitrite (mg/L N)	APHA 4500 NO <sub>2</sub> -I	..	..	..
Ammonia (mg/L N)	APHA 4500 NH <sub>3</sub> -H	..	..	..
Aluminium (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Iron (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Manganese (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Lead (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Iron (mg/L)	Total Available - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Lead (mg/L)	Total Available - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Calcium (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Magnesium (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Potassium (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Sodium (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Chloride (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
Sulfur (mg/L)	Dissolved - APHA 3125 ICPMS <sup>note 1&amp;2</sup>	..	..	..
<b>BTEX</b>				
Benzene (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
Toluene (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
Ethylbenzene (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
m/p-Xylene (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
o-Xylene (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
Naphthalene (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
<b>Total Recoverable Hydrocarbons (TRH)</b>				
C6-C9 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
C10-C14 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
C15-C28 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
C29-C36 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
C10-C16 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
C16-C34 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
C34-C40 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..
Sum C10-C36 Fraction (µg/L or ppb)	Subcontracted: SGS report SE203569	..	..	..

### Notes:

- Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH < 2;  
Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
- Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
- 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
- For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
- Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- Analysis conducted between sample arrival date and reporting date.
- \*\* NATA accreditation does not cover the performance of this service.
- .. Denotes not requested.
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- Results relate only to the samples tested.
- This report was issued on 17/03/2020.



## RESULTS OF WATER ANALYSIS

3 samples supplied by Ground Water Data Collection Service on 3/06/2020 . Lab Job No. J4461.

Samples submitted by Mathew Baker. Your Job: Blakebrook Quarry

2 Tildon Drive CLUNES NSW 2480

Parameter	Methods reference	Sample 1	Sample 2	Sample 3
		BQSW1 3/6/20	BQSW2 3/6/20	BQSW3 3/6/20
	<i>Job No.</i>	J4461/1	J4461/2	J4461/3
pH	APHA 4500-H <sup>+</sup> -B	7.35	7.64	7.54
Conductivity (EC) (dS/m)	APHA 2510-B	0.729	0.172	0.166
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	496	117	113
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	9	16	15

### Notes:

- 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
- For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
- Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- Analysis conducted between sample arrival date and reporting date.
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- Results relate only to the samples tested.
- This report was issued on 05/06/2020.



WORLD RECOGNISED  
**ACCREDITATION**  
Accreditation No. 14960  
Accredited for compliance  
with ISO/IEC 17025 - Testing

checked: .....  
Graham Lancaster  
Laboratory Manager

## RESULTS OF WATER ANALYSIS

3 samples supplied by Ecoteam on 3/09/2020 . Lab Job No. J7918.

Samples submitted by Lise Bolton. Your Job: SMC010-Blakebrook WQ-Surface Water-SEPT20

13 Ewing Street LISMORE NSW 2480

Parameter	Methods reference	Sample 1	Sample 2	Sample 3
		SW1 3/9/20	SW2 3/9/20	SW3 3/9/20
	<i>Job No.</i>	<i>J7918/1</i>	<i>J7918/2</i>	<i>J7918/3</i>
<b>Total Suspended Solids (mg/L)</b>	GFC equiv. filter - APHA 2540-D	66	1	4
<b>Phosphate (mg/L P)</b>	APHA 4500 P-G	0.007	0.015	0.016
<b>Nitrate (mg/L N)</b>	APHA 4500 NO <sub>3</sub> <sup>-</sup> -F	<0.005	<0.005	<0.005
<b>Nitrite (mg/L N)</b>	APHA 4500 NO <sub>2</sub> <sup>-</sup> -I	0.014	0.015	0.013
<b>Ammonia (mg/L N)</b>	APHA 4500 NH <sub>3</sub> -H	0.100	0.109	0.040

### Notes:

- 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
- Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- Analysis conducted between sample arrival date and reporting date.
- \*\* NATA accreditation does not cover the performance of this service.
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- Results relate only to the samples tested.
- This report was issued on 10/09/2020.



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ACCREDITATION

Accreditation No. 14960  
Accredited for compliance  
with ISO/IEC 17025 - Testing

checked: .....  
Graham Lancaster  
Laboratory Manager

## RESULTS OF WATER ANALYSIS

2 samples supplied by Ecoteam on 7/12/2020 . Lab Job No. K1377.

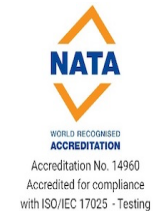
Samples submitted by Lise Bolton. Your Job: SMC010-Blakebrook WQ-Surface Water-Dec20

13 Ewing Street LISMORE NSW 2480

Parameter	Methods reference	Sample 1	Sample 2
		SW2 300 02/12/2020	SW3 300 02/12/2020
	<i>Job No.</i>	<i>K1377/1</i>	<i>K1377/2</i>
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	15	15
Phosphate (mg/L P)	APHA 4500 P-G	0.023	0.014
Nitrate (mg/L N)	APHA 4500 NO <sub>3</sub> -F	<0.005	<0.005
Nitrite (mg/L N)	APHA 4500 NO <sub>2</sub> -I	0.006	<0.005
Ammonia (mg/L N)	APHA 4500 NH <sub>3</sub> -H	0.052	0.044

### Notes:

1. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
2. Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
3. Analysis conducted between sample arrival date and reporting date.
4. \*\* NATA accreditation does not cover the performance of this service.
5. ... Denotes not requested.
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8. Results relate only to the samples tested.
9. This report was issued on 14/12/2020.







## Appendix Q

# Ground Water Monitoring Data 2020

Site	Date	pH	Conductivity (EC) (dS/m)	Total Oils and Grease (mg/L)	Iron - Total (mg/L)	Lead - Total (mg/L)	Iron - Dissolved (mg/L)	Lead - Dissolved (mg/L)	C10-C16 Fraction (µg/L or ppb)	C16-C34 Fraction (µg/L or ppb)	C34-C40 Fraction (µg/L or ppb)	Benzene (µg/L or ppb)	Toluene (µg/L or ppb)	Ethylbenzene (µg/L or ppb)	m/p-Xylene (µg/L or ppb)	o-Xylene (µg/L or ppb)	Naphthalene (µg/L or ppb)	Sodium (mg/L)	Potassium (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Chloride (mg/L)	Sulfate	Bicarbonate (Alkalinity) (mg/L CaCO <sub>3</sub> equivalent)
<b>BQS1-S interim triggers</b>		<b>7.12</b>	<b>0.51</b>	<b>10.8</b>	<b>1.829</b>	<b>0.001</b>																		
BQS1-S	3/03/2020	7.07	0.43	3.1	0.614	<0.001	0.006	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	59	3.7	22.6	8.2	19	5	155
BQS1-S	3/06/2020	6.69	0.42	4.2	<b>2.229</b>	<b>0.002</b>	0.007	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	55	3.3	25.4	9.6	21	3	183
BQS1-S	3/09/2020	6.67	0.32	5.5	0.269	<0.001	<0.005	<0.001	<60	<200	<100	<0.5	0.5	<0.5	<1	<0.5	<0.5	47	3.1	19.9	7.1	19	6	141
BQS1-S	3/12/2020	<b>8.01</b>	0.36	4.0	0.161	<0.001	0.052	<0.001	<60	200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	46	2.8	20.2	7.1	23	4	150
<b>BQS1-I interim triggers</b>		<b>8.12</b>	<b>1.62</b>	<b>21.0</b>	<b>4.977</b>	<b>0.005</b>																		
BQS1-I	3/03/2020	8.07	1.54	<2	0.218	<0.001	0.003	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	275	6.1	35.0	6.7	336	18	180
BQS1-I	3/06/2020	8.07	1.42	2.5	1.249	0.002	<0.005	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	262	5.5	31.3	5.9	304	16	188
BQS1-I	3/09/2020	8.11	1.37	4.3	0.165	<0.001	0.006	<0.001	<60	<200	<100	<0.5	0.6	<0.5	<1	<0.5	<0.5	269	5.8	32.6	5.9	325	15	188
BQS1-I	3/12/2020	6.93	1.53	3.8	0.062	<0.001	0.019	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	263	5.3	31.0	5.6	322	12	180
<b>BQS1-D interim triggers</b>		<b>8.30</b>	<b>1.83</b>	<b>14.2</b>	<b>6.580</b>	<b>0.009</b>																		
BQS1-D	3/03/2020	8.25	1.80	2.5	0.454	0.004	0.006	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	347	4.1	13.0	1.7	426	41	135
BQS1-D	3/06/2020	8.04	1.69	<2	0.406	0.002	<0.005	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	344	4.0	14.0	1.8	402	40	128
BQS1-D	3/09/2020	<b>8.34</b>	<b>1.68</b>	4.2	0.305	0.001	<0.005	<0.001	<60	<200	<100	<0.5	0.7	<0.5	<1	<0.5	<0.5	348	3.9	13.3	1.8	441	40	125
BQS1-D	3/12/2020	<b>7.66</b>	<b>1.89</b>	4.0	0.118	<0.001	0.012	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	339	3.9	14.0	1.7	450	36	120
<b>BQN1-S interim triggers</b>		<b>7.18</b>	<b>1.17</b>	<b>4.1</b>	<b>2.162</b>	<b>0.001</b>																		
BQN1-S	3/03/2020	7.18	1.11	<2	1.857	<0.001	0.929	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	170	4.3	28.4	17.5	215	5	210
BQN1-S	3/06/2020	7.15	1.05	<2	1.772	<0.001	0.636	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	172	4.0	29.1	18.5	185	4	200
BQN1-S	3/09/2020	<b>8.72</b>	0.98	0.6	1.380	<0.001	0.056	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	169	3.9	28.0	17.6	215	8	226
BQN1-S	3/12/2020	6.60	1.10	3.9	1.637	<0.001	0.028	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	167	3.8	28.9	17.0	201	7	140
<b>BQN1-I interim triggers</b>		<b>11.34</b>	<b>2.08</b>	<b>9.0</b>	<b>1.972</b>	<b>0.018</b>																		
BQN1-I	3/03/2020	9.39	1.96	7.2	0.519	<0.001	0.002	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	349	8.3	24.8	5.0	541	21	50
BQN1-I	3/06/2020	10.99	1.79	2.1	1.093	0.001	<0.005	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	331	10.6	27.0	2.2	450	17	131
BQN1-I	3/09/2020	9.32	1.84	<2	0.243	<0.001	<0.005	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	333	7.3	45.8	6.9	516	21	66
BQN1-I	3/12/2020	9.71	1.91	4.1	<b>4.200</b>	0.004	0.756	<0.001	<60	350	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	310	10.0	20.0	5.2	470	40	99
<b>BQN1-D interim triggers</b>		<b>9.10</b>	<b>1.44</b>	<b>4.4</b>	<b>97.645</b>	<b>0.008</b>																		
BQN1-D	3/03/2020	8.90	<b>1.45</b>	<b>7.5</b>	3.878	<0.001	0.01	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	287	3.0	9.1	0.6	319	72	130
BQN1-D	3/06/2020	8.74	1.38	2.9	4.030	<0.001	<0.005	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	274	2.7	9.3	0.6	285	70	125
BQN1-D	3/09/2020	8.87	1.42	2.3	2.815	<0.001	<0.005	<0.001	<60	<200	<100	<0.5	0.8	<0.5	<1	<0.5	<0.5	281	2.8	11.2	1.9	319	89	126
BQN1-D	3/12/2020	7.64	1.15	<b>7.8</b>	13.412	0.002	3.6	<0.001	<60	430	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	280	3.0	14.3	6.8	299	90	160
<b>BQN2-S interim triggers</b>		<b>11.07</b>	<b>1.14</b>	<b>3.6</b>	<b>0.579</b>	<b>0.004</b>																		
BQN2-S	3/03/2020	<b>11.34</b>	1.02	<b>4.6</b>	0.130	<0.001	0.011	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	165	7.5	21.0	0.4	209	32	95
BQN2-S	3/06/2020	9.29	1.02	3.2	0.534	0.001	<0.005	<0.001	62	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	182	6.6	18.9	3.5	218	24	114
BQN2-S	3/09/2020	10.10	<b>1.15</b>	3.0	0.341	0.002	0.016	<0.001	<60	<200	<100	<0.5	3.5	<0.5	<1	<0.5	<0.5	183	7.5	25.0	3.6	231	26	109
BQN2-S	3/12/2020	8.48	<b>1.42</b>	2.9	0.072	<0.001	0.054	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	187	6.6	21.0	4.8	237	23	140
<b>BQN2-I interim triggers</b>		<b>8.67</b>	<b>1.20</b>	<b>6.9</b>	<b>0.301</b>	<b>0.002</b>																		
BQN2-I	3/03/2020	8.00	1.08	3.3	0.109	<0.001	0.041	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	175	9.9	31.1	8.9	153	100	195
BQN2-I	3/06/2020	8.11	0.88	4.0	0.093	<0.001	0.028	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	144	9.7	27.2	9.2	126	40	195
BQN2-I	3/09/2020	8.06	0.71	2.3	0.136	<0.001	0.057	<0.001	<60	<200	<100	<0.5	1.5	<0.5	<1	<0.5	<0.5	120	7.8	25.7	9.6	110	24	190
BQN2-I	3/12/2020	8.09	0.90	2.3	0.018	<0.001	0.005	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	133	8.9	30.9	8.7	137	30	170
<b>BQN2-D - interim triggers</b>		<b>8.85</b>	<b>1.01</b>	<b>4.0</b>	<b>3.904</b>	<b>0.005</b>																		
BQN2-D	3/03/2020	<b>8.88</b>	0.98	<2	0.084	<0.001	0.004	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	222	2.3	3.4	0.6	102	17	345
BQN2-D	3/06/2020	<b>8.87</b>	0.94	<2	<b>12.964</b>	<b>0.010</b>	0.021	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	227	1.9	2.9	0.6	103	15	340
BQN2-D	3/09/2020	<b>9.01</b>	0.90	<b>5.7</b>	1.247	<0.001	0.042	<0.001	<60	230	<100	<0.5	1.4	<0.5	<1	<0.5	<0.5	225	2.3	4.3	0.8	89	16	346
BQN2-D	3/12/2020	8.58	<b>1.03</b>	3.6	0.180	<0.001	0.060	<0.001	<60	<200	<100	<0.5	<0.5	<0.5	<1	<0.5	<0.5	207	2.0	3.5	0.5	88	16	330



## Appendix R

# Community Consultative Committee Minutes

**2020**

**Present:** Chairperson, Commercial Services Manager, Compliance Manager, Quarry  
Operations Coordinator, Compliance Officer

Community Committee Members: Neighbour 7

**Apologies:** Neighbour 1, Neighbour 8, Local Land Services staff

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### **Welcome**

The meeting opened at 4.03pm by the Chairperson and welcomed all members.

### **Previous Minutes**

Overview of previous meeting and minutes were accepted as being true and correct.

### **Business arising from minutes of previous meeting:**

#### **Fencing**

Fencing complete along Neighbour 3 boundary and Neighbour 1 boundary.

- Neighbour 1 very happy with fencing, passing on thanks to Council staff and contractor for an excellent job

Map has been prepared of fencing type and condition

#### **Wild dog baiting**

Due to COVID-19 the baiting program was postponed from March until September 2020.

There was little interest for a community bait, only one (1) neighbouring property participated with the Quarry.

Vertebrate Pest Control training conducted by LLS was attended by Quarry staff and baiting commenced on 8 September 2020 with Notification period of 6 months (ending 8 March 2021).

To date 29 from 40 baits have been taken with baiting to continue until expiration of Notification period (or until baits are no longer taken, whichever occurs first)

#### **Bushfire management on site**

- Operational bush fire management plan in development
- Fences, gates and access roads mapped as above

#### **Traffic Management Assessment**

- Compliance Manager advised the Quarry (Commercial Entity) pays Section 94 levy on outgoing quarry material. Council receives this payment and is responsible for Nimbin Road maintenance. Noting this meeting was being held by the commercial entity (Blakebrook Quarry) and could not speak for divisions of Council. Section 94 Levies Jan-Dec 2019 = \$141,328.59
- Turning intersection redesign still currently with DPIE under assessment.

### **Correspondence**

Email sent to an enquiring neighbour regarding – straying cattle information on 10/12/2019

Email sent to members regarding - Council's website link and Quarry's reporting page 22/1/2020

Email and letters sent to members regarding – postponement of Wild Dog baiting program due to COVID-19.

Condolence letters sent to families on the passing of Neighbour 3 and Neighbour 2.

### **General Business**

- Quarry Operation and Production
  - Quarry operation is currently at low activity.
  - The Quarry being licenced as a State Significant Project means additional reporting and compliance requirements. Council has been actively working on addressing imposed compliance requirements through thorough auditing which has resulted in significant increases to costs.
  - Crushing operations are now performed by a contractor on site (recently put in place through the Procurement process).
  - Drill and Blast tender will soon be ready to go to market to compliment crushing operations.
  - Asphalt plant production has been busy recently (upcoming night works as below).
- Night works – separate DA. Night shift from 1st – 6th November inclusive. Neighbours to Quarry commented they are aware of night works with Asphalt plant however it doesn't bother them as only periodic night activity.
- Project to dismantle old Asphalt Plant in progress. Includes installation of water treatment device for vehicle washdown area (stage 1), removal of old tanks (2 stage process) and installation of fuel bowser (stage 3).

### **Amalgamation of Asphalt and Quarry Development Application**

Still ongoing and has been sitting with the DPIE for over 12 months. Application is now in the assessment phase, so expecting to hear an outcome soon.

### **LEP AMMENDMENT – E2 Conservation Zoning**

LEP amendment still under assessment and Map sheets uploaded to DPIE for finalisation. Possibly be gazetted in November

### **Annual Environmental Monitoring Report (AEMR)**

The 2019 AEMR was completed and submitted to the Department of Planning, Industry and Environment (DPIE) for review on 31 March 2020. The DPIE has responded to Council advising it has accepted this report in line with requirements of the Approval. The report can be found on Council's website.

Three (3) non-compliances

- Two minor dust exceedances within Quarry boundary – furthest from operations anticipated to be related to bushfire impacts at the time.
- Groundwater data exceedance in March 2019. Background data collection in progress per revised Soil and Water Management Plan to establish more accurate trigger levels.

Key action items for next reporting period

- Continuation of groundwater data collection to establish 12 data points for each monitoring well
- Working with Council's Strategic Planners to finalise the Planning Proposal to rezone the environmental offset area to the E2 Environmental Conservation Zone
- Continuing to work with DPE to finalise the current modification request to Part 3A Approval No.07\_0020

### **Site Maintenance**

Weed Control

- Regular weed control is undertaken by the Quarry's Bush Regeneration contractors. In accordance with Bushland Regeneration Plan and Biodiversity Offset Strategy.
- \$60,000 per year allocated to Bush Regen activities. Slightly ahead of schedule overall. e5c slightly due to dry and dusty conditions in 2019. w4 commenced early and some additional work

undertaken in s2 to manage weeds and encourage natural regeneration. Zones n2, n3, e5a and e5b completed on schedule. Zone w4 to be completed by end of 2021 and e1 by end of 2022.

Groundwater Investigation

As a result of the DPIE required Groundwater Investigation Council was required to purchase 70ML of groundwater shares. Council engaged a broker and successfully bided for 70ML of water shares in July 2020.

Additional Other Business

External audit for ISO certification occurring 2-6 November 2020

The meeting closed at 4.30pm. Meetings are scheduled annually, due October 2021.

<b>ACTION</b>	<b>ACTION OUTCOME</b>	<b>BY WHOM &amp; WHEN</b>
Wild dog baiting	to continue until Notification period lapses	Quarry staff – March 2021
Contact LLS to enquire about availability of wild dog baits	Contact Committee members and advise outcome	Council – 31 January 2020 <b>Complete</b>
Traffic Management Assessment relating to Nimbin Road	Forward link to Departments State projects page to ensure committee members know where to locate assessment information and outcome	Council – 31 January 2020 <b>Complete</b>
Council website Quarry records	Forward link to Council records page to ensure committee members can find referenced records	Council – 31 January 2020 <b>Complete</b>



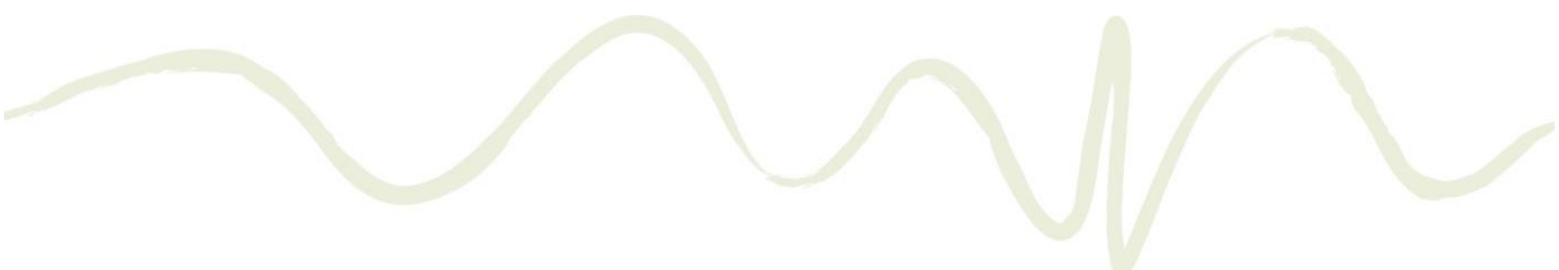
## Appendix S

# Information Available on LCC Website

Information to be provided on LCC website as per Schedule 5 Condition 14

<b>Schedule 5 Condition 14 Description</b>	<b>Available on LCC Website 19/03/2021?</b>
<b>(Reference) Document Title</b>	
<i>the documents listed in condition 2(a) of Schedule 2;</i>	
Environmental Assessment <sup>1</sup>	Y
Environmental Assessment (Mod 1) <sup>2</sup>	Y
<i>current statutory approvals for the project;</i>	
Part 3A Approval No.07_0020 (Mod 1)	Y
EPA Licence 3384	Y
<i>all approved strategies, plans and programs required under the conditions of this approval;</i>	
(Sch 3.Cond. 5) Noise Management Plan	Y
(Sch. 3 Cond. 9) Blast Management Plan	Y
(Sch. 3 Cond. 9) Mine Safety Management Plan	Y
(Sch. 3 Cond. 12) Air Quality Management Plan	Y
(Sch. 3 Cond. 19) Soil and Water Management Plan	Y
(Sch. 3 Cond. 19) Groundwater Monitoring and Management Sub Plan	Y
(Sch. 3 Cond. 19) Pollution Response Management Plan	Y
(Sch. 3 Cond. 23) Traffic Management Plan	Y
(Sch. 3 Cond. 24) Aboriginal Heritage Management Plan	Y
(Sch. 3 Cond. 28) Biodiversity and Rehabilitation Management Plan	Y
(Sch. 3 Cond. 28) Biodiversity Strategy	Y
(Sch. 5 – Cond. 1) Environmental Management Strategy	Y
<i>a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;</i>	
Blast Reports – 2020	Y
Noise Monitoring Reports – 2020	Y
Dust Monitoring Summary Results – 2020	Y
Ground Water Monitoring Results – 2020	Y
Surface Water Monitoring Results – 2020	Y
Water Discharge Report – 2020	n/a <sup>3</sup>
<i>a complaints register, updated monthly;</i>	Y
<i>the annual reviews of the project;</i>	
Annual Environmental Monitoring Report 2012	Y
Annual Environmental Monitoring Report 2013	Y
Annual Environmental Monitoring Report 2014	Y
Annual Environmental Monitoring Report 2015	Y
Annual Environmental Monitoring Report 2016	Y





Annual Environmental Monitoring Report 2017	Y
Annual Environmental Monitoring Report 2018	Y
Annual Environmental Monitoring Report 2019	Y
<i>any other matter required by the Secretary; and</i>	
3 Year Environmental Audit	Y
Truck Dispatch Times	Y
(b) keep this information up-to-date, to the satisfaction of the Secretary.	Y <sup>4</sup>

<sup>1</sup> *Blakebrook Quarry Expansion, Environmental Assessment Report, Final Report*, January 2009, and the Proponent's response to submissions titled *Blakebrook Quarry Expansion, Response to Submissions, Final Report*, August 2009

<sup>2</sup> Environmental Assessment titled *Blakebrook Quarry Modification Application*, August 2017

<sup>3</sup> No water discharge occurred during the reporting period.

<sup>4</sup> The review undertaken as part of this AEMR finds that the documentation available on the LCC website appears to be up-to-date



## Appendix T

# Complaints Register

# Environmental Complaints Register



Information received about an Environmental Complaint shall be added to the register. These details shall then be added to a Non Conformance Report Form and actioned via the Non Conformance Procedure.

To be kept for at least 4 years – date & time	Method of complaint (phone, face to face)	Details of Complainant	Nature of Complaint	Action Taken	Reason for no Action (if applicable)	NCAR Report no:
2017						
01/01/2017 31/01/2017				Nil - No complaints received		
1/02/2017 28/02/2017				Nil - No complaints received		
1/03/2017 31/03/2017				Nil - No complaints received		
01/04/2017 30/04/2017				Nil - No complaints received		
01/05/2017 31/05/2017				Nil - No complaints received		
01/06/2017 30/06/2017				Nil - No complaints received		
01/07/2017 31/07/2017				Nil - No complaints received		
01/08/2017 31/08/2017				Nil - No complaints received		
01/09/2017 30/09/2017				Nil - No complaints received		
01/10/2017 31/10/2017				Nil - No complaints received		
01/11/2017 30/11/2017				Nil - No complaints received		
01/12/2017 31/12/2017				Nil - No complaints received		

# Environmental Complaints Register



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To be kept for at least 4 years – date & time	Method of complaint (phone, face to face)	Details of Complainant	Nature of Complaint	Action Taken	Reason for no Action (if applicable)	NCAR Report no:
2018						
01/01/2018 31/01/2018				Nil - No complaints received		
01/02/2018 28/02/2018				Nil - No complaints received		
01/03/2018 31/03/2018				Nil - No complaints received		
01/04/2018 30/04/2018				Nil - No complaints received		
01/05/2018 31/05/2018				Nil - No complaints received		
01/06/2018 30/06/2018				Nil - No complaints received		
01/07/2018 31/07/2018				Nil - No complaints received		
01/08/2018 31/08/2018				Nil - No complaints received		
01/09/2018 30/09/2018				Nil - No complaints received		
01/10/2018 31/10/2018				Nil - No complaints received		
01/11/2018 30/11/2018				Nil - No complaints received		
01/12/2018 31/12/2018				Nil - No complaints received		

# Environmental Complaints Register



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To be kept for at least 4 years – date & time	Method of complaint (phone, face to face)	Details of Complainant	Nature of Complaint	Action Taken	Reason for no Action (if applicable)	NCAR Report no:
2019						
01/01/2019 31/01/2019				Nil - No complaints received		
01/02/2019 28/02/2019				Nil - No complaints received		
01/03/2019 31/03/2019				Nil - No complaints received		
01/04/2019 30/04/2019				Nil - No complaints received		
01/05/2019 31/05/2019				Nil - No complaints received		
01/06/2019 30/06/2019				Nil - No complaints received		
01/07/2019 31/07/2019				Nil - No complaints received		
1/08/2019 31/08/2019				Nil - No complaints received		
1/09/2019 30/09/2019				Nil - No complaints received		
1/10/2019 31/10/2019				Nil - No complaints received		
1/11/2019 30/11/2019				Nil - No complaints received		
1/12/2019 31/12/2019				Nil - No complaints received		

# Environmental Complaints Register



Information received about an Environmental Complaint shall be added to the register. These details shall then be added to a Non Conformance Report Form and actioned via the Non Conformance Procedure.

To be kept for at least 4 years – date & time	Method of complaint (phone, face to face)	Details of Complainant	Nature of Complaint	Action Taken	Reason for no Action (if applicable)	NCAR Report no:
2020						
1/1/2020 31/1/2020				Nil - No complaints received		
1/2/2020 29/2/2020				Nil - No complaints received		
1/3/2020 31/3/2020				Nil - No complaints received		
1/4/2020 30/4/2020				Nil - No complaints received		
1/5/2020 31/5/2020				Nil - No complaints received		
25/6/2020	Phone call to LCC Customer Service	Neighbour to Quarry site	Asphalt night works disturbing them (noise)	Notified Asphalt leasee of complaint. Night work allowed through DA.		185
1/7/2020 31/7/2020				Nil - No complaints received		
1/8/2020 31/8/2020				Nil - No complaints received		
1/9/2020 30/9/2020				Nil - No complaints received		
1/10/2020 31/10/2020				Nil - No complaints received		
1/11/2020 30/11/2020				Nil - No complaints received		
1/12/2020 31/12/2020				Nil - No complaints received		

# Environmental Complaints Register



Information received about an Environmental Complaint shall be added to the register. These details shall then be added to a Non Conformance Report Form and actioned via the Non Conformance Procedure.

To be kept for at least 4 years – date & time	Method of complaint (phone, face to face)	Details of Complainant	Nature of Complaint	Action Taken	Reason for no Action (if applicable)	NCAR Report no:
2021						
1/1/2021 31/1/2021				Nil - No complaints received		