

# Independent Environmental Audit Report

## Blakebrook Quarry (MP 07\_0020)



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**Certification**

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# 1. Introduction

## 1.1 Background

GeoLINK was engaged by Lismore City Council (LCC) to carry out an Independent Environmental Audit (audit) of the Blakebrook Quarry Project (project), located at 540 Nimbin Road, Blakebrook, NSW. The audit was undertaken to comply with Schedule 5 Condition 12 of the Notice of Modification of Project Approval MP 07-0020 (consent) issued by the NSW Department of Planning and Environment (DPE) on the 18<sup>th</sup> September 2017. Previous audits were undertaken in 2013 and 2015 and these are discussed in **Section 3.3**.

### 1.1.1 Project Overview

GeoLINK understands that quarry activities have taken place at the Blakebrook Quarry site since 1979. On the 24<sup>th</sup> November 2009, LCC received project approval under the NSW Environmental Planning & Assessment Act 1979. The approval was modified in 2017 and the current limits, as specified in Schedule 2 Conditions 6 to 8, are:

- The Proponent may carry out quarrying operations on the site until 31 December 2039.
- The Proponent must not undertake quarrying operations below 55 m AHD in the northern pit or 105 m AHD in the southern pit.
- The Proponent must not:
  - transport more than 600,000 tonnes of quarry materials from the site per calendar year; or
  - dispatch more than 100 laden trucks from the site on any calendar day.

Key features of the site include the main northern quarry pit where rock extraction activities are undertaken, crushing and screening plant and equipment, administrative offices, weighbridge, laboratory, workshop, and fuel and chemical storage facilities. An asphalt plant is located in the south-western portion of the site, however this facility operates under a separate development approval and was not included in the audit scope.

## 1.2 Audit Team


The GeoLINK audit team comprised Duncan Thomson and Simon Williams. The audit team was endorsed by DPE in a letter to LCC dated 22 October 2018 (copy provided in **Appendix A**).

## 1.3 Audit Objective

The objective of the audit was to assess compliance of the project with the requirements of the consent.

Schedule 5 Condition 12 of the consent is as follows:

*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.*

## **1.4 Audit Scope**

To develop the scope of the audit, input was sought from DPE, other relevant NSW government agencies and the Community Consultative Committee (CCC). Further details are provided in **Section 3.1.2**.

The scope of the Audit included:

1. an assessment of compliance with:
  - a. conditions of consent;
  - b. statement of commitments (Appendix 2 of consent);
  - c. post approval documents prepared to satisfy the conditions of consent (e.g. Environmental Management Plans and Sub-plans); and
  - d. Environmental Protection Licence (EPL) 3384.
2. an assessment of the environmental performance of the project;
3. the status of implementation of previous Independent Audit findings, recommendations and actions (if any); and
4. a high-level assessment of whether Environmental Management Plans and Sub-plans are adequate.

The asphalt plant located in the south-western portion of the site, which operates under a separate development approval, was not included in the audit scope

### **1.4.2 Audit Period**

The audit covered the three year period that had elapsed since the previous audit (i.e. November 2015 until November 2018).



## 2. Methodology

An audit methodology was prepared and issued to LCC at the start of the project. The methodology is presented in **Appendix B**. In summary, the methodology comprised:

### Initiation Stage

- Project start-up
- Organisational review
- Review of background information

### Pre-Audit Stage

- Consultation with DPE, other relevant NSW government agencies and the Community Consultative Committee
- Development of an audit plan
- Development of the audit protocol checklist

### Audit Stage

- Opening meeting
- Review of documentation
- Site inspection
- Interviews with key staff
- Review of audit evidence
- Closing meeting

### Post-Audit Stage

- Review of audit data
- Preparation of audit report

# 3. Findings

## 3.1 2018 Audit

### 3.1.1 Approvals and Documents Audited

The following approvals and documents were audited:

- Notice of Modification of Project Approval MP 07-0020 (consent) issued by the NSW Department of Planning and Environment (DPE) on the 18th September 2017
- Statement of Commitments (Appendix 2 of consent)
- Environmental Management Strategy, Revision 3.1, August 2018
- Noise & Blast Management Plan EMS-MP1, Revision 3.1, August 2018
- Air Quality Management Plan EMS-MP2, Revision 3.1, August 2018
- Operational Traffic Management Plan EMS-MP6, Revision 3.1, August 2018
- Aboriginal Heritage Management Plan EMS-MP5, Revision 3.1, August 2018
- Biodiversity & Rehabilitation Management Plan EMS-MP4, Revision 3.1, August 2018
- Soil & Water Management Plan, Revision 1, December 2017
- Environmental Protection Licence (EPL) 3384

### 3.1.2 Consultation

Contact was made with relevant agencies and the CCC prior to the site inspection to request input to the audit process. In particular, input was sought regarding key issues that should be covered by the audit. The names of relevant contact people at the agencies and the CCC were provided by LCC. A summary of the consultation is presented below.

**Table 3.1 Consultation Summary**

<b>Organisation</b>	<b>Contact</b>	<b>Date of Email Request for Input</b>	<b>Input Provided?</b>
CCC	Tim Heldt	7/11/18	Yes
NSW DPE	James Epstein Genevieve Seed Jack Murphy Shelley McPhee	7/11/18	Yes
NSW EPA	Janelle Bancroft	7/11/18 (15/11/18 follow-up email)	No
Water NSW	Peter Dupen	7/11/18	Yes
NSW OEH	Ross Wellington	7/11/18 (15/11/18 follow-up email)	No

The agencies and the CCC identified the following key issues to be covered by the audit:

- Biodiversity offsets
- Groundwater assessment
- Overall compliance with approved management plans
- Truck movements
- Wild dog control





### 3.1.3 Site Inspection and Interviews

A site inspection was undertaken on 22 November 2018 and included the following areas:

- Northern quarry pit
- Southern quarry pit
- Administrative offices, including weighbridge
- Chemical storage shed
- Workshop (exterior only)
- Laboratory (exterior only)
- Internal roads and car parking area

Site inspection photographs are provided in **Appendix D**. Interviews with the following personnel were undertaken on the same day:

- James Livingstone, Quarry Coordinator
- Eleisha Went, Compliance Coordinator
- Emma Butcher, Compliance Officer
- Lucia Zorzi, Weighbridge Officer (brief discussions only)

### 3.1.4 Summary of Compliance

The compliance status descriptors utilised in this audit are:

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

**Non-compliant:** The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.

**Not triggered:** A requirement has an activation or timing trigger that has not been met at the time when the audit is undertaken, therefore an assessment of compliance is not relevant.

The audit findings are presented in the Audit Protocol Checklist in **Appendix C**. Seven non-compliances were identified during the 2018 audit. The non-compliances are discussed in the following sections.

#### 3.1.4.1 Non-compliance 1 – Laden truck movements

##### Requirement

DPE Notice of Modification of Project Approval: Schedule 2 Condition 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.*

##### Findings

On 16 May 2018, the weighbridge recorded that 105 laden trucks were dispatched from the site, which was an exceedance of the 100 truck per day limit. The non-compliance was promptly reported to DPE and DPE responded via a letter dated 6 July 2018. The system for tracking and recording the



dispatch of laden trucks was observed during the site inspection and discussed with the weighbridge officer. The weighbridge has software that counts the number of trucks that go across the weighbridge and allows real-time monitoring. The current system is considered to be appropriate.

#### Recommendation

No further action is recommended.

#### 3.1.4.2 Non-compliance 2 – Soil & Water Management Plan

##### Requirement

DPE Notice of Modification of Project Approval: Schedule 3 Condition 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;*

(Note: only the relevant portion of the condition has been reproduced above)

##### Findings

The 1<sup>st</sup> draft of the updated Soil and Water Management Plan was submitted to DPE on 18 December 2017, which complies with the timing required by clause (c). However, as outlined in the DPE letter to LCC dated 26/2/18, the 1<sup>st</sup> draft of the plan did not adequately address the relevant conditions. At the time of the audit (November 2018), the plan was yet to be approved by DPE, hence the non-compliance. An updated version of the plan was subsequently approved by DPE via a letter to LCC dated 7/3/19.

##### Recommendation

No further action is recommended.

#### 3.1.4.3 Non-compliance 3 – Biodiversity Offset Strategy

##### Requirement

DPE Notice of Modification of Project Approval: Schedule 3 Condition 5 (pg11)

*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.*

### Findings

The Biodiversity Offset Strategy (BOS) forms part of the Biodiversity and Rehabilitation Management Plan (BRMP). At the time of the audit (November 2018), the plan was yet to be approved by DPE, hence the non-compliance. An updated version of the BRMP, incorporating the BOS, was subsequently approved by DPE via a letter to LCC dated 14/3/19.

### Recommendation

No further action is recommended.

#### 3.1.4.4 Non-compliance 4 – Biodiversity & Rehabilitation Management Plan

### Requirement

DPE Notice of Modification of Project Approval: Schedule 3 Condition 28

*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;*

(Note: only the relevant portion of the condition has been reproduced above)

### Findings

The 1<sup>st</sup> draft of the updated Biodiversity and Rehabilitation Management Plan was submitted to DPE on 18 December 2017, which complies with the timing required by clause (c). However, as outlined in the DPE letter to LCC dated 6/2/18, the 1<sup>st</sup> draft of the plan did not adequately address the relevant conditions. At the time of the audit (November 2018), the plan was yet to be approved by DPE, hence the non-compliance. An updated version of the plan was subsequently approved by DPE via a letter to LCC dated 14/3/19.

### Recommendation

No further action is recommended.

#### 3.1.4.5 Non-compliance 5 – Rehabilitation bond review

##### Requirement

DPE Notice of Modification of Project Approval: Schedule 3 Condition 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.*

##### Findings

LCC did not submit a review of the Biodiversity and Rehabilitation Bond within 3 months of the 2015 Independent Environmental Audit. DPE issued a show cause letter in August 2016 and subsequently issued a penalty infringement notice in September 2016. LCC provided a bank guarantee for the Biodiversity and Rehabilitation Bond to DPE in October 2016.

##### Recommendation

It is recommended that LCC include an action in the compliance tracking system to ensure that future reviews of the Biodiversity and Rehabilitation Bond are completed within the required timeframe. Condition 30 states that the reviews need to be undertaken “within 3 months of each Independent Environmental Audit”. We interpret this to mean within 3 months of the submission of the Independent Environmental Audit report to DPE. It is recommended that LCC check with DPE as to whether this is the correct interpretation.

#### 3.1.4.6 Non-compliance 6 – Compression braking

##### Requirement

DPE Notice of Modification of Project Approval: Appendix 2, Statement of Commitment 5.2

*Speed limits within the quarry site will be restricted to 40km/h and compression braking prohibited.*

##### Findings

No issues were identified with the first portion of this requirement regarding a 40 km/h speed limit. However, the second portion of the requirement is not complied with. Compression braking is utilised by trucks within the site.

##### Recommendation

Because some of the internal roads are relatively steep, the use of compression braking is considered to be appropriate in some instances for safety reasons. The Traffic Management Plan refers to “limiting compression braking” (pg 19), rather than stating that it is prohibited. It is recommended that LCC submit an application to modify the wording of Statement of Commitment 5.2 to allow compression braking in circumstances where it is appropriate for safety reasons.

#### 3.1.4.7 Non-compliance 7 – Water discharged from site

##### Requirement

DPE Notice of Modification of Project Approval: Appendix 2, Statement of Commitment 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.*

##### Findings

The requirement that no quarry water is discharged from the site is not complied with. There is a sediment basin located on the opposite side of the entrance road from the weighbridge (refer to Appendix D Plate 9). This sediment basin has an overflow that would ultimately discharge from the site.

##### Recommendation

The sediment basin overflow is identified as a surface water discharge point in EPL 3384. As such, it is appropriate that the discharge of quarry water occurs at this location. Furthermore, it is understood that LCC's intention is for another sediment basin overflow to be added as a second surface water discharge point in EPL 3384 in the future. It is recommended that LCC submit an application to modify the wording of Statement of Commitment 9.1 to allow the discharge of quarry water from the site via approved surface water discharge locations.

## 3.2 Issues & Events during 2015-18 Audit Period

This section outlines key issues and events that occurred during the audit period.

### 3.2.1 Approval Modification


Project Approval (MP 07\_0020) for the Blakebrook Quarry Project was granted by DPE on 24 November 2009. In 2017, LCC submitted a modification application to allow limited excavation of the southern pit prior to the completion of a detailed groundwater assessment. The Notice of Modification of Project Approval MP 07-0020 (consent) was subsequently issued by the NSW Department of Planning and Environment (DPE) on 18 September 2017.

The consent requires the update of various environmental management plans, as discussed in **Section 3.5**.

### 3.2.2 Agency Actions

The following actions were taken by government agencies during the audit period:

- DPE issued a penalty notice and order in June 2016 for failing to undertake a groundwater assessment before commencing extraction in the southern pit, which was a non-compliance with Schedule 3 Condition 20 of the original Project Approval. Schedule 3 Condition 17 of the current consent requires the submission of a detailed groundwater assessment by 30 December 2018. During this audit, LCC advised that this deadline will be met.

- 
- DPE issued a show cause letter in August 2016 and subsequently issued a penalty notice in September 2016 because LCC did not submit a review of the Biodiversity and Rehabilitation Bond within 3 months of the 2015 Independent Environmental Audit. This was a non-compliance with Schedule 3 Condition 30. LCC provided a bank guarantee for the Biodiversity and Rehabilitation Bond to DPE in October 2016. Refer to **Section 3.1.4.2** for further discussion of this item.
  - EPA issued a show cause letter in October 2017, followed by an official caution in November 2017, associated with deficiencies with erosion and sediment controls in the southern pit.
  - DPE issued a show cause letter in March 2018 regarding potential non-compliance with Schedule 3 Condition 17 associated with extraction depths. DPE subsequently reviewed additional information provided by LCC and determined to take no official enforcement action.

### 3.2.3 Non-compliance Notifications

The following non-compliance notifications were made by LCC during the audit period:

- 16 May 2018: Non-compliance with DPE Notice of Modification of Project Approval: Schedule 2 Condition 8. The weighbridge recorded that 105 laden trucks were dispatched from the site, which was an exceedance of the 100 truck per day limit. Refer to **Section 3.1.4.1** for further discussion of this item.
- 19 October 2018: Exceedance of groundwater quality triggers.

### 3.2.4 Complaints

According to the complaints register and confirmed by LCC personnel during the audit interviews, there were no complaints regarding quarry operations during the audit period. There were two complaints regarding noise from the asphalt plant night works in 2016, but the asphalt plant is not included in the scope of this audit.

### 3.2.5 Incidents

Based on audit interviews with LCC personnel, it is understood that there were no environmental incidents during the audit period.

## 3.3 Previous Audits

Previous audits were undertaken by Coffey in 2013 and 2015. The status of recommendations to address the non-compliances identified in the 2015 audit are discussed below.



### **3.3.1 Non-compliance 1 – Blasting hours**

#### Requirement

DPE 2009 Original Project Approval: Schedule 3 Condition 9

*Blasting Hours – The Proponent may only carry out blasting on site between 10am and 3pm Monday to Friday, with no blasting on weekends or public holidays.*

#### 2015 Findings

A review of the blasting records and the 2013 Environmental Management Report indicated that one blast on the 6 August 2013 was carried out outside of the approved blasting hours with a blast undertaken at 4:08pm.

#### 2015 Recommendations

It is recommended that sufficient time be allowed for set up of high volume blasts so as to avoid similar timing issues.

#### 2018 Status

The relevant consent condition is now Schedule 3 Condition 1. A review of the blasting records for 2016 to 2018 found that all blasts were undertaken within the specified operating hours. As such, planning and implementation of blasting appears to be appropriate. No further action is recommended.

### **3.3.2 Non-compliance 2 – Noise monitoring frequency**

#### Requirement

DPE 2009 Original Project Approval: Schedule 3 Condition 6(b)

*Noise Monitoring – The Proponent shall prepare and implement a Noise Monitoring Program which must include annual attended noise monitoring.*

#### 2015 Findings

A review of the available noise monitoring results found that no noise monitoring was undertaken during the 2014 calendar year.

#### 2015 Recommendations

It is recommended that a calendar of compliance events, including noise monitoring, is prepared for the quarry operation and arrangements made to ensure that this monitoring occurs.

#### 2018 Status

The relevant consent condition is now Schedule 3 Condition 5. A review of the noise monitoring reports for 2016 to 2018 found that the required number of monitoring events were completed. As such, planning and implementation of noise monitoring appears to be appropriate. No further action is recommended.

### 3.3.3 Non-compliance 3 – Noise monitoring exceedances

#### Requirement

DPE 2009 Original Project Approval: Schedule 3 Condition 4

*Impact Assessment Criteria - The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 4.*

#### 2015 Findings

The noise monitoring records reviewed have shown exceedances of the  $L_{Aeq(15min)}$  criteria in multiple noise monitoring locations surrounding the site during 2013 and 2015 rounds.

#### 2015 Recommendations

Noise monitoring locations are properly documented so as to confirm actual test locations. The DoP (2009) Project Approval Report, Appendix 3: Receiver Location Plan, shows the noise monitoring locations referred to in the DA. We recommend that GPS coordinates are provided for each monitoring location so as to ascertain the monitoring point is consistent with the approved locations. Also, this will show the proximity of each monitoring location to sensitive receptors (i.e. residences) and to other pre-existing factors which could be influencing the results i.e. traffic on nearby roads.

The reported noise results do not provide clear guidance on which measured results apply to the  $L_{Aeq(15min)}$  test. We recommend updating the table format to include which values correspond to the  $L_{Aeq(15min)}$  test and that any exceedances are highlighted.

#### 2018 Status

The relevant consent condition is now Schedule 3 Condition 3. The Noise & Blast Management Plan has recently been updated (August 2018) and includes a scaled map of monitoring locations (Figure 1.3), which is considered to be adequate. The latest noise monitoring report (November 2018) includes Table 3.4, which presents the  $L_{Aeq(15min)}$  results. No further action is recommended.

### 3.3.4 Observation 4 – Invasive weed control

#### 2015 Findings

During the site inspection of the quarry surrounds various invasive weed species were observed in disturbed areas of the site and in the adjoining bush land buffer areas.

#### 2015 Recommendations

It is recommended that LCC implement the following:

- Within 6 months of land acquisition conduct a detailed survey and mapping of weed species and their distribution on the 62.6 biodiversity offset area.
- Within the next 12 months allocate sufficient funds and resources to destroy and remove Class 3 weeds, including Giant Devil's Fig and Groundsel Bush, from the quarry site and adjoining biodiversity offset area.
- Allocate sufficient annual funds and resources to suppress and where possible remove weed species from the quarry site and adjoining biodiversity offset area.
- Continue to monitor and update mapping of weed populations on the quarry site and its biodiversity offset area.





## 2018 Status

The Biodiversity & Rehabilitation Management Plan has recently been updated (August 2018) and the Biodiversity Offset Strategy is in the process of being finalised (draft Rev 2 November 2018). Both of these documents include information about the weeds present on the site and actions associated with weed control. Substantial funds and resources are currently being invested in weed control. LCC advised that monthly weed control is undertaken in areas outside the operational quarry by a team of 3-5 contractors. The LCC maintenance team undertakes weed control within the operational areas. Approximately \$50,000 per year is currently spent on weed control activities. Current weed control efforts are considered to be appropriate and no additional action is recommended.

### **3.3.5 Observation 5 – Vertebrate pest control**

#### 2015 Findings

Based on discussions with quarry management we understand that wild dog control is a local issue affecting neighbouring rural landholders. Initial discussions have been held with landholders, LCC quarry management, and Local Land Services to undertake a controlled baiting program to suppress wild dogs.

#### 2015 Recommendations

Due to the purchase of an additional 45 hectares of bushland, the control of vertebrate pests, including wild dogs, on this land will also need to be managed by LCC, including the allocation of funding and resources. The current cooperative approach to work with neighbouring landholders to address this problem is supported.

#### 2018 Status

Following ongoing discussion and coordination with neighbouring rural landowners, wild dog baiting is undertaken on an annual basis, with the most recent baiting completed in November 2018. No additional action is recommended.

### **3.3.6 Observation 6 – Dust monitoring timing**

#### 2015 Findings

A review of the dust monitoring data and the 2013 and 2014 Annual Environmental Management Reports indicated that the sampling days on several occasions was outside of the +/- 2 days for the 30 day period. Following a review of the current 2015 data this issue appears to have been addressed with no exceedances of the +/- 2 days.

#### 2015 Recommendations

It is recommended that quarry management remain diligent with regards to the timing of dust monitoring.

#### 2018 Status

A review of the dust monitoring results for 2016 to 2018 found that the sampling days complied with the requirement of 30 +/- 2 days. As such, planning and implementation of dust monitoring appears to be appropriate. No further action is recommended.



## 3.4 Environmental Management Plans

As discussed in **Section 3.2.1**, LCC submitted a modification application in 2017. The modified consent issued by DPE on 18 September 2017 requires updated environmental management plans. As such, substantial time and effort has been invested over the past year to prepare updated management plans. The plans have been through a review process, with DPE advising via a letter to ERM dated 28 August 2018 that the following documents have been approved:

- Environmental Management Strategy, Revision 3.1, August 2018
- Noise & Blast Management Plan EMS-MP1, Revision 3.1, August 2018
- Air Quality Management Plan EMS-MP2, Revision 3.1, August 2018
- Operational Traffic Management Plan EMS-MP6, Revision 3.1, August 2018
- Aboriginal Heritage Management Plan EMS-MP5, Revision 3.1, August 2018

At the time of the audit (November 2018), the Biodiversity & Rehabilitation Management Plan had also been updated (August 2018) and the Biodiversity Offset Strategy was in the process of being finalised (draft Rev 2 November 2018). A draft of the Soil & Water Management Plan was prepared in December 2017 and the intention was to finalise this plan once the detailed groundwater assessment had been completed.

As presented in **Section 3.1.4**, non-compliances were identified with respect to the Soil & Water Management Plan, Biodiversity & Rehabilitation Management Plan and the Biodiversity Offset Strategy. However, these documents were subsequently approved by DPE in early 2019 and no further action is recommended.

## 3.5 Environment Protection Licence 3384

LCC holds Environmental Protection Licence (EPL) 3384 issued by the EPA for the scheduled activity of 'extractive activities' at the Blakebrook Quarry. There were several variations to the EPL during the reporting period as summarised below:

- Notice 1525659, 30 November 2015: The EPL variation was triggered by a review of the EPL, which revealed not all conditions included on contemporary licensed quarries were included. As a result, limit conditions relating to noise and blasting and operating conditions mainly related to sediment and erosion control were added to the EPL.
- Notice 1558031, 27 November 2017: As noted in **Section 3.2.2**, the EPA issued a show cause letter in October 2017, followed by an official caution in November 2017, associated with deficiencies with erosion and sediment controls in the southern pit. Subsequent to this, the EPL variation included a Pollution Reduction Plan (PRP) condition requiring the submission of a Soil and Water Management Plan. The variation also included updates to operating hours and the premise location.
- Notice 1568156, 6 August 2018: The purpose of the EPL variation was to allow LCC to store and mix glass sand recovered from the Lismore Recycling and Recovery Centre at the quarry.

The EPL Annual Returns for 2016/17 and 2017/18 both reported that there were no complaints and no discharges from identification point 1 (i.e. sediment basin located near weighbridge) that required monitoring. The 2017/18 Annual Return listed the deficiencies with erosion and sediment controls in the southern pit (as noted above and in **Section 3.2.2**) as a non-compliance.



### **3.6 Summary**

Overall, environmental management at the Blakebrook Quarry is considered to be satisfactory. There appears to have been significant improvement since the previous audit in 2015. The non-compliances from the 2015 audit have been effectively addressed and the seven non-compliances identified in this audit are considered to be less significant with regard to environmental risk. There was a high level of awareness of environmental management responsibilities amongst the LCC personnel interviewed. During the site inspection, environmental controls were observed to be adequate and well maintained.



## 4. Recommendations

### 4.1 Non-compliances

The following recommendations relate to the non-compliances discussed in **Section 3.1.4**:

- LCC include an action in the compliance tracking system to ensure that future reviews of the Biodiversity and Rehabilitation Bond are completed within the required timeframe.
- Condition 30 states that reviews of the Biodiversity and Rehabilitation Bond need to be undertaken “within 3 months of each Independent Environmental Audit”. We interpret this to mean within 3 months of the submission of the Independent Environmental Audit report to DPE. It is recommended that LCC check with DPE as to whether this is the correct interpretation.
- LCC submit an application to modify the wording of Statement of Commitment 5.2 to allow compression braking in circumstances where it is appropriate for safety reasons.
- LCC submit an application to modify the wording of Statement of Commitment 9.1 to allow the discharge of quarry water from the site via approved surface water discharge locations.

### 4.2 Opportunities for Improvement

The following recommendations are opportunities for improvement identified during the audit:

- Blast reports could be presented more clearly to assist with interpretation, checking and review. For example, a simple cover page could be included for each blast noting the date of the blast and the contractors involved. Supporting documentation could then be inserted after the cover page.
- Two of the non-compliances identified in this audit (3 & 4) relate to Statements of Commitments that have wording that is either inconsistent with the current management plans or quarry operations. A comprehensive review of the Statement of Commitments may reveal other inconsistencies or requirements that are redundant. All identified inconsistencies could be addressed in a single modification application.
- To minimise the risk of future non-compliances with deadlines/ timeframes, a comprehensive compliance tracking register could be developed, which includes all relevant conditions and requirements from the consent, management plans and the EPL.
- The possibility of relocating the weather station to a more suitable location could be investigated, although it is noted that options may be restricted by electrical/ IT infrastructure constraints. Refer to *AS/NZS 3580.14:2014 Methods for sampling and analysis of ambient air – Part 14: Meteorological monitoring for ambient air quality monitoring applications* for guidance.
- Annual quarry survey plans could be more clearly presented, including labels showing levels.
- The LCC Blakebrook Quarry webpage could be better organised with superseded documents either removed or placed into a superseded folder.



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## Appendix A

# DPE Audit Team Endorsement



Contact: James Epstein  
Phone: 02 6670 8650  
Email: [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)  
Our ref: MP 07\_0020

Ms Emma Butcher  
Commercial Services Compliance Officer  
Lismore City Council  
PO Box 23A  
Lismore NSW 2480

Email: [Emma.Butcher@lismore.nsw.gov.au](mailto:Emma.Butcher@lismore.nsw.gov.au)

Dear Ms Butcher

**Blakebrook Quarry (MP 07\_0020)  
Independent Environmental Audit (Schedule 5, Condition 12)**

I refer to your email dated 18 October 2018 seeking the Secretary's endorsement for an audit team to undertake the Independent Environmental Audit (audit) under project approval MP 07\_0020 (the consent) for the Blakebrook Quarry (the site).

Having considered the qualifications and experience of the GeoLINK audit team, namely;

- Simon Williams; and
- Duncan Thomson

the Secretary endorses the appointment of this team to undertake the audit in accordance with Schedule 5 Condition 12 (a) of the consent. This approval is conditional on the audit team being independent of the development.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and the *Post-approval requirements for State significant developments – Independent Audit Guideline* dated October 2015.

The audit report is to:

- be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- include consultation with the relevant agencies and the CCC;
- 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);
- review the adequacy of strategies, plans or programs required under the abovementioned approvals;

- 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
- be conducted and reported to the satisfaction of the Secretary.

Within two (2) months of commissioning the audit, the Applicant is to submit a copy of the audit report to the Secretary together with its response to any recommendations contained in the audit report and a timetable to implement the recommendations.

Prior to submitting the audit report to the Secretary, it is recommended that Lismore City Council review the report to ensure it complies with the relevant consent condition.

Should you wish to discuss this matter please contact James Epstein on the details above.

Yours sincerely,



Shelley McPhee 22.10.18  
**Team Leader - Compliance**  
as nominee for the Secretary





## **Appendix B**

# **Audit Methodology**

**Project** Blakebrook Quarry Independent Environmental Audit **Date** 16 November 2018

**To** Eleisha Went  
Emma Butcher **Email** [eleisha.went@lismore.nsw.gov.au](mailto:eleisha.went@lismore.nsw.gov.au)  
[emma.butcher@lismore.nsw.gov.au](mailto:emma.butcher@lismore.nsw.gov.au)

**Of** Lismore City Council **Page 1 of 3**

**From** Duncan Thomson **Ref No** 3180-1003

**Subject** Audit Methodology

Meeting Notes	<input type="checkbox"/>	File Notes	<input type="checkbox"/>	Facsimile	<input type="checkbox"/>	Transmittal	<input checked="" type="checkbox"/>	Telephone Notes	<input type="checkbox"/>
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### Initiation Stage

ABN 79 896 839 729  
ACN 101 084 557

*Return address:*  
PO Box 1446  
COFFS HARBOUR  
NSW 2450

**COFFS HARBOUR**  
T 02 6651 7666

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F 02 6687 7782

**ARMIDALE**  
T 02 6772 0454

**LISMORE**  
T 02 6621 6677

[www.geolink.net.au](http://www.geolink.net.au)

**Project Start-up**  
Initial communication between Council and GeoLINK will be via phone calls and emails. This initial communication will provide opportunities to discuss the project, introduce members of each team and establish communication protocols. Details to be discussed include:

- The quarry site and facility boundaries;
- The scope and objectives of the audit;
- The proposed audit activities, such as document reviews, personnel interviews and site inspections, communication protocols, logistics and administrative arrangements;
- Identification of the audit team and site facilitation arrangements; and
- The audit schedule and milestones.

### **Organisational Review**

GeoLINK will review Council's current management plans and approvals in order to gain an understanding of the organisational structure of the quarry and the environmental management of the operation.

### **Review of Background Information**

Council will provide all background information required to undertake the audit. The background information will then be reviewed and any follow-up questions will be raised with Council.

### Pre-Audit Stage

A number of pre-audit activities are to be undertaken in consultation with Council staff. These activities include development of an audit plan for the on-site activities and making the necessary preparation and arrangements for the site visit by the GeoLINK audit team.

### **Audit Protocol**

A site-specific audit protocol (checklist) will be developed for the site. The audit protocol details a step by step series of questions and evaluation criteria designed to assess:

- Compliance with the DP&E approval requirements;
- Compliance with management and monitoring plans;
- Compliance with relevant environmental licences;
- Current environmental management practices and their status; and
- Staff awareness.

## **Audit Stage**

### **Opening Meeting**

GeoLINK will conduct an audit Opening Meeting at the commencement of the site audit. The Opening Meeting is to be attended by the GeoLINK audit team, the quarry management team and other relevant Council staff. The purpose of the Opening Meeting is to:

- Introduce all parties;
- Present the audit scope and explain the objectives;
- Outline the audit approach and methodology;
- Address questions or concerns that Council personnel may have at this early stage; and
- Gain the support and assistance of management and operations staff in conducting the audit.

### **Document Review**

During the audit we will review available key compliance documentation including:

- Environmental Management Strategy (Feb 2011)
- Noise & Blast Management Plan (Rev 3.1)
- Air Quality Management Plan (Rev 3.1)
- Soil & Water Management Plan (draft, Dec 2017)
- Traffic Management Plan (Rev 3.1)
- Aboriginal Heritage Management Plan (Rev 3.1)
- Biodiversity & Rehabilitation Management Plan (Rev 3.1)
- Annual Environmental Management Reports
- Monitoring data and reports, including blast, dust, surface water, groundwater, noise and truck movements
- Complaints register
- CCC meeting minutes
- Relevant correspondence

### **Detailed Site Inspection**

As part of the site audit the GeoLINK audit team will undertake a detailed, but efficient and practical, site inspection. During the site inspection, we will observe the existing conditions at the site and adjoining land, including management measures for mitigation of potential environmental impacts associated with noise, dust, water, biodiversity, traffic, heritage and waste. We will also look for evidence of:

- Compliance with legislative and regulatory requirements;
- Conformance with the approval and associated management plans and programs;
- Actual operational practices; and
- Staff participation in environmental management at the quarry.

### **Interview/s with Key Staff**

During the site audit the GeoLINK audit team will hold one or more interviews with appropriate staff in order to obtain information on:

- Actual past and present work practices;
- The level of compliance with approval and statutory requirements; and
- The level of awareness of those requirements.

### **Review Audit Evidence**

GeoLINK will review the adequacy and completeness of the audit evidence at the conclusion of the site audit. We will:

- Review the information gathered and seek additional information where needed;
- Attempt to substantiate the findings of the audit;
- Summarise and document the audit findings and observations;

- Identify issues that require immediate attention;
- Note any outstanding issues that require a follow-up; and
- Prepare for the closing meeting.

### **Closing Meeting**

The Closing Meeting will provide an opportunity to debrief on the audit outcomes. If possible, the attendees at the Closing Meeting should be the same people who were in attendance at the Opening Meeting. Areas covered in the Closing Meeting will include:

- Summarise the audit activities and findings;
- Highlight compliance strengths and weaknesses at the quarry;
- Discuss the preliminary findings and recommended corrective actions and, in particular, any findings that will require immediate attention; and
- Clarify outstanding issues and address staff questions or concerns.

### **Post-Audit Stage**

The outcome of the post-audit stage, and the purpose of the project, is to produce an Environmental Audit Report that addresses all of the audit findings and recommendations.

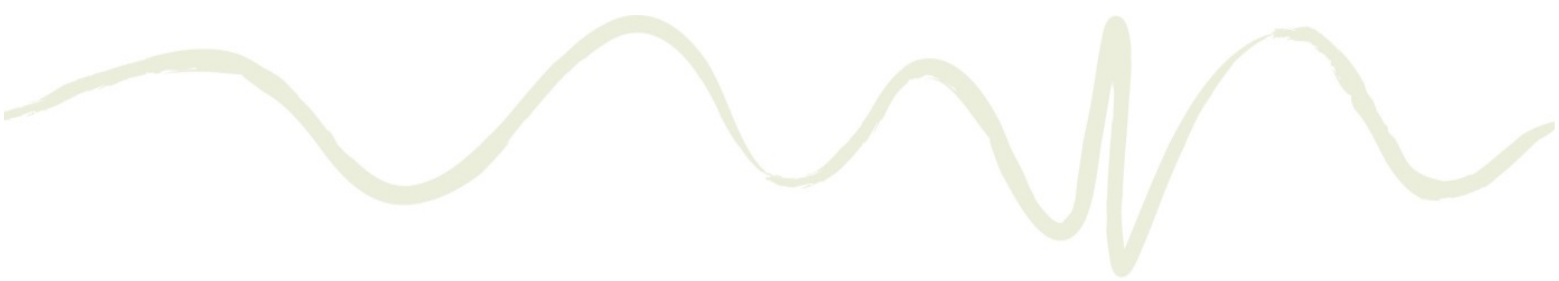
### **Review of Audit Data**

At the completion of the audit, Council will review the Environmental Audit Report and provide any comments to the GeoLINK audit team for review and, where supported, for inclusion in the final audit report.

Do not hesitate to contact me on 02 6687 7666 or 0419 237 075 should you have any queries.



**Duncan Thomson**  
Environmental Auditor



## Appendix C

# Audit Protocol Checklist

Audit Protocol Checklist

Reference	Condition / Requirement	Evidence	Findings	Compliance Status								
<b>DPE Notice of Modification of Project Approval MP 07_0020, dated 18/09/2017</b>												
Sch 2 Cond 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. <i>Note: Dispatch of laden trucks is also controlled under condition 1 of Schedule 3.</i>	(a) Annual returns submitted to DRG (b) Weighbridge records and real-time monitoring software	(a) Annual return data: 2017-18 FY = 216,088 tonnes 2016-17 FY = 116,213 tonnes (b) One exceedance of the 100 truck limit occurred on 16 May 2018 (105 trucks). Promptly reported to DPE. Refer to DPE letter dated 6 July 2018.	Non-compliant								
Sch 2 Cond 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.	(a) Annual returns for 2016-17 and 2017-18 (b) Annual Reviews for 2016, 2017 & 2018	(a) Annual returns submitted as required (b) Annual Reviews include production data	Compliant								
Sch 2 Cond 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.	Site induction powerpoint presentation stored on weighbridge office computer and induction records	Site induction covers environmental requirements, including heritage and biodiversity.	Compliant								
Sch 2 Cond 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.	Site inspection	Observed limit of works / extraction marker pole (refer App D, Plate 1).	Compliant								
Sch 3 Cond 1	The Proponent must comply with the operating hours set out in Table 1.  <table border="1"> <caption>Table 1: Operating hours</caption> <thead> <tr> <th>Activity</th> <th>Permissible Hours</th> </tr> </thead> <tbody> <tr> <td>Quarrying operations including loading and dispatch of laden trucks</td> <td>7 am to 6 pm Monday to Friday 7 am to 3 pm Saturday At no time on Sundays or public holidays</td> </tr> <tr> <td>Blasting</td> <td>10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays</td> </tr> <tr> <td>Maintenance</td> <td>May be conducted at any time, provided that these activities are not audible at any privately-owned residence</td> </tr> </tbody> </table>	Activity	Permissible Hours	Quarrying operations including 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	Timesheets for week ending 18/10/2018 and J Livingstone interview	Timesheets showed typical weekday work hours of 6:45am (preparing for 7am start for operations) to 4pm. J Livingstone confirmed operating hours comply with requirements.	Compliant
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											
Sch 3 Cond 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.	J Livingstone interview	J Livingstone advised that no events have occurred in the past 3 years that have required works outside of standard operating hours.	Not triggered								
Sch 3 Cond 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.	Annual noise monitoring reports for 2016, 2017 and 2018.	As explained in the annual noise monitoring reports, the quarry operational noise levels could not be accurately assessed because the quarry operations were not audible at the	Compliant								

Reference	Condition / Requirement	Evidence	Findings	Compliance Status						
	<p>Table 2: Noise criteria dB(A)</p> <table border="1" data-bbox="259 169 864 264"> <thead> <tr> <th data-bbox="259 169 512 217">Receiver</th> <th data-bbox="519 169 864 217">Day L<sub>day</sub> (15 minutes)</th> </tr> </thead> <tbody> <tr> <td data-bbox="259 221 512 245">Location 2</td> <td data-bbox="519 221 864 245">36</td> </tr> <tr> <td data-bbox="259 250 512 264">All other locations</td> <td data-bbox="519 250 864 264">35</td> </tr> </tbody> </table> <p>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.</p>	Receiver	Day L <sub>day</sub> (15 minutes)	Location 2	36	All other locations	35		<p>monitoring locations. The noise consultant estimates that the noise generated by the project does not exceed the criteria.</p>	
Receiver	Day L <sub>day</sub> (15 minutes)									
Location 2	36									
All other locations	35									
Sch 3 Cond 5	<p>The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ol style="list-style-type: none"> <li>be prepared in consultation with the EPA;</li> <li>be submitted to the Secretary within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;</li> <li>describe the measures to be implemented to ensure: <ul style="list-style-type: none"> <li>▪ compliance with the noise criteria and operating conditions of this approval;</li> <li>▪ best practice management is being employed; and</li> <li>▪ 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);</li> </ul> </li> <li>describe the proposed noise management system; and</li> <li>include a monitoring program to be implemented to measure noise from the project against the noise criteria in Table 2.</li> </ol> <p>The Proponent must implement the Noise Management Plan as approved from time to time by the Secretary.</p>	<p>Blakebrook Quarry Noise &amp; Blast Management Plan, Rev 3.1 dated August 2018, by ERM Letter from DPE to ERM dated 28/08/2018</p>	<p>DPE letter states that DPE considers that the plan fulfils the condition requirements and has been approved.</p>	Compliant						
Sch 3 Cond 7	<p>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.</p> <p><i>Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the quarry.</i></p>	<p>Annual Reviews and blast reports for 2016, 2017 and 2018</p>	<p>No more than 2 blasts were carried out in a month.</p>	Compliant						
Sch 3 Cond 9	<p>The Proponent must prepare a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ol style="list-style-type: none"> <li>be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;</li> </ol>	<p>Blakebrook Quarry Noise &amp; Blast Management Plan, Rev 3.1 dated August 2018, by ERM Letter from DPE to ERM dated 28/08/2018</p>	<p>DPE letter states that DPE considers that the plan fulfils the condition requirements and has been approved.</p>	Compliant						

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
	<p>(b) describe the measures to be implemented to ensure compliance with the blast criteria and operating conditions of this approval;</p> <p>(c) include measures to manage flyrock to ensure the safety of people and livestock and to protect property;</p> <p>(d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this approval;</p> <p>(e) include local community notification procedures for the blasting schedule, in particular to nearby residences; and</p> <p>(f) include a protocol for investigating and responding to complaints related to blasting operations.</p> <p>The Proponent must implement the Blast Management Plan as approved from time to time by the Secretary.</p>			
Sch 3 Cond 12	<p>The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;</p> <p>(b) describe the measures to be implemented to ensure:</p> <ul style="list-style-type: none"> <li>▪ compliance with the air quality criteria and operating conditions of this approval;</li> <li>▪ best practice management is being employed; and</li> <li>▪ the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events;</li> </ul> <p>(c) describe the proposed air quality management system;</p> <p>(d) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> <li>▪ is capable of evaluating the performance of the project;</li> <li>▪ includes a protocol for determining any exceedances of the relevant conditions of approval;</li> <li>▪ and effectively supports the air quality management system.</li> </ul> <p>The Proponent must implement the approved Air Quality Management Plan as approved from time to time by the Secretary.</p>	<p>Blakebrook Quarry Air Quality Management Plan, Rev 3.1 dated August 2018, by ERM</p> <p>Letter from DPE to ERM dated 28/08/2018</p>	<p>DPE letter states that DPE considers that the plan fulfils the condition requirements and has been approved.</p>	Compliant
Sch 3 Cond 13	<p>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 <i>Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales</i> guidelines.</p>	<p>Site inspection and E Went interview</p>	<p>A new meteorological station was installed on 12 February 2018. Observed weather station and associated remote display in weighbridge office.</p>	Compliant
Sch 3 Cond 15	<p>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.</p>	<p>Water balance models for 2016 (<i>Blakebrook Quarry Water Balance Model 2016</i> by Newton Denny Chapelle dated February 2017) and 2017 (<i>Annual Surface Water Balance, 2017 Blackbrook Quarry, Blakebrook New South Wales</i> by</p>	<p>Water balance models indicate that the quarry water demand is being met via the internal water capture and storage system. Confirmed by J Livingstone.</p>	Compliant



Reference	Condition / Requirement	Evidence	Findings	Compliance Status
		Gilbert and Sutherland). J Livingstone interview.		
Sch 3 Cond 17	<p>The Proponent must undertake a detailed groundwater assessment to the satisfaction of the Secretary. This assessment must be:</p> <p>(a) prepared by a suitably qualified expert in consultation with DPI Water;</p> <p>(b) submitted to the Secretary for approval by 30 December 2018;</p> <p>(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;</p> <p>(d) adequately assess groundwater resources affected by the northern and southern pits, to the proposed full extraction depths of those pits;</p> <p>(e) adequately assess all groundwater impacts associated with proposed extraction;</p> <p>(f) provide data for predicted groundwater pit inflows during and following extraction; and</p> <p>(g) propose management measures to address pit inflows and impacts to groundwater resources.</p> <p>The Proponent must implement the management measures proposed in the groundwater assessment to the satisfaction of the Secretary.</p>	E Went and J Livingstone interviews Quarry survey plans	E Went advised that Gilbert and Sutherland are preparing the detailed groundwater assessment and that it is on track to be submitted by 30 December 2018. Agency consultation will be captured in the report. With regard to clause (c), J Livingstone advised there has been some historical excavation in the northern pit below 105 m AHD. There has been no vertical extraction in the quarry since 2009. Annual surveys of pit levels are completed, with the latest survey completed in June 2018. DPE investigated whether LCC had complied with this clause in 2018 and provided a letter dated 3 September 2018 advising that no official enforcement action would be taken.	Compliant
Sch 3 Cond 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.	J Livingstone interview	J Livingstone advised that no groundwater has been encountered in the South Pit.	Not triggered
Sch 3 Cond 19	<p>The Proponent must prepare a Soil and Water Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared by suitably qualified and experienced person/s approved by the Secretary;</p> <p>(b) be prepared in consultation with the EPA and DPI Water;</p> <p>(c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary; and</p> <p>(d) include a:</p> <p>(i) Site Water Balance that includes:</p> <ul style="list-style-type: none"> <li>• details of: <ul style="list-style-type: none"> <li>o sources and security of water supply;</li> <li>o water use and management onsite;</li> <li>o any off-site water transfers; and</li> <li>o reporting procedures; and</li> </ul> </li> </ul>	<p>Soil and Water Management Plan (draft), dated December 2017, by Gilbert &amp; Sutherland</p> <p>E Went interview</p> <p>Email correspondence between LCC and DPE</p> <p>Letter from DPE to LCC dated 26/2/18</p> <p>Letter from DPE to LCC dated 7/3/19</p>	The 1 <sup>st</sup> draft of the updated Soil and Water Management Plan was submitted to DPE on 18 December 2017, which complies with the timing required by clause (c). However, as outlined in the DPE letter dated 26/2/18, the 1 <sup>st</sup> draft of the plan did not adequately address the relevant conditions. At the time of the audit (November 2018), the plan was yet to be approved by DPE.	Non-compliant

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
	<ul style="list-style-type: none"> <li>• measures to be implemented to minimise clean water use on site;</li> <li>(ii) Surface Water Management Plan, that includes:               <ul style="list-style-type: none"> <li>• a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the project;</li> <li>• a detailed description of the surface water management system on site including the:                   <ul style="list-style-type: none"> <li>o clean water diversion system;</li> <li>o erosion and sediment controls;</li> <li>o dirty water management system; and</li> <li>o water storages; and</li> </ul> </li> <li>• a program to monitor and report on:                   <ul style="list-style-type: none"> <li>o any surface water discharges;</li> <li>o the effectiveness of the water management system,</li> <li>o the quality of water discharged from the site to the environment;</li> <li>o surface water flows and quality in local watercourses;</li> </ul> </li> </ul> </li> <li>(iii) Groundwater Management Plan that includes:               <ul style="list-style-type: none"> <li>• 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</li> <li>• a monitoring program to manage potential impacts, if any, on any alluvium and associated surface water source near the proposed extraction area that includes:                   <ul style="list-style-type: none"> <li>o identification of a methodology for determining threshold water level criteria;</li> <li>o contingency measures in the event of a breach of thresholds; and</li> <li>o a program to regularly report on monitoring.</li> </ul> </li> </ul> </li> </ul> <p>The Proponent must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.</p>			
Sch 3 Cond 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.	Site inspection Weighbridge software that tracks vehicle movements LCC's overall monitoring system LCC Blakebrook Quarry webpage <a href="https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-RAI-45-38-11">https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-RAI-45-38-11</a>	Observed laden trucks going over the weighbridge (refer App D, Plate 2) Viewed weighbridge software that tracks vehicle movements and observed use of system for entering this data into LCC's overall monitoring system. Viewed daily totals for FY 2018-19.	Compliant

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
Sch 3 Cond 22	<p>The Proponent must:</p> <p>(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;</p> <p>(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;</p> <p>(c) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site; and</p> <p>(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.</p>	Site inspection	Observed several trucks leaving site. All had loads covered and were observed to be clean of material.	Compliant
Sch 3 Cond 23	<p>The Proponent must prepare a Traffic Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the RMS and Council;</p> <p>(b) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;</p> <p>(c) describe the processes in place for the control of truck movements entering and exiting the site;</p> <p>(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;</p> <p>(e) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and</p> <p>(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.</p> <p>The Proponent must implement the approved Traffic Management Plan as approved from time to time by the Secretary.</p>	Blakebrook Quarry Operational Traffic Management Plan, Rev 3.1 dated August 2018, by ERM Letter from DPE to ERM dated 28/08/2018	DPE letter states that DPE considers that the plan fulfils the condition requirements and has been approved.	Compliant
Sch 3 Cond 24	<p>The Proponent must prepare an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. The plan must:</p> <p>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEH and the Registered Aboriginal Parties;</p> <p>(c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary; and</p> <p>(d) include a description of the measures that would be implemented to:</p> <ul style="list-style-type: none"> <li>▪ protect, monitor and manage known sites of archaeological significance;</li> </ul>	Blakebrook Quarry Aboriginal Heritage Management Plan, Rev 3.1 dated August 2018, by ERM Letter from DPE to ERM dated 28/08/2018	DPE letter states that DPE considers that the plan fulfils the condition requirements and has been approved.	Compliant

Reference	Condition / Requirement	Evidence	Findings	Compliance Status								
	<ul style="list-style-type: none"> <li>▪ manage any new Aboriginal objects or relics that are discovered;</li> <li>▪ store Aboriginal heritage items salvaged on site; and</li> <li>▪ ensure ongoing consultation and involvement of the Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site.</li> </ul> <p>The Proponent must implement the approved Aboriginal Heritage Management Plan as approved from time to time by the Secretary.</p>											
Sch 3 Cond 5 (pg11)	<p>The Proponent must:</p> <p>(a) implement the Biodiversity Offset Strategy (see Table 5);</p> <p>(b) ensure that adequate resources are dedicated towards the implementation of this strategy;</p> <p>(c) provide appropriate long term security for the offset area; and</p> <p>(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.</p> <p><i>Table 5: Biodiversity Offset Strategy</i></p> <table border="1"> <thead> <tr> <th>Offset Areas</th> <th>Minimum Size</th> </tr> </thead> <tbody> <tr> <td>On-site offset (Protection Zone in Appendix 4)</td> <td>17.6 hectares</td> </tr> <tr> <td>Off-site offset (within Lismore local government area, and not already within a conservation area)</td> <td>45 hectares</td> </tr> <tr> <td>Total</td> <td>62.6 hectares</td> </tr> </tbody> </table> <p><i>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.</i></p>	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	<p>E Went interview</p> <p>Email correspondence between LCC and DPE</p>	<p>(a) LCC acquired the land in 2017. The Biodiversity Offset Strategy (BOS) forms part of the Biodiversity and Rehabilitation Management Plan (BRMP). At the time of the audit (November 2018), the plan was yet to be approved by DPE.</p> <p>(b) E Went advised a minimum \$50k per year is allocated. Council is tendering for bush regeneration work. Addendum is attached to BOS.</p> <p>(c) E Went advised E2 zoning has been negotiated and OEH has accepted. OEH has asked Council to consider rezoning offset areas located within quarry site from operational to community. This is currently being considered by LCC.</p> <p>(d) E Went advised that a timetable was previously supplied.</p>	Non-compliant
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											
Sch 3 Cond 27	<p>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.</p> <p><i>Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance.</i></p>	<p>Site inspection and J Livingstone interview</p>	<p>The footprint of the active quarry operations has not reduced therefore rehabilitation cannot be commenced. Noted that the southern end of the northern pit is likely to be the first area to commence rehabilitation. Interim stabilisation measures were observed.</p>	Compliant								
Sch 3 Cond 28	<p>The Proponent must prepare a Biodiversity and Rehabilitation Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared by a suitably qualified expert;</p> <p>(b) be prepared in consultation with OEH and Council;</p> <p>(c) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;</p>	<p>Blakebrook Quarry Biodiversity and Rehabilitation Management Plan, Rev 3.1 dated August 2018, by ERM</p> <p>E Went interview</p> <p>Email correspondence between LCC and DPE</p> <p>Letter from DPE to LCC dated 6/2/18</p> <p>Letter from DPE to LCC dated 14/3/19</p>	<p>The 1<sup>st</sup> draft of the updated Biodiversity and Rehabilitation Management Plan was submitted to DPE on 18 December 2017, which complies with the timing required by clause (c). However, as outlined in the DPE letter dated 6/2/18, the 1<sup>st</sup> draft of the plan did not adequately address the relevant conditions. At the time of the audit (November</p>	Non-compliant								

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
	<p>(d) provide details of the conceptual final landform and associated land uses for the site;</p> <p>(e) describe how the implementation of the Biodiversity Offset Strategy will be integrated with the overall rehabilitation of the site;</p> <p>(f) include a Koala Management Plan prepared in accordance with SEPP 44;</p> <p>(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;</p> <p>(h) describe the short, medium and long term measures to be implemented to:</p> <ul style="list-style-type: none"> <li>▪ manage remnant vegetation and habitat on site, including within the Biodiversity Offset Strategy area; and</li> <li>▪ ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this approval;</li> </ul> <p>(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:</p> <ul style="list-style-type: none"> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ protecting vegetation and fauna habitat outside the approved disturbance area on-site, including core Koala habitat;</li> <li>▪ minimising the impacts on native fauna, including undertaking pre-clearance surveys;</li> <li>▪ establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;</li> <li>▪ ensuring minimal environmental consequences for threatened species, populations and habitats;</li> <li>▪ collecting and propagating seed;</li> <li>▪ controlling weeds and feral pests;</li> <li>▪ controlling erosion; and</li> <li>▪ managing bushfire risk;</li> </ul>		<p>2018), the plan was yet to be approved by DPE.</p>	

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
	<p>(j) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;</p> <p>(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</p> <p>(l) include details of who is responsible for monitoring, reviewing, and implementing the plan.</p> <p>The Proponent must implement the Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.</p>			
Sch 3 Cond 30	<p>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:</p> <p>(a) effects of inflation;</p> <p>(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</p> <p>(c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date.</p>	Correspondence between DPE and LCC	LCC did not submit a review of the Biodiversity and Rehabilitation Bond within 3 months of the 2015 Independent Environmental Audit. DPE issued a show cause letter in August 2016 and subsequently issued a penalty infringement notice in September 2016. LCC provided a bank guarantee for the Biodiversity and Rehabilitation Bond to DPE in October 2016.	Non-compliant
Sch 3 Cond 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.	Site inspection Section 3.14 of the <i>Blakebrook Quarry 2017 Annual Monitoring Report</i> by Newton Denny Chappelle dated 29/03/2018.	Measures are considered to be appropriate and adequate.	Compliant
Sch 3 Cond 36	<p>The Proponent must:</p> <p>(a) ensure that the project is suitably equipped to respond to any fires on site; and</p> <p>(b) assist the Rural Fire Service and emergency services to the extent practicable if there is a fire in the vicinity of the site.</p>	Site inspection Section 3.17 of the <i>Blakebrook Quarry 2017 Annual Monitoring Report</i> by Newton Denny Chappelle dated 29/03/2018.	Measures are considered to be appropriate and adequate.	Compliant
Sch 4 Cond 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:	Attachment 4 of the <i>Blakebrook Quarry 2017 Annual Monitoring Report</i> by Newton Denny Chappelle dated 29/03/2018.	Annual Review states that no landholder has requested an independent investigation of blast impacts on property.	Not Triggered

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
	<p>(c) commission a suitably qualified person whose appointment has been approved by the Secretary to investigate the claim and prepare a property investigation report; and</p> <p>(d) give the landowner a copy of the report.</p> <p>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.</p> <p>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.</p>			
Sch 5 Cond 1	<p>The Proponent must prepare an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:</p> <p>(e) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Proponent;</p> <p>(f) provide the strategic framework for environmental management of the project;</p> <p>(g) identify the statutory approvals that apply to the project;</p> <p>(h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</p> <p>(i) describe the procedures to be implemented to:</p> <ul style="list-style-type: none"> <li>▪ keep the local community and relevant agencies informed about the operation and environmental performance of the project;</li> <li>▪ receive, record, handle and respond to complaints;</li> <li>▪ resolve any disputes that may arise during the course of the project;</li> <li>▪ respond to any non-compliance;</li> <li>▪ respond to emergencies; and</li> </ul> <p>(j) include:</p> <ul style="list-style-type: none"> <li>▪ copies of any strategies, plans and programs approved under the conditions of this approval; and</li> <li>▪ a clear plan depicting all the monitoring to be carried out under the conditions of this approval.</li> </ul> <p>The Proponent must implement any Environmental Management Strategy as approved from time to time by the Secretary.</p>	Blakebrook Quarry Environmental Management Strategy, Rev 3.1 dated August 2018, by ERM Letter from DPE to ERM dated 28/08/2018	DPE letter states that DPE considers that the strategy fulfils the condition requirements and has been approved.	Compliant
Sch 5 Cond 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).	CCC meeting minutes 11/05/17, 2/3/18, 2/11/18 Phone discussion with CCC Chair Tim Heldt	CCC has clearly been established and CCC meeting minutes and discussion with Tim Heldt indicate that CCC is operating effectively.	Compliant

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
Sch 5 Cond 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.	LCC Blakebrook Quarry webpage <a href="https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-RAI-45-38-11">https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-RAI-45-38-11</a>	All relevant plans, reports and data appear to be accessible.	Compliant
Sch 5 Cond 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: <ul style="list-style-type: none"> <li>• the documents listed in condition 2(a) of Schedule 2;</li> <li>• current statutory approvals for the project;</li> <li>• all approved strategies, plans and programs required under the conditions of this approval;</li> <li>• a comprehensive summary of the monitoring results of the project, reported in accordance</li> <li>• with the specifications in any conditions of this approval, or any approved plans and programs;</li> <li>• a complaints register, updated monthly;</li> <li>• the annual reviews of the project;</li> <li>• any independent environmental audit as described in condition 12 above, and the Proponent's</li> <li>• response to the recommendations in any audit; and</li> <li>• any other matter required by the Secretary; and</li> </ul> (b) keep this information up-to-date, to the satisfaction of the Secretary.	LCC Blakebrook Quarry webpage <a href="https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-RAI-45-38-11">https://www.lismore.nsw.gov.au/cp_themes/default/page.asp?p=DOC-RAI-45-38-11</a>	All relevant plans, reports and data appear to be accessible and up-to-date.	Compliant
<b>Statement of Commitments (DPE Notice of Modification of Project Approval MP 07_0020, dated 18/09/2017 – Appendix 2)</b>				
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 radio for communication with buses and garbage trucks within all haulage vehicles as recommended within Appendix G. Traffic Impact Study, of the Environmental Assessment.	Site inspection Blakebrook Quarry Operational Traffic Management Plan, Rev 3.1 dated August 2018, by ERM	Plan includes a code of conduct as Annex B. Observed use of radio communication during site inspection.	Compliant
2.8	The development shall provide adequate on-site parking for all vehicles, plant and equipment associated with the development.	Site inspection	Inspected parking areas and observed them to be adequate.	Compliant
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.	Site inspection J Livingstone interview	All loading and unloading observed to be within the site. Loading and unloading observed within quarry pit and other operational areas. J Livingstone advised that LCC actively dissuades trucking contractors from queuing outside quarry prior to opening.	Compliant
4.1	All site employees/ contractors will undergo site induction training that includes stop work procedures if archaeological sites are discovered.	Site induction powerpoint presentation stored on weighbridge office computer and induction records	Site induction covers heritage issues.	Compliant



Reference	Condition / Requirement	Evidence	Findings	Compliance Status
5.2	Speed limits within the quarry site will be restricted to 40km/h and compression braking prohibited.	Site inspection J Livingstone interview	No issues were identified with the first portion of this requirement regarding a 40 km/h speed limit. Speed limit signs observed. However, the second portion of the requirement is not complied with. Compression braking is utilised by trucks within the site.	Non-compliant
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.	Site inspection J Livingstone interview	J Livingstone advised that a water truck is permanently stationed on site and utilises water that collects in sumps. Sprinklers are used alongside the main haul road whenever there is a risk of dust based on visual assessment. Water truck observed on site during site inspection.	Compliant
7.2	Water sprays will be used on all mobile crushing, stockpiles and screening equipment to minimise airborne particulate matter.	Site inspection	Several items of equipment were inspected and were fitted with water sprays.	Compliant
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.	Site inspection J Livingstone and E Went interviews	Bunding is present to divert clean water away from quarry pits (refer App D, Plate 3). The requirement that no quarry water is discharged from the site is not complied with. There is a sediment basin located on the opposite side of the entrance road from the weighbridge (refer App D, Plate 9). This sediment basin has an overflow that would ultimately discharge from the site.	Non-compliant
<b>Noise &amp; Blast Management Plan EMS-MP1, Revision 3.1, August 2018</b>				
Section 6.3 Item 11	Combine predictive meteorological forecasting and noise monitoring data to guide the daily planning of quarrying operations during noise-enhancing meteorological conditions.	J Livingstone interview	J Livingstone advised that general quarry operations are not influenced by meteorological conditions. They can be undertaken in a range of weather conditions, as evidenced by lack of issues with environmental monitoring. The only weather conditions that would result in cancelling operations is heavy rain. Blasts are typically booked 2-3 weeks in advance and are difficult to rebook. Haven't had exceedances of blast criteria and blasts have been undertaken in a range of weather – including overcast days with low cloud. Experienced blast contractors are utilised.	Compliant
Section 6.3 Item 13	Plant equipment audits will be undertaken on an annual basis for compliance purposes.	J Livingstone interview	J Livingstone advised that daily operator checks are completed and all servicing is carried out by trained, qualified, competent personnel. Servicing and maintenance are triggered by engine hour thresholds or pre-start check or operational reporting. Noted that	Compliant

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
			the term 'audit' has not been clearly defined in the requirement. Equipment is provided by LCC's fleet unit, which undertakes maintenance etc. in accordance with standard operating manuals.	
Section 7.4 Para. 4	All acoustic instrumentation employed throughout the monitoring program shall meet with the requirements of AS 1259.2-1990, "Sound Level Meters".	<i>Blakebrook Quarry Noise Monitoring Results – November 2018</i> by Ambience Audio Services, dated 12/11/2018.	Section 3.1 of report states that requirement was met.	Compliant
Section 7.4 Para. 5	Instrument calibration shall be checked before and after each measurement survey, with the variation in calibrated levels not exceeding $\pm 0.5$ dBA.	<i>Blakebrook Quarry Noise Monitoring Results – November 2018</i> by Ambience Audio Services, dated 12/11/2018.	Section 3.1 of report states that requirement was met.	Compliant
<b>Air Quality Management Plan EMS-MP2, Revision 3.1, August 2018</b>				
Table 7.1 Row 4	Long term stockpiles are to be seeded to minimize the potential for fugitive dust. Short term stockpiles will be kept damp via the water cart.	Site inspection	Overburden and topsoil stockpiles were observed to be vegetated (refer App D, Plate 4). Stockpiles of quarry products are not covered but are not considered to be a dust risk given the large particle size. Water cart observed on site.	Compliant
Section 8.2.2 Para. 2	The mass deposition rate of deposited matter is determined at the laboratory, taking into account the mass of insoluble plus soluble solids collected, the funnel cross-sectional area and the exposure period. The results are reported in g/m <sup>2</sup> /month or mg/m <sup>2</sup> /day.	Dust deposition gauge monitoring results 2016 to 2018.	Results are reported as required.	Compliant
Section 9.7 Para. 1	Complaints regarding the Blakebrook Quarry will be received through the existing Lismore City Council complaint handling process. Complaints regarding the quarry, whether received via email, telephone or written communications are to be entered into a complaint register by Council staff.	Blakebrook Quarry Environmental Complaints Register	Register exists and is utilised for complaints.	Compliant
<b>Operational Traffic Management Plan EMS-MP6, Revision 3.1, August 2018</b>				
Table 7.1 Row 4	Quarry trucks, site plant and the weighbridge/ dispatch office will be fitted with UHF radios to allow for communications and co-ordination of quarry truck movements.	Site inspection J Livingstone interview	J Livingstone advised that UHF radios are installed on all plant, trucks and weighbridge and use of UHF is critical to site communications. Observed effective UHF radio use during site inspection.	Compliant
Table 7.1 Row 4	Prestart meetings will be held at the beginning of each day and quarry truck movements (based on specific understanding of likely truck volumes due to booked quantities) can be outlined.	Site inspection J Livingstone interview Toolbox (prestart meeting) register, including whiteboard printout (week of 14/11 to 21/11)	Toolbox register included summary of daily operations.	Compliant
<b>Aboriginal Heritage Management Plan EMS-MP5, Revision 3.1, August 2018</b>				
Table 7.1 Row 3	Notify regulatory authorities including OEH of any incidents relating to Aboriginal heritage management.	J Livingstone interview	J Livingstone advised that there have been no incidents relating to aboriginal heritage management in the past 3 years.	Not triggered
<b>Biodiversity &amp; Rehabilitation Management Plan EMS-MP4, Revision 3.1, August 2018</b>				

Reference	Condition / Requirement	Evidence	Findings	Compliance Status						
Section 7.3.1	Signage indicating that rehabilitation works are in progress will also be erected to discourage disturbance to these areas.	Site inspection J Livingstone interview	Rehabilitation works have not commenced.	Not triggered						
Section 7.3.3	Topsoil from areas identified for vegetation removal will be stockpiled on site (away from drainage lines) for later use in on-site rehabilitation works.	Site inspection	Two topsoil stockpiles were noted during site inspection. Stockpiles were located away from drainage lines.	Compliant						
Section 7.3.4	During removal of vegetation within the approved quarry area, the following protocol for clearing hollow bearing trees will be adopted. <u>Pre-Clearing</u> At least one week notice is required prior to the clearing of native vegetation to allow adequate time for inspections of use by native fauna (CEG, 2008). After notice has been given, an ecologist trained in the handling and relocation of native fauna, will inspect hollow bearing trees for native fauna (CEG, 2008).	J Livingstone interview	J Livingstone advised that no hollow bearing trees have been cleared in the past 3 years.	Not triggered						
Section 7.3.5	Native vegetation requiring removal will be immediately mulched or chipped and stockpiled on-site to be used in rehabilitation works (CEG, 2008).	J Livingstone interview	J Livingstone advised that there has been no significant clearing or mulching in past 3 years. Previously stockpiled mulch has been utilised for on site revegetation.	Not triggered						
Section 7.3.5	Weeds removed during vegetation clearing will be safely transferred off-site and disposed of at an approved waste transfer facility (CEG, 2008).	J Livingstone interview	J Livingstone advised that there has been no significant clearing in past 3 years.	Not triggered						
<b>Environment Protection Licence 3384, 6 August 2018</b>										
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. <table border="1" data-bbox="255 1118 927 1217"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Extractive activities</td> <td>Land-based extractive activity</td> <td>&gt; 100000 - 500000 T annual capacity to extract, process or store</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Extractive activities	Land-based extractive activity	> 100000 - 500000 T annual capacity to extract, process or store	Annual returns submitted to DRG	Annual return data: 2017-18 FY = 216,088 tonnes 2016-17 FY = 116,213 tonnes	Compliant
Scheduled Activity	Fee Based Activity	Scale								
Extractive activities	Land-based extractive activity	> 100000 - 500000 T annual capacity to extract, process or store								
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	EPL Annual Returns for 2016/17 and 2017/18	EPL Annual Returns state no discharge of waters from Point 1 as a result of rainfall less than 60.2 millimetres over any consecutive five day period.	Compliant						
L1.3	The licensee must take all practical measures to avoid or minimise generation of total suspended solids.	Site inspection	Erosion and sediment controls were observed to be appropriate for the type and scale of operation.	Compliant						
L3.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises	Site inspection J Livingstone and E Went interviews	No waste from external sources (aside from glass sand) observed during site inspection. J	Compliant						

Reference	Condition / Requirement	Evidence	Findings	Compliance Status										
	for storage, treatment, processing, reprocessing or disposal, excluding the following: a) Glass sand recovered from the Lismore Recycling and Recovery Centre.		Livingstone and E Went confirmed no other waste is received at the site.											
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 locations as stated in Section 4 of Schedule 3 within the Department of Planning - Section 75J of the Environmental Planning & Assessment Act 1979 - Blakebrook Quarry Project - Project No. 07_0020 , except as expressly provided by this licence.	Annual noise monitoring reports for 2016, 2017 and 2018.	As explained in the annual noise monitoring reports, the quarry operational noise levels could not be accurately assessed because the quarry operations were not audible at the monitoring locations. The noise consultant estimates that the noise generated by the project does not exceed the criteria.	Compliant										
L6.1	Activities covered by this licence must be in accordance with the operating hours set out in the table below:  <table border="1" data-bbox="264 550 925 758"> <thead> <tr> <th>Activity</th> <th>Permissible Hours</th> </tr> </thead> <tbody> <tr> <td>Quarrying activities including loading and dispatch of trucks</td> <td>07:00 to 18:00 Monday to Friday, 07:00 to 15:00 on Saturday and at no time on Sundays and Public Holidays</td> </tr> <tr> <td>Blasting</td> <td>10:00 to 15:00 Monday to Friday and at no time on Saturday, Sunday and Public Holidays</td> </tr> <tr> <td>Asphalt plant</td> <td>06:00 to 17:30 Monday to Saturday and at no time on Sundays and Public Holidays</td> </tr> <tr> <td>Maintenance</td> <td>May be conducted at any time provided that these activities are not audible at any privately-owned residence</td> </tr> </tbody> </table>	Activity	Permissible Hours	Quarrying 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	Timesheets for week ending 18/10/2018 and J Livingstone interview	Timesheets showed typical weekday work hours of 6:45am (preparing for 7am start for operations) to 4pm. J Livingstone confirmed operating hours comply with requirements.	Compliant
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													
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.	Site inspection J Livingstone interview	Operation of equipment was observed to be acceptable during the site inspection. J Livingstone advised that daily operator checks are completed and all servicing is carried out by trained, qualified, competent personnel. Servicing and maintenance are triggered by engine hour thresholds or pre-start check or operational reporting. Equipment is provided by LCC's fleet unit, which undertakes maintenance etc. in accordance with standard operating manuals.	Compliant										
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Site inspection J Livingstone interview	Overburden and topsoil stockpiles were observed to be vegetated (refer App D, Plate 4). Stockpiles of quarry products are not covered but are not considered to be a dust risk given the large particle size. J Livingstone advised that a water truck is permanently stationed on site and utilises water that collects in sumps. Sprinklers are used alongside the main haul road whenever there is a risk of dust based on visual assessment. Water truck observed on site during site inspection. Interim stabilisation measures were also observed.	Compliant										

Reference	Condition / Requirement	Evidence	Findings	Compliance Status
			Several items of equipment were inspected and were fitted with water sprays.	
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.	Site inspection	Bunding is present to divert clean water away from quarry pits (refer App D, Plate 3).	Compliant
O4.7	The licensee must endeavour to maximise the reuse of captured stormwater on the premises.	Site inspection J Livingstone interview	Water truck and dust suppression sprinklers utilise water that collects in sumps. Pump and pipe infrastructure for stormwater reuse observed.	Compliant
O4.8	Each sedimentation basin must have a marker (the "sedimentation basin marker") that identifies the upper level of the sediment storage zone.	Site inspection	Depth marker is present in sediment basin (refer App D, Plate 9).	Compliant
M4.1	The licensee is required to install and maintain a rainfall depth measuring device.	Site inspection	A new meteorological station was installed on 12 February 2018. Observed weather station and associated remote display in weighbridge office.	Compliant

## Appendix D

### Site Inspection Photos



Plate 1: Extent of works marker



Plate 2: Weighbridge and offices



Plate 3: Upstream catchment diversion bund



Plate 4: Vegetated topsoil stockpile



Plate 5: Northern quarry pit



Plate 6: Northern quarry pit, with product stockpile





Plate 7: Southern quarry pit



Plate 8: Dirty surface water containment bund



Plate 9: Sediment basin located near quarry entrance



Plate 10: Drainage channel leading to sediment basin



## Appendix E

# Independent Audit Declaration Form

### Independent Audit Declaration Form


Project Name	Blakebrook Quarry
Consent Number	07_0020
Description of Project	Rock quarry, including quarry pits, crushing and screening plant and equipment, administrative offices, weighbridge, laboratory, workshop, and fuel and chemical storage facilities
Project Address	540 Nimbin Road, Blakebrook, NSW
Proponent / Operator	Lismore City Council

I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:

- the audit has been undertaken in accordance with relevant condition(s) of consent and the *Independent Audit Post Approval Requirements (Department 2018)*;
- the findings of the audit are reported truthfully, accurately and completely;
- I have exercised due diligence and professional judgement in conducting the audit;
- I have acted professionally, objectively and in an unbiased manner;
- I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the audit, or by relationship as spouse, partner, sibling, parent, or child;
- I do not have any pecuniary interest in the audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child;
- neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit; and
- I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

#### Notes:

- a) Under section 10.6 of the *Environmental Planning and Assessment Act 1979* a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and
- b) The *Crimes Act 1900* contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both)

Signature	
Name of Auditor	Duncan Thomson
Qualification	BE Env (Hons)
Company	GeoLINK
Company Address	Level 1, 64 Ballina St, Lennox Head
Date	21/01/2019