

# Independent Environmental Audit

Sly's Quarry Expansion  
Lot 2 DP 1055044  
Tullymorgan-Jackybulbin Road Mororo  
NSW

**HEALTH SCIENCE ENVIROMENTAL EDUCATION  
ENVIRONMENTAL AUDITOR**

# Independent Environmental Audit

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Lot 2 DP 1055044  
Tullymorgan-Jackybulbin Road Mororo  
NSW

Prepared for: Newman Quarrying Pty Ltd  
Job No: 41/2017  
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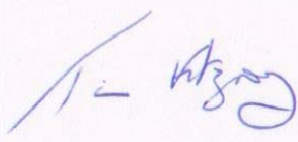
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Independent Audit Certification Form	
Development Name	Sly's Quarry Expansion
Development Consent No.	Development Consent SSD 6624
Description of Development	Sandstone quarry
Development Address	Lot 2 DP 1065044 Tullymorgan-Jackybulbin Road, Mororo NSW
Operator	Newman Quarrying Pty Ltd
Operator Address	PO Box 22 Wood burn NSW 2472
<b>Independent Audit</b>	
Title of Audit	Sly's Quarry Expansion– Independent Environmental Audit – Sep
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <ul style="list-style-type: none"> <li><i>• The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits</i></li> <li><i>• The findings of the audit are reported truthfully, accurately and completely;</i></li> <li><i>• I have exercised due diligence and professional judgement in conducting the audit;</i></li> <li><i>• I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;</i></li> <li><i>• I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;</i></li> <li><i>• I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i></li> <li><i>• Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and</i></li> <li><i>• I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apar from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so. Note. a) The Independent Audit is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000. b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2years imprisonment or \$22,000, or both).</i></li> </ul>	
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Auditor Certification (if relevant)	Approved by the Secretary of Department of Planning and Environment, 3 July 2017 Environmental Auditing Certificate, UNSW, March 2001
Date:	September 2017

# Executive Summary

An independent environmental audit of the Sly's Quarry Expansion was conducted in August 2017 by Tim Fitzroy of Tim Fitzroy & Associates, Dr Melissa Van Zwieten (Ecologist), Tim Ruge (Environmental Engineer) and Dr John Heilig (Vibration) to assess the compliance status of the Sly's Quarry Expansion development and operations, in accordance with Development Consent SSD 6624 Schedule 5 condition 11.

The audit was conducted generally in accordance with the Australian/New Zealand Standards AS/NZS ISO 19011:2002 - Guidelines for Quality and/or Environmental Management System Auditing and the Independent Audit Guidelines (Department of Planning and Environment, October 2015).

The documentation and files held by the operator Newman Quarrying and interview/discussion with Mr Mark Newman provided the auditors with the required information and documentation for the verification of compliance of the Sly's Quarry Expansion operations with the Development Consent and other statutory environmental approvals.

The independent environmental audit conducted in August 2017 confirmed that Sly's Quarry was being developed generally in accordance with the project description and predictions outlined in the Environmental Impact Assessment for the Sly's Quarry Expansions, March 2015. The operation of the Sly's Quarry at the date of this audit, generally demonstrates compliance with the Development Consent conditions, and the Environment Protection Licence conditions.

A summary of the audit finding is provided below:

## **Environmental Management Strategy** **Status: Compliant**

The approved Environmental Management Strategy prepared for Sly's Quarry to satisfy Development Consent SSD 6624 Schedule 5 condition 1 provides a sound basis for the management of Sly's Quarry expansion activities when combined with the implementation of the approved Environmental Management Plans. The Environmental Management Strategy also addresses the majority of the elements of ISO 14001.

## **Management Plans** **Status: Compliant**

The environmental management plans prepared for the Sly's Quarry expansion to support the Environmental Management Strategy, have been developed generally in accordance with the requirements of Development Consent SSD 6624 Schedule 5 condition 3. All required management plans have been submitted to the DPE and have been approved.

## **Noise Management** **Status: Compliant Ongoing**

The Noise Management Plan prepared to satisfy Project Approval Schedule 3 condition 5 was approved by DPE on 9 May 2016. Noise monitoring conducted in October 2016, confirmed that the noise emissions from Sly's Quarry operations received at sensitive receivers, were consistent with the predicted noise assessment criteria in the Environmental Assessment (2015), and were compliant with the Development Consent SSD 6624 Schedule 3 and EPL 11649 conditions. Subsequent noise monitoring in February 2017 and May 2017 have also demonstrated compliance with the noise assessment criteria.

## **Blast Management**

**Status: Compliant Ongoing**

The Blast Management Plan for Sly's Quarry operations was approved by DPE on 9 May 2016. Blast management at Sly's Quarry occurs in accordance with Development Consent SSD 6624 Schedule 3, EPL 11649 L5 conditions and AS 2187.2-2006 Explosive Storage, Transport and Use. The blast monitoring results between May 2016 and August 2017 indicated no exceedance of the blast overpressure or ground vibration criteria had occurred because of blasting at Sly's Quarry.

## **Air Quality**

**Status: Non-Compliant Low Risk**

The Air Quality Management Plan and dust control measures implemented at Sly's Quarry are adequate for the quarry operations and activities. Air Quality Monitoring had not commenced due to the cost and sourcing specialised equipment. This matter has now been resolved and monitoring was due to commence on 11 August 2017. Dust issues occurring from high wind events have been managed in accordance with the Air Quality Management Plan, with operations/activities that have the potential to generate dust curtailed in higher exposed areas where there is potential for dispersion of dust. No complaints related to dust / air quality were received between 9 May 2016 and 8 August 2017.

## **Soil and Water Management**

**Status: Non-Compliant Low Risk**

The Soil and Water Management Plan was approved by DPE on 9 May 2016. Implementation of the management measures and monitoring in the Soil and Water Management Plan for surface water, and erosion and sediment control have occurred for Sly's Quarry operation and activities in accordance with the plan.

A difference of opinion between the applicant and regulator with respect to the proposed location of groundwater monitoring wells has resulted in the delay of well installation. The Groundwater monitoring wells were installed the day prior to the audit inspection in August 2017. No results of groundwater monitoring are available

Soil and water management on the Sly's Quarry site was observed during this independent environmental audit to be generally compliant with the requirements of the EPL and Development consent conditions.

Non-compliance was found in relation to some environmental measures regarding soil and water management. These non-compliances were generally low risk and relate to:

- Baseline water quality monitoring of drainage line points has not been undertaken. This non-compliance is rated Low Risk.
- Quarterly monitoring of the groundwater monitoring wells has not commenced. This non-compliance is rated Low Risk.
- Impervious bunded facilities have not been provided for vehicle/plant maintenance/wash-down areas. This non-compliance is rated Low Risk.
- The storage system for waste oil and batteries is not compliant. This non-compliance is rated Low Risk.

Compliance with some conditions requires verification. This includes:

- Weekly monitoring of erosion and sediment controls
- Spill kit monitoring
- Provision of spill kits at refuelling sites and the training of personnel in their use
- Construction details for the three groundwater monitoring bores.

It is recommended verification of the above matters and the non-compliances are addressed as soon as possible. The recommended works to address the non-compliances involve:

- commence baseline water quality monitoring as detailed in the SWMP
- groundwater monitoring:
  - confirm groundwater bores have been constructed correctly
  - purge the bores prior to installation of water level data loggers
  - commence logging and sampling as detailed in the SWMP
- vehicle/plant cleaning and maintenance area: establish a bunded hardstand area with an appropriate wastewater collection and treatment/reuse or storage/transfer system
- modify the waste oil storage tank by replacing inlet pipe with a spill safe system to capture spillage and bollards to protect it from vehicle damage.
- Relocate the stored batteries to the workshop or a suitably enclosed, roofed area.

### **Traffic and Transport**

**Status: Generally Compliant**

The Traffic Management Plan and Drivers Code of Conduct are adequate for the control of trucks and drivers associated with the transport of product from Sly's Quarry.

Non-compliance was found in relation to some measures in the Traffic Management Plan. These non-compliances were low risk and relate to:

- the intersection upgrade for the access road and Tullymorgan-Jackybulbin Road. The upgrade works are generally complete except for the following matters:
  - Install Give Way sign at exit from the site
  - Widen the batter slightly in accordance with Council request
  - Install truck warning signs on Tullymorgan-Jackybulbin Road.

The above non-compliances are rated Low Risk.

It is recommended the non-compliances regarding the intersection upgrade are addressed as soon as possible.

### **Waste Management**

**Status: Compliant**

Waste management on Sly's Quarry site occurs in accordance with the approved Waste Management Plan. The management of the waste materials and the volumes of waste generated on the site from the Sly's Quarry activities is satisfactory. Waste is minimised where practicable and reuse / recycling occurs where possible to reduce waste going to landfill.

### **Heritage Management**

**Status: Compliant**

A Heritage Management Plan was prepared to satisfy the requirements of Development Consent Schedule 3 condition 26 and approved by DPE on 9 May 2016. No heritage items have been encountered on Sly's Quarry site between 9 May 2016 and 5 August 2017.

### **Biodiversity, and Rehabilitation**

**Status: Compliant or Not Triggered**

A Biodiversity and Rehabilitation Plan (BRMP) was approved by DPE on 9 May 2017. An updated Plan is due for submission to include Biodiversity Offset Strategy matters in November 2017. The BRMP encompasses the overall ecological management and rehabilitation of the Quarry site. The BRMP covers the requirements of Development Consent Schedule 3 condition 31 in relation to long term security of biodiversity offsets at the site. The plan will not be implemented until clearing

commences within Stage 2 of the Quarry's operation. As a guide to success, rehabilitation of the previously disturbed areas of the Quarry (e.g. Development Area C), has progressively occurred with native vegetation. The restored areas were observed to exhibit similar vegetation diversity and community structure to the surrounding natural environment. The consent conditions allow for review of the BRMP and BOS at regular intervals to accommodate changes based on performance criteria.

**Bushfire Management**

**Status: Non Compliant Moderate Risk**

A Bushfire Management Plan was approved by DPE. There is no evidence of induction of new staff members, contractors, visitors and site users to include bushfire awareness, reporting and response actions to fire danger, and evacuation procedures.



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# 1. Introduction

## 1.1 Background

Development Approval granted for the Sly's Quarry Expansion requires an Independent Environmental Audit of the project to be conducted in accordance with the Development Consent SSD 6624 Schedule 5 condition 11:

- "The independent environmental audit referred to in Schedule 5 Condition 11 must:
- (a) be conducted by a suitable qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the project and assess whether it is complying with the requirements of this approval, and any other relevant approvals and relevant EPL/s;
  - (d) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
  - (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals."

This current Independent Environmental Audit was commissioned by Newman Quarrying Pty Ltd for the Sly's Quarry Expansion and conducted by Tim Fitzroy & Associates, in association with Dr Melissa Van Zwieten, Dr John Heilig and Tim Ruge following endorsement of Tim Fitzroy as auditor by the Secretary of Department of Planning and Environment (DPE) on 3 July 2017 to satisfy Development Approval SSD 6624 Schedule 5 condition 11.

The audit was conducted generally in accordance with the Australian/New Zealand Standards AS/NZS ISO 19011:2002 - Guidelines for Quality and/or Environmental Management System Auditing and Independent Audit Guideline (DP&E, October 2015).

## 1.2 Scope of Work

The scope of work for the Independent Environmental Audit of the Sly's Quarry Expansion included:

- review of implementation of the requirements of the Development consent conditions, and other licences and approvals for the construction and operation of the Sly's Quarry;
- site inspection of the quarry operation and activities;
- review on-site documentation and monitoring data relevant to the Independent Environmental Audit;
- discussions with Newman Quarrying project and GHD (proponent's environmental consultant) staff in relation to the Development consent conditions;
- discussion and liaison with various relevant government agencies and Clarence Valley Council staff;
- assessment of compliance with the Development Consent and other environmental approval conditions; and
- preparation of an Independent Environmental Audit Report providing assessment of compliance against each environmental approval condition.

## 1.3 Structure of the Independent Environmental Audit

The Independent Environmental Audit Report provides comment on compliance of each condition of approval in a tabulated form, with additional discussion where required on specific matters to generally address the requirements of the Independent Audit Guideline. The tables of conditions for the Development Consent, Environmental Protection Licence and other relevant environmental approvals are attached to the main text of the report with the compliance status provided where auditable.

The format of the Independent Environmental Audit Report is as follows:

	Executive Summary
<b>Section 1</b>	Introduction
<b>Section 2</b>	Sly's Quarry Expansion Development
<b>Section 3</b>	Approvals and Licences
<b>Section 4</b>	Agency Consultation
<b>Section 5</b>	Review of Environmental Management
<b>Section 6</b>	Conclusions
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<b>Appendix C</b>	Site Photos
<b>Appendix D</b>	Correspondence from Agencies
<b>Appendix E</b>	Monitoring and Incidents/Complaints Register

## 1.4 Compliance Tables

This Independent Environmental Audit Report has assessed the activities of Sly's Quarry for compliance with the intent of the conditions of the Development Consent SSD 6624 and Environment Protection Licence 11649 via site inspection, document review and verification of relevant documentation related to the conditions of approval. The compliance status of each condition is expressed (in general accordance with Independent Audit Guideline section 4.1), in Appendices A to B to this Independent Environmental Audit Report:

Assessment Status	Criteria Description
Compliant	Where verifiable evidence has been collected to demonstrate that the intent of the elements of the conditions of the regulatory approval and appropriateness of implementation against the Development Consent SSD 6624 has occurred.
Compliant Ongoing	The intent and specific requirements of the condition have been met and the requirements are an ongoing requirement for the operation of the Quarry project.
Administrative Non-compliance	A technical non-conformance with a condition of approval that would not result in any risk or material harm to the environment (e.g. the submission of a report to government later than required under the approval conditions).
Non-Compliance – Low Risk	Non-compliance with a condition of approval with the potential for moderate environmental consequences, but is unlikely to occur, or, potential for low environmental consequence but is likely to occur.

Non-Compliance – Moderate Risk	Non-compliance with a condition of approval with the potential for serious environmental consequences but unlikely to occur, or, potential for moderate environmental consequence but likely to occur.
Non-Compliant – High Risk	Non-compliance of a condition of approval with the potential for significant environmental consequences, regardless of the likelihood of occurrence.
Not verified	Where the auditor was not able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.
Not active / Not triggered	A regulatory approval requirement / condition has an activation or timing that had not been triggered at the date of the audit, therefore a determination of compliance could not be made.
Noted / Not applicable	A statement or fact where no assessment of compliance is required.

Any non-compliance with a condition of approval (if identified) will be subject to a risk assessment in accordance with the Independent Audit Guideline section 4.1 Table 2 and reported in section 6 Conclusions of this Independent Environmental Audit Report.

## 1.5 Limitations of the Audit

The auditor received complete cooperation from Newman Quarrying and GHD personnel during the audit. Documentation that was not available either before, or immediately during the audit site visit / inspection and document review, was provided to the auditor by Newman Quarrying and GHD, after the site visit.

The findings of the audit are based upon visual observations on the site, interviews with site personnel and interpretation of records / documentation provided by Newman Quarrying. Opinions presented within the audit apply to the site as observed at the date of the audit site inspection and from information provided by Newman Quarrying personnel. Any changes to this information of which the Tim Fitzroy & Associates is not aware and has not had the opportunity to evaluate, have not therefore been considered in this report. The auditor has taken due care to consider all reasonably available information provided during the audit and has taken this information to represent a fair and reasonable characterisation of the environmental status of the site.

The adequacy of strategy/ plans / programs required under the Development Consent SSD 6624, was assessed by reference to the requirements of the conditions of approval, and documentation from the relevant agency(s) to Newman Quarrying in relation to the status / approval of the prepared documents, at the date of this audit (August 2017)

## 2. Sly's Quarry Expansion

### 2.1 Background to Sly's Quarry

The site has reportedly been used as a quarry since the 1950's. In 1995, Maclean Shire Council (now Clarence Valley Council) granted development consent (1995/128) to the operation according to State Environmental Planning Policy (SEPP) No. 37 – *Continued Mines and Extractive Industries*. A further consent (1997/011) was granted by Maclean Shire Council in 1997.

The approvals were appealed (Appeals 10220, 10274, 10373 and 10377) and heard in the Land and Environment Court in 1998. On 29 January 1999, the court ordered (in part):

2. That Appeal No. 10377 of 1998 be upheld in part and development consent be granted to sand extraction in Sites B and C and rock quarrying in Site A on Lot 26 DP 755629 Jackybulbin Road, Tabbimoble, Maclean Shire, as shown on Exhibit 1 up to 100,000 tonnes per annum maximum extraction rate in each, all subject to and as modified by the Conditions in the attached Schedule.

Following the court decision, Newman Quarrying prepared an Environmental Management Plan (EMP) which was approved by Maclean Shire Council. The EMP outlined, in detail, the proposed operations, including a site plan with designated areas for Sites A, B and C.

Site A is an area of approximately 22 hectares which contains the sandstone quarry, Site B is a sand extraction operation approximately 5 hectares in area south of Tullymorgan-Jackybulbin Road and Site C is a sand extraction area approximately 44 hectares in area, on the western section of Lot 2 on the northern side of Tullymorgan-Jackybulbin Road.

Development Consent SSD 6624 allows Newman Quarrying to expand the sandstone quarry at Lot 2 DP 1055044, Tullymorgan-Jackybulbin Road, Mororo, known as Sly's Quarry as follows:

1. Site A of the approved sandstone quarry is to expand by 11.1 hectares;
2. Site B and C are to be closed and rehabilitated; and
3. An extraction rate up to 500,000 tonnes per annum from a total resource of 7 million tonnes.

Compared to the previously approved quarry, the net area of the quarry has reduced by 49 hectares and the rate of extraction will increase from 100,000 tonnes per annum.

The primary purpose of Sly's Quarry, is to supply substantial quantities of quarry materials required for current and proposed Pacific Highway works, and for supply to Clarence Valley Council (CVC) and local contractors.

## 2.2 Topography

The area surrounding the quarry is undulating with an elevation ranging from approximately 40 m AHD (near Tullymorgan-Jackybulbin Road) to approximately 229 m AHD at the peak of Mount Doubleduke outside the northern boundary of the quarry site. The quarry site is located on a generally south-facing slope with Mt Doubleduke lying to the north of the existing quarry. The land slopes south, with the Pacific Highway to the east.

The quarry site drains from north to south via several intermittent waterways. The existing quarry has altered the natural topography by excavating the centre of the site to form an amphitheatre shape. The current floor of the quarry is approximately 44 m AHD with a second level to the east at approximately 58 m AHD. The centre of the existing quarry has active faces to the north, east and west ranging up to approximately 20 m in height.

## 2.3 Surrounding Land Use

The site and surrounding area is zoned RU2 Rural Landscape and E3 Environmental Management. The area immediately surrounding the quarry is heavily vegetated, with rural/residential properties to the west, south and east. The Pacific Highway is 2.6 km to the east of the site, whilst the adjoining areas to the south, west and north are heavily vegetated.

The site has been operated as a quarry since the 1950's and the proposed site is dominated by the excavation from previous quarrying.

## 2.4 Sly's Quarry Resource

A summary of the results from a geotechnical investigation by Hensel Geosciences (2014) suggests the presence of a variety of arenaceous rock types and several, very minor, lithologically distinct interbeds. The sandstone ranges from medium grained to coarse-grained. The former tends to have a pale pinkish colour and is distinctly cross-bedded. The majority of beds are less than 1 m in thickness. In contrast, there are several prominent beds of the coarser sandstone between 2 m and 3 m thick. The general colour of the coarse-grained sandstone is medium to light-grey.

The existing quarry produces both solid and blended crushed sandstone products that can be used in a variety of engineering and construction applications. Hensel Geosciences (2014) reports testing has shown that the sandstone is highly siliceous and with only very small amounts of phyllosilicates (mica, illite, chlorite) and carbonaceous material. This virtually categorises the sandstone as inert chemically and physically under most normal natural conditions. It is shown to be well-cemented and quite strong.

## 2.5 Sly's Quarry Status 2017

Development Approval SSD 6624 granted on 5 May 2016, provided approval of the activities described in the Environmental Impact Statement for the proposed Quarry Expansion at Lot 2 DP 1055044, Tullymorgan-Jackybulbin Road, Mororo, (GHD Pty Ltd, March 2015). The Development Approval was granted for the closure and rehabilitation of some existing activities and the extension of extraction operations to the north and south of the previously approved extraction areas in Site A.

The activities include:

- expanding the approved sandstone quarry pit by 11.1 hectares;
- extracting a total resource of 7 million tonnes;
- increasing the maximum extraction rate of sandstone to 500,000 tonnes per year;



- importing mulch and topsoil for rehabilitation;
- closing and rehabilitating two other existing quarry pits (Sites B and C)
- conglomerate extraction (blasting and excavation).
- processing Operations (size reduction, screening and blending) occurs in the processing plant.
- off-site road transport of products.
- vehicle/equipment maintenance and ancillary activities and stores on-site.
- administration and product despatch.
- progressive rehabilitation and maintenance of the disturbed areas of the quarry site.

The Development Area; outline of expansion area; extraction area and conceptual rehabilitation area are provided in Illustrations 2.1, 2.2, 2.3 and 2.4.

## Illustration 2.1 – Quarry Development Area



Figure 1: Location of existing (Site A) and previous extraction areas (Sites B and C)

## Illustration 2.2 – Outline of Quarry Expansion Area

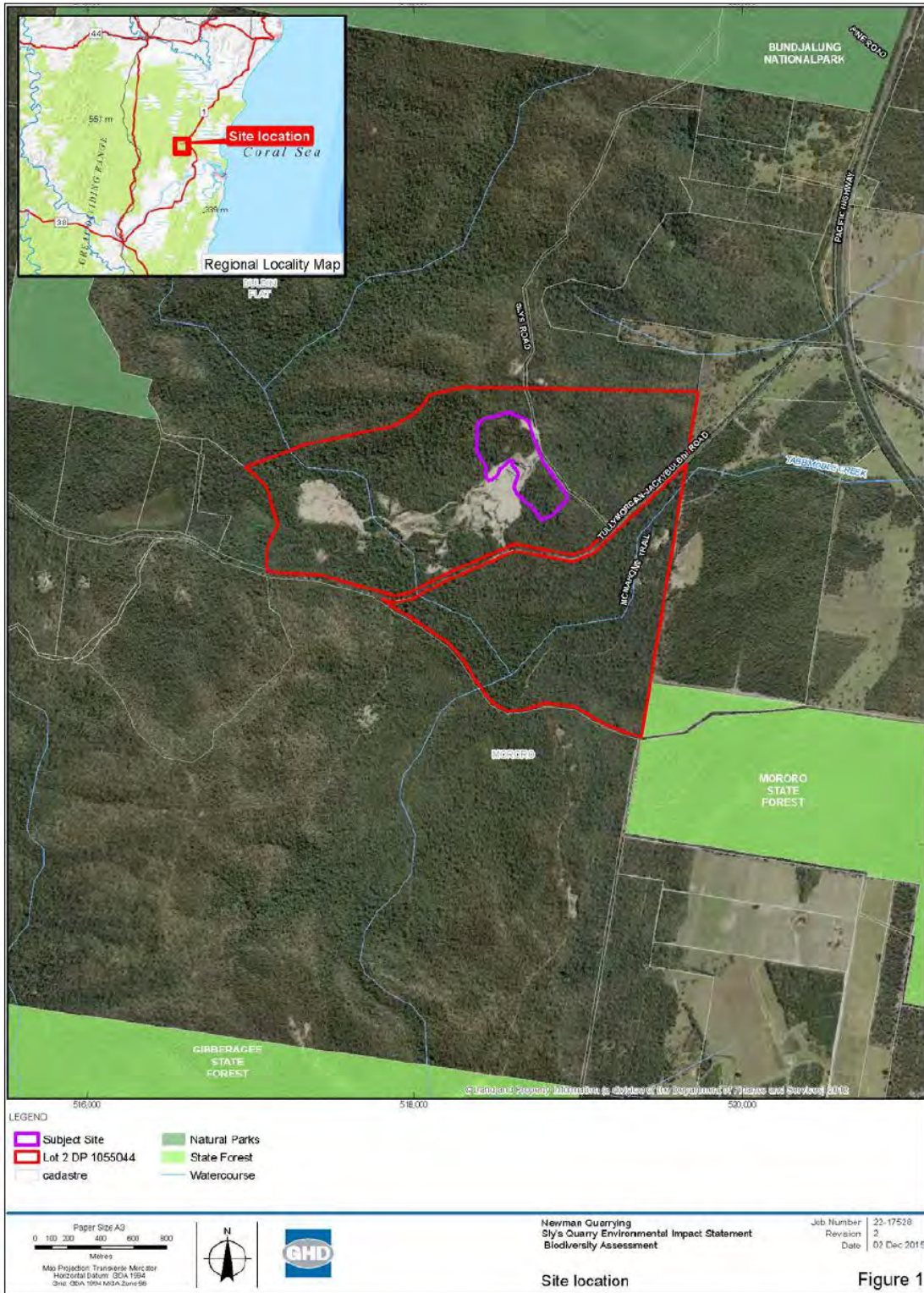


Figure 2: Outline of expanded quarry footprint (shown in purple edge and labelled "subject site")

### Illustration 2.3 – Quarry Extraction Stages

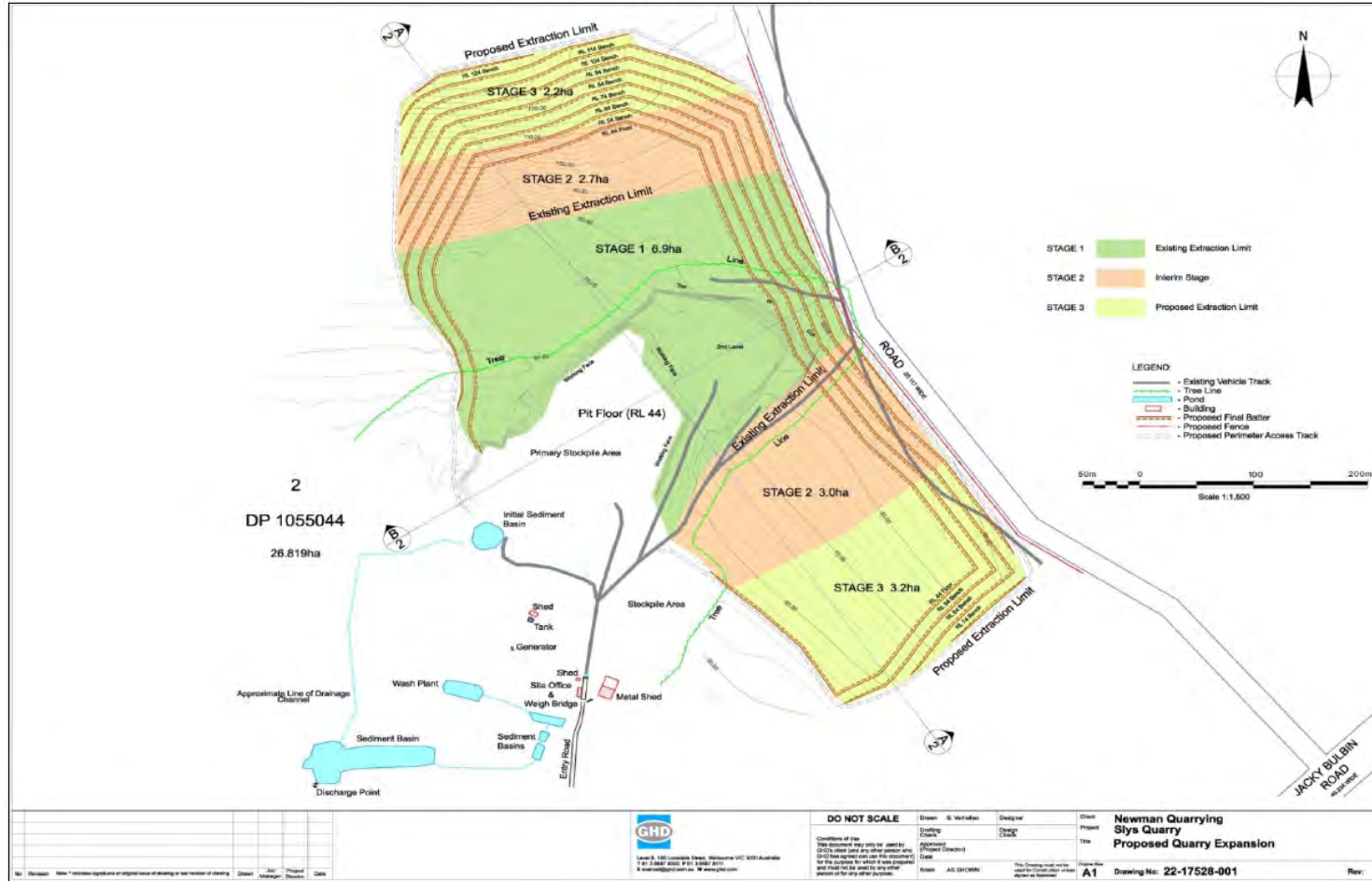


Figure 3: Stages of extraction

## Illustration 2.4 - Quarry Rehabilitation Plan



Figure 5: Conceptual rehabilitation plan

## 3. Approval and Licences

Sly's Quarry was operated in accordance with Development Consent (DA 1995/128) and DA 1997/011 granted by the Maclean Shire Council and upheld by the Land and Environment Court (Appeals 10220, 10274, 10373 and 10377) in 1998 until the granting of the current Development Approval SSD 6624 under Part 3A of the Environmental Planning and Assessment Act 1979, on 5 May 2016. Development Consent DA 130/42 was surrendered on 31 December 2013.

### 3.1 Development Approval SSD 6624

The Sly's Quarry Expansion was declared a State Significant Development (by Clause 7 of Schedule 1 of State Environmental Planning Policy (SEPP) (State and Regional Development) 2011. Development Approval under the Environmental Planning Assessment Act 1979 for the Sly's Quarry Expansion was granted to Newman Quarrying Pty Limited on 5 May 2016.

The approval for the Sly's Quarry Expansion provides for the continuation and expansion of the Sly's Quarry including:

- expanding the approved sandstone quarry pit by 11.1 hectares;
- extracting a total resource of 7 million tonnes;
- increasing the maximum extraction rate of sandstone to 500,000 tonnes per year;
- importing mulch and topsoil for rehabilitation;
- closing and rehabilitating two other existing quarry pits (Sites B and C);
- conglomerate extraction (blasting and excavation);
- processing Operations (size reduction, screening and blending) occurs in the processing plant;
- off-site road transport of products;
- vehicle/equipment maintenance and ancillary activities and stores on-site;
- administration and product despatch; and
- progressive rehabilitation and maintenance of the disturbed areas of the quarry site.

### 3.2 Environment Protection Licence 11649

Environment Protection Licence (EPL) No. 11649 was granted to Newman Quarrying Pty Ltd under Protection of the Environment Operations Act 1997 section 55, on 22 November 2002. The EPL is subject to review each 5 years as set out in Protection of the Environment Operations Act 1997 Schedule 5 Part 3.6. The EPL is current until surrendered or revoked.

The latest licence modification variation 155407 was issued on 10 August 2017, five days after site audit inspection.

## EPL 11649 Fee Based Activities

Land-based extractive activity	> 100000-500000 T annual capacity to extract, process or store
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The following Notices of Variation to EPL 11649 have occurred between June 2016 and August 2017.

Date Variation No	Variation to EPL 11649
28 June 2016/ 1541664	<p>On 16-May-2016 the Environment Protection Authority (EPA) received an application for the variation of the licence.</p> <p>The variations are made to accommodate the recent State Significant Development (SSD) approval - SSD 6624, granted on 5 May 2016.</p> <p><b>Key Modifications included:</b></p> <p><b>A1.2</b> Notwithstanding A1.1, the scale of the land-based extractive activity authorised under this licence must not exceed 500,000 tonnes per annum, being the amount equivalent to the extraction limit approved by the development consent granted under the Environmental Planning and Assessment Act 1979 for the premises specified in A2.</p> <p><b>E1 Soil and Water Management</b></p> <p>E1.1 A Soil and Water Management Plan (SWMP) must be developed which outlines all management and mitigation measures relating to stormwater management, erosion and sediment control. This must be prepared in accordance with Managing Urban Stormwater Soils and Construction Volume 1 and Volume 2 E. Mines and quarries. The Soil and Water Management Plan must:</p> <ul style="list-style-type: none"> <li>• outline of stormwater management measures to control pollutants at the source and contain them within the site.</li> <li>• outline of erosion and sediment control measures to minimise disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment.</li> <li>• describe measures for maintaining and monitoring any stormwater controls.</li> <li>• provide details of method of storage of topsoil and associated erosion and sediment control</li> <li>• describe waste water treatment measures; systems for reusing/recycling waste water; and methods of treating any unavoidable discharge from the site to meet specified water quality requirements.</li> <li>• describe the size and location of the sediment basins for each stage of the development of the quarry.</li> </ul> <p>The sediment basins must meet the design and operational standards of Managing Urban Stormwater Soils and Construction: Volume 1 and Volume 2 E. Mines and quarries. This document requires a minimum standard of 90 percentile five-day rainfall event (75mm) to be used to determine basin sizing for quarries.</p> <ul style="list-style-type: none"> <li>• If sediment basins are proposed to be used as water storage for re-use purposes on site (e.g. for dust suppression, process water, etc) a water balance must be conducted to ensure that the design volume of the basin required for stormwater capture and treatment is not compromised by water storage required for re-use purposes. Such dual-purpose basins need to be accurately designed and managed to accommodate both stormwater management and water re-use objectives.</li> <li>• Detail a progressive rehabilitation plan for the quarry, including the exhausted quarry areas "B" and "C".</li> </ul> <p>The SWMP is to be submitted to the EPA by 31 August 2016.</p> <p><b>E2 Noise Compliance Assessment</b></p> <p>E2.1 A noise compliance assessment must be undertaken within two months of commencement of the proposed increased extraction rate. The</p>

	assessment must be conducted by a suitably qualified and experienced acoustical practitioner and shall assess compliance with noise criteria presented above. A report must be provided to the EPA within 1 month of the assessment.
<b>10 August 2017*/ 1554071</b>	<p>The following variations have been made to the licence:</p> <ul style="list-style-type: none"> <li>○ Modifying the hours of operation (Condition L6.1) to reflect the consent conditions in SSD6624 issued 5 May 2016.</li> <li>○ Adding conditions L2.6, L2.7 and L2.8 to accommodate turbidity monitoring of sediment basin discharges.</li> </ul> <p>L6 Hours of operation L6.1 Noise generating activities at the premises must be conducted during the following hours:</p> <ul style="list-style-type: none"> <li>• 7:00 am and 6:00 pm Monday to Friday;</li> <li>• 7:00 am and 1:00 pm Saturday;</li> <li>• at no time on Sundays and Public Holidays.</li> </ul> <p>Note: Saturday working hours are extended to 7am to 4pm only for the purposes of fulfilling a contract for the supply of quarry products to the Pacific Highway upgrade project (SSD 4963).</p> <p>L2.6 Turbidity v's Total Suspended Solids L2.7 If the licensee uses turbidity (NTU) in place of total suspended solids (TSS) to determine compliance with Condition L2.4, the licensee must first develop a statistical correlation which identifies the relationship between NTU and TSS for water quality in the sediment basins. The licensee must develop and implement a method to enable the ongoing verification of the relationship between NTU and TSS. <b>L2.8</b> The licensee must provide the EPA with a copy of the statistical correlation assessment methodology and results before using NTU in place of TSS.</p>

**\*Note:** EPL Variation occurred post site audit inspection on 4 August 2017 and therefore this variation is included for information only.



## 4. Agency Consultation

### 4.1 Department of Planning and Environment

DPE responded to the letter provided for consultation in accordance with Schedule 5 condition 11(b) with the following matters to be addressed during the audit:

*We have received a number of complaints in relation to traffic and road conditions for this operation. Can you please focus on conditions in relation to transport/traffic/roads, and consider specifically the following:*

- *Did Newman's get the quarry entry upgrade completed before 31 July 2017?*
- *Are the truck drivers operating in a safe and courteous way to other road users? and*
- *What is the condition of Tullymorgan-Jackybulbin Road? Are the trucks damaging the road? Are further works/controls required to ensure road safety?*

*In Table 4-1 of Appendix J (the Traffic Management Plan) of the EMS, Ref T04 states:*

*Upgrade the access and Tullymorgan-Jackybulbin Road intersection in accordance with the design in Appendix B by 31 July 2017.*

- *Did Newman's get the quarry entry upgrade completed before 31 July 2017?*

**TFA Response:** The intersection upgrade has generally been completed in accordance with the design but with some outstanding works:

- Give Way sign to be installed at exit from the site
- Widen the batter slightly in accordance with request from Council's inspector (pers. com. Mark Newman, 4/08/2017)
- Install the truck warning signs (W5-22A) on Tullymorgan-Jackybulbin Road as per the design drawing

*Are the truck drivers operating in a safe and courteous way to other road users?*

**TFA Response:** At the time of audit site inspection all drivers were operating in a safe and courteous manner. Mr Newman confirmed that all drivers are monitored by an IPMS (GPS) and that no complaints had been received from the public in the last year with respect to road traffic operations

- *What is the condition of Tullymorgan-Jackybulbin Road? Are the trucks damaging the road? Are further works/controls required to ensure road safety?*

**TFA Response:** Except for two small potholes exposed during previous rain, approximately 900m east of the subject site Tullymorgan-Jackybulbin Road is in good condition. This is evidenced by Clarence Valley Council, in collaboration with the National Heavy Vehicle Regulator, approving an increase in the Performance Based Standard (PBS) for heavy vehicle transport on Tullymorgan-Jackybulbin Road from 48.5 Tonnes to 57 Tonne per vehicle. It is noted that only three rural roads in CVC area have this level of accreditation.

## 4.2 Environment Protection Authority

On 31 July 2017 Tim Fitzroy (TF) spoke to Scott Ensby, Operations Officer, North Coast NSW EPA. Mr Ensby advised that he had commented on the DA and an amendment to the Soil and Water Management Plan was required by GHD. The quarry has been approved under the new EPL for quarries. The EPA had not received any official complaints. Mr Ensby advised that the quarry would have been busy servicing the Pacific Highway upgrade. Mr Ensby referred TF to Stuart McLachlan (DPE Enforcement Officer) and Thomas Watt also from DPE.

## 4.3 Roads and Maritime Services

On 7 August 2017 TFA received an email from Matt Adams, Assistant Manager, Land Use Assessment, Network & Safety Management, Northern Region, Regional & Freight, Roads and Maritime Services.

Mr Adams advised as follows:

*The key interests for Roads and Maritime are the safety and efficiency of the road network, traffic management, the integrity of infrastructure and the integration of land use and transport.*

*It is requested the audit consider the following;*

- *Verify records of laden truck movements and the publication of such records in accordance with Condition 22.*
- *Review procedures relating to the management of vehicles under Condition 23 to confirm appropriate measures are in place to ensure vehicles comply with requirements.*
- *Review the Traffic Management Plan (TMP) required under Condition 24 of the consent to confirm that all required actions have been completed, in particular the upgrade of the site access to Tullymorgan-Jackybulbin Road and the adoption of a Drivers Code of Conduct.*
- *Review operating procedures to ensure that measures identified under TMP are being implemented as required under Condition 25.*

*For your reference, Roads and Maritime is currently providing comment to the Department of Planning & Environment in relation to a proposed modification of the consent.*

*Verify records of laden truck movements and the publication of such records in accordance with Condition 22.*

**TFA Response:** A daily record of truck movements has been recorded on the quarry's website: <http://newmanquarrying.com.au/files/>

The website summary covers all days from May 2016 to May 2017.

- *Review procedures relating to the management of vehicles under Condition 23 to confirm appropriate measures are in place to ensure vehicles comply with requirements.*

**TFA Response:**

Condition 23a)

- Trucks were observed to comply with the covered load requirement during the audit site inspection (4 August 2017).
- The Driver's Code of Conduct notes that all laden trucks entering or exiting the site are to have their loads covered, except for loads consisting solely of boulders.

Condition 23 b)

- Trucks pass over a rumble grate to dislodge material prior to exiting the site.
- Trucks exiting the site were observed to be generally clean during the audit site inspection on 4 August 2017.
- The Driver's Code of Conduct notes that all trucks are to be cleaned of material that may fall on the road, before leaving the site. It also notes that vehicles should be maintained to a clean and tidy standard.

Condition 23 c)

- Business name is adequately signed on doors of trucks – observed during the audit site inspection on 04/08/2017.

Condition 23 d)

- The quarry gates are opened at 6:30am Monday to Saturday to allow trucks to wait inside the site until the quarry operations commence at 7am. Quarry operations do not occur on Sundays or public holidays.

- *Review the Traffic Management Plan (TMP) required under Condition 24 of the consent to confirm that all required actions have been completed, in particular the upgrade of the site access to Tullymorgan-Jackybulbin Road and the adoption of a Drivers Code of Conduct.*

**TFA Response**

- The Traffic Management Plan was approved by the Department of Planning and Environment on 9 May 2017
- Details on Newman Quarrying implementation of the TMP are provided in section 5.7.4
- All drivers have completed training in respect to Driver's Code of Conduct (pers. comm. Mark Newman, 4/08/2017)

- *Review operating procedures to ensure that measures identified under TMP are being implemented as required under Condition 25.*

**TFA Response**

This audit indicates the TMP is generally being implemented but with some non-compliances as detailed in section 5.7.4.

## 4.4 Department of Primary Industries

On 3 August 2017 TFA received the following email advice from Malcolm Drummond, Senior Geoscientist - Land Use Assessment, Geological Survey of NSW Division of Resources and Geoscience

*As sand and gravel are not 'minerals' covered by the Mining Act 1992, nor is their extraction regulated under the Act, the Division of Resources & Geoscience (DRG) has no statutory role in the development/management of quarries. DRG therefore has no comments regarding the matter.*

On 29 August 2017 TFA received the following email advice from Selina Stillman, Agricultural Resource Management Officer, Education & Regional Services |DPI Agriculture, Department of Primary Industries

*Thank you for the opportunity to provide comments in preparation for the independent environmental audit of Sly's Quarry Expansion. DPI Agriculture provide no specific or additional comments for the purpose of the audit to those listed in the consent conditions below. Separate responses may be provided by other units of DPI.*

## 4.5 Office of Water

Correspondence was received from Vicki Chatfield, Regional Manager, Water Regulatory Operations on 7 September 2017 requesting:

DPI Water requests that the audit considers compliance with the relevant water licensing and management requirements for the operation, specifically:

- Assessment as to whether the project holds the required water entitlements and licences under the *Water Management Act 2000* or *Water Act 1912* (as applicable);
- Compliance with the conditions of any water licences/approvals held.
- Quantification of both active and passive take by the project from each relevant water source and a comparison against previous predictions.
- Compliance with the management and monitoring requirements in the Water Management Plan and Water Monitoring Program for the site.

Office of Water Issue	TFA Response
Assess licences Requirements for Water Entitlements or Conditions under the WMA 2000 or WA 1912	No water entitlements are used on the project and there is no identified need for a licence under the WMA 2000 or WA 1912. The groundwater bores are used only for monitoring and no longer require licencing under Part 5 of the Water Act 1912. The quarry has not intercepted groundwater to date.
Compliance with conditions of any licences	There is no identified need for a licence under the WMA 2000 or WA 1912
Quantification of active and passive take by the project from each relevant water source and a comparison against previous predictions	The water supply for current operations is adequately provided by water stored in the settling basins on the site – refer to Water Balance in Section 5.6.
Compliance with management and monitoring requirements in the Water Management Plan and Water Monitoring Program	Refer to Section 5.6

## 4.6 Office of Environment and Heritage

TFA received a letter dated 1 September 2017 from Krister Waern, Assistant Team Leader Planning, North East Regional Planning, Office of Environment and Heritage.

The OEH recommends that the following management and mitigation measures contained in the above-mentioned documents, plans and strategies are considered in the Environmental Auditing process:

1. Implementation of sediment and erosion controls specified in the SWMP;
2. Effective implementation of the proposed dust suppression measures detailed in the AQMP
3. Use of interim stabilisation measures used to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation;
4. Stockpiling of removed soil for rehabilitation works;
5. Bunding of mulch stockpiles;
6. Completion of baseline monitoring of surface and ground water resources;
7. Weekly completion of the Environmental Inspection Checklist;
8. Preparation of the post-clearing report by the project ecologist;
9. Ongoing evaluation of the environmental management performance;
10. Adequacy of the proposed site induction, toolbox talks and targeted environmental training in conveying information required for protecting and managing biodiversity and environmentally sensitive areas;
11. Compliance with the approved extent of vegetation clearing in accordance with detailed design and staging process;
12. Avoidance of areas of high ecological constraint (e.g. areas containing *Hibbertia marginata* and threatened ecological communities);
13. Location of compounds, site facilities, stockpiles and machinery in existing cleared areas;
14. Evidence of BRMP review and updating in response to the results of pre-clearing surveys;
15. Weed control undertaken in accordance with the BRMP;
16. Effective implementation of the plant and frog pathogen hygiene protocols;
17. Collection of seed prior to clearing works for use in rehabilitation works, particularly seed for *Hibbertia marginata*;
18. Preparation of a nest box management plan in consultation with the OEH;
19. Preparation and implementation of a Rehabilitation Plan for the former sand quarry area known as "Area C";
20. Undertaking of progressive rehabilitation in accordance with the BRMP; and
21. Completion of all monitoring commitments in accordance with the monitoring schedule provided in the EMS.

<b>OEH Issue</b>	<b>TFA Response</b>
Implementation of sediment and erosion issues identified in SWMP	Erosion and sediment controls appropriately installed and adequately maintained – observed during audit inspection on 04/08/2017.
Effective Implementation of dust suppression	Dust suppression controls available and utilised – observed during audit inspection on 04/08/2017.
Use of interim stabilisation measures to minimise dust	Revegetation being progressively installed, where appropriate– observed during audit inspection on 04/08/2017.
Stockpiling of removed soil for rehabilitation works	Not Triggered
Bunding of mulched stockpiles	Not Triggered
Completion of baseline monitoring for surface and groundwater	Baseline monitoring for surface and groundwater has not been undertaken at the time of the site audit
Weekly completion of Environmental Checklist	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 4/08/2017) however no verifiable evidence has been provided.
Preparation of post clearing report by Ecologist	Not Triggered
Ongoing evaluation of environmental performance	Not Triggered for rehabilitation works
Adequacy of site induction, toolbox, targeted environmental training for protecting and managing biodiversity and environmentally sensitive land	Not commenced; operator plans to commence training closer to November 2017 trigger for start of rehabilitation works
Compliance with Vegetation Clearing in accordance with detailed design and staging plans	Not Triggered
Avoidance of areas of high ecological constraints	During site audit inspection (4.08.2017) there was no evidence of disturbance of areas of high ecological significance
Locations of compounds, site facilities, stockpiles and machinery in existing cleared areas	Compounds, site facilities, stockpiles and machinery are in existing cleared areas
Evidence of BRMP review and updating in response to the results of pre-clearing surveys	Not Triggered
Weed control undertaken in accordance with BRMP	Not Triggered
Effective implementation of plant and frog Pathogen hygiene protocols	Not Triggered
Collection of seed prior to clearing for use in rehabilitation works	Not Triggered
Preparation of a nest box management plan in consultation with the OEH	Not Triggered
Preparation and implementation of Rehabilitation of former Sand Quarry known as Area C	Rehabilitation has commenced
Undertake progressive rehabilitation in accordance with BRMP	Not Triggered
Completion of all monitoring commitments In accordance with monitoring schedule in the EMS	Blast and water quality monitoring has been undertaken in accordance with monitoring schedule. Noise Monitoring has been undertaken by not strictly in accordance with monitoring schedule Air Quality and Groundwater monitoring have been delayed. TFA is advised by Mark Newman (6.09.2017) that air and groundwater monitoring has now commenced post site audit inspection.

## 4.7 NSW Fisheries

On 8 August 2017 TFA received the following email advice from Jonathan Yantsch, Fisheries Manager, Aquatic Ecosystems (North Coast) Aquatic Environment, Primary Industries NSW:

*The existing quarry footprint does not contain Key Fish Habitat (KFH). KFH is defined within the DPI Fisheries Policy and guidelines for fish habitat conservation and management (Update 2013). For this general location, among other features, KFH would generally consist of 3rd order or greater waterways defined by the Strahler method and using a 1:25,000 topographical map. Any plan for the quarry's expansion should consider whether the new footprint would contain KFH or whether access requirements would necessitate impacts to KFH, for example, road waterway crossings. If so, such interactions should be considered with regard to the aforementioned policy and guidelines.*

*It is noted that the existing quarry is located within close proximity to known and expected habitat of the threatened fish species Purple Spotted Gudgeon (PSG) and Oxleyan Pygmy Perch (OPP). The DPI Fisheries threatened species indicative distribution data can be viewed [here](#). Given the proximity of PSG and OPP to the existing quarry site, it is recommended that the environmental audit to be undertaken for the proposed quarry expansion includes an assessment of the potential impacts (i.e. a Species Impact Statement or Test of Significance) to these threatened species. Potential impacts to these species associated with an expansion of the quarry may include, but not be limited to, downstream water quality impacts associated with sediment inputs, and downstream water temperature, pH and flow characteristic changes associated with water pump-out activities.*

*Assessment of Significance Guidelines have been prepared to help applicants and/or proponents of a development or activity to interpret and apply the factors of assessment. These are the factors that need to be considered when assessing whether an action, development or activity is likely to significantly affect threatened species, populations or ecological communities, or their habitats. The guidelines clarify the specific terminology of the relevant legislation and provide clear interpretations of the factors of assessment.*

On 28 August 2017 TFA provided the following response to Mr Yantsch

*Thank you for your time on this matter. As discussed with Dr Van Zwieten, we wish to clarify the purpose of our audit. We are only able to audit against the approved consent conditions and do not have the capacity to directly audit the completeness of various reports (e.g. EIS, Biodiversity and Rehabilitation Management Plan (BRMP)).*

*We appreciate your comments and acknowledge that newly listed species and/or new records of currently listed species may occur during the course of the operation of the Quarry. It is our understanding that various management plans (e.g. BRMP) may from time to time be updated during the course of the operation. This may be a result of various reasons but most likely dominated by requests to change management tasks. For example, if a particular method of rehabilitation is not successful, an alternative method may be proposed.*

*Within the audit process, we are able to provide some feedback or general comment on the adequacies of prepared documents, however, these documents have been signed off by OEHL and/or satisfaction of the Secretary and are beyond the scope of our audit. However, we will provide some comment on the recognition of newly listed species*

*and/or new records of species should be undertaken from time to time (and most likely in conjunction with the Management Plan reviews).*

*In the meanwhile, if you have comments in relation to the approved consent conditions, we would be grateful if you could provide these by 30.08.2017.*

## **4.8 Clarence Valley Council**

In a telephone call with Tim Fitzroy on 27 July 2017 CVC Senior Development Planner, Pat Ridgeway advised that there were no ongoing issues and that the development was a State Matter. Mr Ridgeway advised that he was not aware of any ongoing issues with traffic or the like as is the case with some other quarries.



# 5. Review of Environmental Management

A summary of the status of consent conditions for the Sly's Quarry Expansion under the Development Consent SSD 1624 and EPL 11649, and implementation of the requirements of the conditions are presented below. (Summary Tables of compliance are provided in Appendices A and B of this report).

## 5.1 Environmental Management

[Development Consent SSD 1624 Schedule 5]

### 5.1.1 Environmental Management Strategy

[Development Consent SSD 1624 Schedule 5 condition 1]

The Environmental Management Strategy was prepared to satisfy Development Consent SSD 6624 Schedule 5 condition 1 and submitted to DPE on 3 May 2017. The Environmental Management Strategy and environmental management plans were approved by DPE on 9 May 2017. The Environmental Management Strategy is an over-arching document to specific environmental management plans prepared to guide operations within Sly's Quarry, including:

- Noise Management Plan;
- Blast Management Plan;
- Air Quality Monitoring Program;
- Transport Management Plan;
- Waste Management Plan;
- Soil and Water Management Plan;
- Staged Biodiversity and Rehabilitation Management Plan (which covers all aspects of this plan except the Biodiversity Offset Strategy); and
- Bushfire Management Plan.

The final Biodiversity and Rehabilitation Management Plan must be resubmitted to the DPE prior to 30 November 2017 with the inclusion of the Biodiversity Offset Strategy matters.

The DPE has also reviewed the Bushfire Management Plan and considers it of acceptable standard.

The Environmental Management Strategy generally addresses the key elements of ISO 14001.

**Table 5.1 Environmental Management Strategy vs AS/NZS ISO14001 Elements**

<b>ISO 14001 Element</b>	<b>Environmental Management Strategy Section</b>
4.3.1 Environmental Aspects	Section 1.2 Objectives
4.3.2 Legal and Other Requirements	Section 3 Legislative Framework
4.3.3 Objectives and Targets	Section 1.2 Objectives
4.3.4 Environmental Management Programs	Appendix E to N Environmental Management Plans
4.4.1 Structure and Responsibility	Section 4.3 Roles and Responsibilities
4.4.2 Training Awareness and Competence	Section 5 Environmental Training and Awareness
4.4.3 Communication	Section 7 Communication
4.4.7 Emergency Preparedness and Response	Section 6 Incidents and Emergencies
4.5.1 Monitoring and Measurement	Section 8 Inspections, Monitoring and Auditing
4.5.2 Non-conformance, Corrective Action	Section 8.4 Non-conformances, corrective and preventative actions

**5.1.2 Conclusion**

**Environmental Management Strategy**

**Status: Compliant**

The approved Environmental Management Strategy prepared for Sly’s Quarry Expansion provides a sound basis for the management of Sly’s Quarry activities when combined with the implementation of the approved Environmental Management Plans. The Environmental Management Strategy also addresses the majority of the elements of ISO 14001.

**5.2 Management Plans**

[Development Consent SSD 6624 Schedule 5 condition 3]

**5.2.1 Environmental Management Plans**

The management plans required for Sly’s Quarry Expansion to satisfy Development Consent SSD 6624 are:

- Schedule 3, condition 5                      Noise Management Plan (NMP)
- Schedule 3, condition 10                  Blast Management Plan (BMP)
- Schedule 3, condition 14                  Air Quality Monitoring Program (AQMP)
- Schedule 3, condition 20                  Soil and Water Management Plan (SWMP)
- Schedule 3, condition 24                  Traffic Management Plan (TMP)
- Schedule 3, condition 31                  Biodiversity and Rehabilitation Management Plan (BRMP)
- Schedule 3, condition 40                  Bushfire Management Plan (BMP)

**5.2.2 Management Plan Development**

The management plans prepared for Sly’s Quarry, have been developed generally in accordance with the requirements of the specific requirements in Development Consent 6624 Schedule 3 conditions. Table 5.2 identifies the section(s) of each management plan that addresses the Development Consent 6624 Schedule 5 condition 3 components.

**Table 5.2: Summary of the Management Plan sections addressing Development Consent 6624 Schedule 5 condition 3 components**

Development Consent 6624 Schedule 5 condition 3 components	Management Plans (section reference)	Status
The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:		
(a) detailed baseline data;	Baseline data for noise, air quality, surface water, traffic, soils, biodiversity/flora and fauna, and heritage is presented in the Environmental Impact Statement for Sly's Quarry Expansion - section 5 (2015). Refer to the EMS (2015) for NMP, BMP, AQMP, SWMP, TMP, BRMP, WasteMP and HMP baseline data not included in each management plan.	Administrative Non-Compliant
(b) a description of:  i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	BRMP – Section 2 Environmental Requirements NMP – Section 2 Env. Req. BMP – Section 2 Env. Req. AQMP – Section 2 Env. Req. SWMP – Section 2 Env. Req. TMP – Section 2 Env. Req. WasteMP – Section 2 Env. Req. HMP – Section 2 Env. Req.	Compliant
ii) any relevant limits or performance measures/criteria;	NMP – Development Consent SSD 6624 Sched 3 condition 3 NMP – Development Consent SSD 6624 Sched 3 condition 7 AQMP – Development Consent SSD 6624 Sched 3 condition 12 SWMP section 4 Surface Water Quality SWMP section 4 Groundwater Quality TMP – Section 4 Control Measures BRMP – Section 1 Objectives and Outcomes WasteMP – Section 1 Objectives and Targets HMP – Section 5 Compliance Management	Compliant
iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	NMP – sec 1.2 Targets AQMP – sec 1.2 Targets SWMP sec 1.2 Targets TMP – sec 1.2 Targets BRMP – sec 1.3 Targets WasteMP – sec 1.2 Targets HMP – sec 1.2 Targets	Compliant
(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	NMP – sec 4 Environmental Control Measures AQMP – sec 4 Environmental Control Measures SWMP sec 4. Environmental Control Measures TMP – sec 4. Environmental Control Measures BRMP – sec 4. Environmental Control Measures WasteMP – sec 4. Environmental Control Measures HMP – sec 4. Environmental Control Measures	Compliant
(d) a program to monitor and report on the: • impacts and environmental	NMP – sec 5 Monitoring & Reporting AQMP – sec 5 Monitoring & Reporting SWMP sec 5 Monitoring & Reporting TMP – sec 5 Monitoring & Reporting	Compliant

performance of the development; and • effectiveness of any management measures (see (c) above);	BRMP – sec 5 Monitoring & Reporting WasteMP – sec 5 Monitoring & Reporting HMP – sec 5 Monitoring & Reporting	
(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	NMP – sec 5.2 Contingency Plan AQMP – sec 5.2 Contingency Plan SWMP sec 5.2 Contingency Plan TMP – sec 5.2 Contingency Plan BRMP – sec 5.2 Contingency Plan WasteMP – sec 5.2 Contingency Plan HMP – sec 5.2 Contingency Plan	Compliant
(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	NMP – sec 6 Review & Improvement AQMP – sec 6 Review & Improvement SWMP sec 6 Review & Improvement TMP – sec 6 Review & Improvement BRMP – sec 6 Review & Improvement WasteMP – sec 6 Review & Improvement HMP – sec 6 Review & Improvement	Compliant
(g) a protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria;	NMP – sec 6 Review & Improvement AQMP – sec 6 Review & Improvement SWMP sec 6 Review & Improvement TMP – sec 6 Review & Improvement BRMP – sec 6 Review & Improvement WasteMP – sec 6 Review & Improvement HMP – sec 6 Review & Improvement	Compliant
(h) a protocol for periodic review of the plan.	NMP – sec 6 Review & Improvement AQMP – sec 6 Review & Improvement SWMP sec 6 Review & Improvement TMP – sec 6 Review & Improvement BRMP – sec 6 Review & Improvement WasteMP – sec 6 Review & Improvement HMP – sec 6 Review & Improvement	Compliant

### 5.2.3 Conclusion

The environmental management plans prepared for Sly's Quarry Expansion to support the Environmental Management Strategy, have been developed generally in accordance with the requirements of Development Consent SSD 6624 Schedule 5 condition 3. All required management plans have been submitted to the DPE and have been approved.

## 5.3 Noise Management

[Development Consent SSD 1624 Schedule 3 conditions 1 to 6]

### 5.3.1 Environmental Assessment

[Environmental Impact Assessment for Sly's Quarry Expansion, section 5.3, March 2015]

[Environmental Assessment for Sly's Quarry Expansion, Appendix E Noise Impact Assessment, March 2015]

The EIS noted that:

*Eleven potential sensitive receivers in the vicinity of the quarry have been identified from aerial imagery, however some of these may not be residential receivers. The nearest identified sensitive receiver is located approximately 1.5 km from the quarry boundary.*

*Site observations at the monitoring locations indicated that the primary noise sources in the area were:*

- *Road traffic from the Pacific Highway*
- *Natural sources such as insect and bird noise and wind noise in foliage*

*Model results indicate that noise levels generated from quarry operations are predicted to comply with the INP daytime noise criteria at all sensitive receivers. It is noted that off-site noise levels at R3 are close to the criteria, and the use of the rock hammer during peak daily production may cause an exceedance depending on the location of equipment.*

*Noise predictions have been based on a number of conservative assumptions and model configurations, such as peak production rate and haul truck movements. For these reasons, it is likely that actual site noise on a day-to-day basis would be lower than the predicted values.*

*Therefore, it is recommended that compliance noise monitoring be undertaken to verify the predicted noise levels.*

*The predicted growth in traffic due to quarry operations during peak daily production is expected to comply with the Road Noise Policy criteria.*

The Noise Impact Assessment (GHD March 2015) concluded that:

- *Existing noise levels in the area surrounding the site are low and typical of a rural environment. Receivers R1 and R2 are much closer to the Pacific Highway than the other receivers, and as such, background levels measured here were dominated by road noise.*
- *An operational noise criterion of 45 dB(A) Leq(15 min) derived from Logger 1 was adopted at receivers located close to the Pacific Highway.*
- *An operational noise criterion of 35 dB(A) Leq(15 min) derived from Logger 2 was adopted at all other receivers.*
- *The operational noise assessment has been undertaken based on a worst-case operating scenario, with all equipment operating at maximum sound power levels.*
- *The noise assessment indicates that the noise levels due to operation of the quarry are expected to meet the adopted noise criteria at all identified sensitive receivers with the rock hammer operating. The noise assessment indicates that undertaking rock hammering during peak daily production will result in marginal compliance at receiver R3.*
- *Compliance monitoring is recommended to confirm predictions.*
- *An analysis of noise mitigation requirements to achieve compliance at all identified receivers has been undertaken. The crushers, screens and rock hammering activities were identified as being the primary noise sources, and thus mitigation measures should target these activities for greatest affect. Using quarry material or other structures to block the line-of-sight between these activities and receivers would be the most effective and practical mitigation measures to implement.*
- *The predicted growth in quarry traffic along Jackybulbin Rd due to peak production operations was investigated using the United States EPA's Intermittent Traffic Noise guidelines. This model indicated road noise along Jackybulbin Road would comply with the RNP criteria at all assessed sensitive receivers. However, the increase in heavy vehicle traffic is expected to be noticeable to receivers R1 and R2, and may cause annoyance.*

### **5.3.2 Noise Management – Control Measures**

[Development Approval SSD 6624 condition 5]

The Noise Management Plan prepared to satisfy Development Consent SSD 6624 condition 5 was submitted to DPE in November 2016 and approved on 9 May 2017.

Control measures addressed in the Noise Management Plan to satisfy the Development Consent SSD 6624 Schedule 3 condition 5 are:

Development Consent Schedule 3 Condition 5 Requirement and Control Measure	Status	Compliance Status
The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. The plan must		
(a) be prepared in consultation with the EPA;		Compliant
(b) be submitted to the Secretary within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	The Noise Management Plan was submitted to DPE on 5 May 2017 and the revised plan was approved on 9 May 2017.	Compliant
(c) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> <li>• compliance with the noise criteria in this consent;</li> <li>• best practice management is being employed; and</li> <li>• the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;</li> </ul>	Noise Management Plan section 4 describes Control Measures for noise from the quarry and transport operations, and management under adverse weather conditions.  Section 5 describes Noise Monitoring Protocol and Evaluation of Compliance.	Compliant
(d) describe the proposed noise management system;	The Noise Management Plan describes the overall noise management system	Compliant
(e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2 and the road noise criteria in the EIS, and which evaluates and reports on the effectiveness of the noise management system on site.	Noise Management Plan Section 5 describes Noise Monitoring Protocol and Evaluation of Compliance including of regularly evaluating the performance of the project, including road traffic noise and noise compliance monitoring at the nearest affected residence Noise Management Plan section 5.2 includes a Contingency Plan while section 5.3 addresses Reporting. Section 6 provides a mechanism for regular Review and Improvement	Compliant
<b>Noise Management Plan Control Measures</b>		
<u>Hours of Operation</u> Newman Quarrying will only work within the operating hours specified in the development consent and in Section 2.5 of the EMS must be complied with.	Hours of operation of Sly's Quarry activities have occurred in accordance with Development Consent SSD 6624 Schedule 3 condition 1, between 9 May 2016 and 3 August 2017.	Compliant
Noise generated by the development must not exceed 35 dB(A) LAeq (15 minute) at any residence on privately-owned land.	Noise Monitoring undertaken by GHD in October 2016, February 2017 and May 2017 indicate noise levels at the nearest affected levels at less than 35 dB(A) LAeq (15 minute)	Compliant
Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain	All noise sampling activities were undertaken with consideration of the specifications outlined in the AS 1055 (1997) 'Description and Measurement of Environmental Noise' and the NSW Industrial Noise Policy (2000)	Compliant

meteorological conditions) of the NSW Industrial Noise Policy.	(GHD November 2016, February 2017 and July 2017)	
Best practice management must be implemented to minimise the operational and road transportation noise of the development.	Best Practice Management Practices have been adopted by Newman Quarrying to minimise noise impacts	Compliant Ongoing
Noise monitoring must be carried out at least every 3 months or as otherwise agreed with the Secretary to determine whether the development is complying with the relevant conditions of the consent and the adopted noise criteria.	The initial noise monitoring event post Development Consent SSD 6624 occurred on 26 October 2016, (5 months) then 23 February 2017 (3 months) and then 29 May 2017 (3 months). Noise monitoring indicates compliance with noise criteria. Apart from the initial exceedance, the frequency of noise monitoring has been undertaken in accordance with consent conditions	Compliant Ongoing
Compliance noise monitoring should also be undertaken following receipt of a complaint relating to noise emissions from the site.	No noise complaints have been received	Not Active/Not Triggered
Noise monitoring should also be conducted following any change in operating conditions that are likely to increase noise emissions from the site (such as a sudden increase in production rate or heavy vehicle movements) or move noise sources significantly closer to noise sensitive receivers.	There had been no change or modification to require additional noise monitoring	Not Active/Not Triggered
The noise monitoring data should be regularly assessed and on-site operations should be modified or stopped to ensure compliance with the relevant conditions of the consent. For example, noise barriers consisting of earth mounds or shipping containers may be used to reduce noise impacts.	Noise Monitoring Data indicates compliance with noise criteria	Not Active/Not Triggered
Where practical, machines would be operated at low speed or power and switched off when not being used rather than left idling for prolonged periods.	During Site Audit inspection machines would be operated at low speed or power and switched off when not being used	Compliant Ongoing
Keep truck drivers informed of designated vehicle routes, parking locations and delivery hours.	Mr Newman confirmed that drivers are informed and updated via toolbox talks, signage and radio of designated vehicle routes, parking locations and delivery hours.	Compliant Ongoing
Avoid dropping materials from height and avoid metal to metal contact on material.	No evidence of dropping materials from height and metal to metal contact on material during site audit inspection	Compliant Ongoing
All engine covers would be kept closed while equipment is operating.	No evidence of engine covers open while equipment is operating during site audit inspection	Compliant Ongoing
The quarry manager is to erect a sign at the entrance of the quarry with a phone number and permanent site contact so that noise complaints can be received and addressed in a timely manner.	Quarry sign had been temporarily relocated during entrance road works and onsite entry road works	Administrative, Non-Compliance

### 5.3.3 Noise Criteria

[Development Consent SSD 6624 Schedule 3 Condition 3]  
[Environment Protection Licence 16649 Conditions L4.1 to L4.3]

The noise assessment criteria for Sly's Quarry Expansion are specified in Development Consent SSD 6624 Schedule 3 Condition 3 and Environment Protection Licence 16649 Conditions L4.1 to L4.3.

Receiver	Day Leq (15minutes)	Evening Leq (15minutes)	Night Leq (15minutes)
All privately owned residences	35	35	35

### 5.3.4 Noise Monitoring Program

[Development Consent SSD 6624 Schedule 3 Condition 5 (e)]  
[Environment Protection Licence 16649 Conditions E2.1]

Section 5 of the Noise Management Plan states that noise compliance monitoring will occur at R3 (Residence 3) within two months of the commencement of the increased extraction rate and quarterly for the first two years. Road traffic noise monitoring will also occur quarterly for the first two years at a site that is representative of R1 and R2 but is not influenced by noise from the highway. If this monitoring indicates compliance with the criteria in Table 3-3 and Table 3-5 and DPE approve, the noise monitoring will cease unless there is:

- A justifiable noise complaint
- A change in operating conditions that are likely to increase noise emissions from the site

Special condition E2.1 of EPL 11649 states that a noise compliance assessment must be undertaken within two months of commencement of the proposed increased extraction rate. The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and shall assess compliance with noise criteria presented above. A report must be provided to the EPA within 1 month of the assessment.

Attended noise monitoring was not undertaken strictly in accordance with Schedule 3 Condition 4 c) of Development Consent SSD 6624 or Special condition E2.1 of EPL 11649. Attended noise monitoring was undertaken on 26 October 2016, 23 February 2017 and 29 May 2017.

The aforementioned discrepancy with respect to the frequency of noise monitoring is deemed to be an administrative non-compliance.

### 5.3.5 Noise Monitoring Results

[Development Consent SSD 6624 Schedule 3 Condition 4 (c)]  
[Environment Protection Licence 16649 Conditions E2.1]

Attended compliance noise monitoring by GHD at Sly's Quarry was conducted on 26 October 2016, 23 and 24 February 2017 and 29 May 2017.

On 26 October 2016 noise monitoring was conducted at nearby noise sensitive receivers. Receiver known as 'Hill', was located approximately 1.9 km WNW of the quarry and receiver 'R3' and 'R3 Extra' were located approximately 1.4 km and 1.1 km to the South-west of the quarry site respectively.

On 23 and 24 February 2017 and 29 May 2017 noise monitoring was conducted to assess operational noise emissions from the quarry site at sensitive receiver R3. Road side monitoring



was also undertaken along Tullymorgan-Jackybulbin Road, to determine road noise exposure for receivers R1 and R2 due to quarry related traffic.

The noise monitoring results indicate Sly's Quarry site operations comply with the noise criteria at all assessed sensitive receivers under the prevailing weather conditions. Based on the results of the monitoring, no additional mitigation measures are considered warranted.

### 5.3.6 Conclusions

The Noise Management Plan prepared to satisfy Development Consent Schedule 3 condition 5 was approved by DPE on 9 May 2016. Noise monitoring conducted in October 2016, February and May 2017 confirmed that the noise emissions from the Sly's Quarry operations received at sensitive receivers, were consistent with the predicted noise assessment criteria in the Environmental Impact Statement (GHD 2015), and compliant with the Development Consent Schedule 3 and EPL 11649 conditions.

## 5.4 Blasting

[Development Consent SSD 6624 Schedule 3 Conditions 7 to11]

### 5.4.1 Environmental Assessment

[Environmental Impact Statement Assessment for Sly's Quarry Expansion, section 5, March 2015]

[Environmental Impact Statement Assessment for Sly's Quarry Expansion, Noise Impact Assessment Appendix E, March 2015]

The development consent specifies a suite of conditions that ensure the blasting activities are completed using best practices and produce levels of disturbance that are aligned with internationally accepted standards. The permissible levels are therefore protective of both amenity and infrastructure.

The development consent conditions are given below:

### 5.4.2 Blasting Management Plan

[Development Approval SSD 6624 Schedule 3 condition 10 and 11]

The Blast Management Plan prepared to satisfy Development Consent Schedule 3 condition 10 and 11 was submitted to DPE on 5 May 2017 and approved by DPE on 9 May 2017

Control measures addressed in the Blast Management Plan section 4, to satisfy Development Consent Schedule 3 condition 10 and 11 are:

Development Consent Schedule 3 Condition 10 & 11 Requirement and Control Measure	Status	Compliance Status
The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. The plan must		
(a) be submitted to the Secretary within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	Blast Management Plan prepared and submitted on 3rd May 2017 by GHD. Letter received by NSW Department of Planning (9 <sup>th</sup> May 2017) confirming Blast Management Plan approval	Compliant

<b>Development Consent Schedule 3 Condition 10 &amp; 11 Requirement and Control Measure</b>	<b>Status</b>	<b>Compliance Status</b>
(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;	Table 4 (Environmental Control Measures) of the Blast Management Plan specifies 13 measures detailed as B1 to B13 to ensure best practices are implemented	Compliant
(c) include measures to manage flyrock;	Table 4 (Environmental Control Measures) of the Blast Management Plan specifies measures referenced as B6, B8 and B9 with respect to minimising potential flyrock	Compliant
(d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;	Section 5 of the Blast Management Plan details the blast monitoring requirements, including location	Compliant
(e) include community notification procedures for the blasting schedule, in particular to nearby residences;	Table 4 (Environmental Control Measures) of the Blast Management Plan specifies measures referenced as B10 and B11 with respect to community notification	Compliant
(f) include a protocol for investigating and responding to complaints.	Section 5.2 of the Blast Management Plan details the measures that must be adopted in the event of a justified community related complaint	Compliant
11 The Applicant must implement the approved Blast Management Plan as approved from time to time by the Secretary.	Adjustments to the Blast Management Plan have been considered and it is recommended that the plan be resubmitted with changes to Condition B6	Observation

### 5.4.3 Blast Criteria and Monitoring Program

[Development Approval SSD 6624 Schedule 3 condition 7]

[Environment Protection Licence 11649 condition L5]

The criteria for the overpressure and vibration impact from blasting are provided in Development Approval SSD 6624 Schedule 3 Condition 7 and Environment Protection Licence 11649 Conditions L5.3 and L5.4 as shown below.

<b>Receiver</b>	<b>Airblast Overpressure (dB Lin Peak)</b>	<b>Ground Vibration (mm/sec)</b>	<b>Allowance exceedance</b>
Any residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in the above table, and the Applicant has advised the Department in writing of the terms of this agreement. It has been advised that there are no agreements between the quarry and adjacent residents in place.

#### 5.4.4 Blast Monitoring Results

Blasting activities have been monitored in accordance with the requirements of the Blast Management Plan.

The recorded monitoring results at location R3 up until 31st July 2017 are shown in the following table.

Blast Monitoring	Ground Vibration Level (mm/s)	Airblast Overpressure (dBL)	Comment
2 <sup>nd</sup> June, 2016	0.56	103.5	Not related to blast event
5 <sup>th</sup> July, 2016	0.40	101.0	Compliant
21 <sup>st</sup> July, 2016	0.22	105.0	Not related to blast event
22 <sup>nd</sup> August, 2016	1.56	106.0	Not related to blast event

The maximum recorded vibration level and airblast overpressure level at Location R3 was 0.40mm/s and 101.0dBL respectively. Both values are compliant with Condition 7.

#### 5.4.5 Conclusions

In accordance with the requirements of the Blast Management Plan, all blasts have been monitored at location R3 with respect to the levels of ground vibration and airblast overpressure. The blast monitor at this location has been configured at an industry accepted standard appropriate threshold of 0.2 to 0.3mm/s for ground vibration and around 88dBL for airblast overpressure. The set threshold limits will ensure the event will be recorded if vibration or air overpressure impact levels exceed 10% of the permissible values.

Of the 25 blasts that were completed up until 31st July 2017, monitoring records are provided for four events. The remaining 21 blasts did not generate levels of vibration or air overpressure above the pre-set threshold values. Of the four recorded blasts, three are confirmed as unrelated to the blasting event, most likely caused by the movement of persons or vehicles around the monitoring site. This statement is based upon the frequency of the vibration/air overpressure pulse, the differential propagation velocities, pulse amplitudes and arrival times. Only one monitoring record is therefore attributable to a blast event.

Based upon the separation distance between the blast area within the quarry and the R3 monitoring location, it is expected that the peak level of vibration will be in the region of 0.3mm/s to 1mm/s. It is therefore expected that some blasts will not be recorded at location R3. This is consistent with the absence of monitoring data.

Monitoring units are presently configured with a threshold level of 0.3mm/s which permits only those blasts that produce more than 0.3mm/s to be recorded by the unit. For those blasts that generate vibration less than 0.3mm/s, no event will be recorded. Reducing the threshold level to less than 0.3mm/s is not recommended as additional non-blast related data will be recorded. The threshold vibration value equates to around 6% of the permissible limit of 5mm/s and is therefore appropriate for confirmation of compliance.

#### 5.4.6 Recommendations

All reviewed information demonstrates compliance with the Development Approval and associated Blast Management Plan. It is however suggested that:

- The quarry manager maintains a record of blast initiation dates and times independent of the drill and blast contractor;
- Consideration be given to adjusting the configuration of the blast monitoring equipment to permit continuous recording (histogram capability) to verify ground vibration and air overpressure results for those occasions where the blast has not generated levels exceeding the threshold values. Further lowering of the threshold levels is not however proposed.

## 5.5 Air quality Management

[Development Approval SSD 6624 Schedule 3 condition 14]  
[Environment Protection Licence 11649 condition O3]

### 5.5.1 Environmental Assessment

[Environmental Impact Statement for Sly's Quarry Expansion, section 5.4, March 2015]  
[Environmental Impact Statement for Sly's Quarry Expansion, Air Quality Impact Assessment Appendix F, March 2015]

The quarry has the potential to impact the local air quality, especially via generation of dust. To assess this impact an Air Quality Impact Assessment (AQIA) (GHD, 2015) was prepared with a focus on dust. The nearest residences are located approximately 1.5 km from the quarry boundary.

The AQIA concluded that: off-site dust impacts are considered unlikely from the assessed quarry operations so that basic, normal dust suppression activity will be sufficient.

### 5.5.2 Predicted Air Quality and Criteria

Dispersion air modelling conducted for the Environmental Impact Statement (AQIA Appendix F) predicted that including conservative background concentrations, the annual average TSP and annual average PM10 concentrations would meet DECCW (EPA) guidelines at all the identified discrete receptors and at the boundaries of Sly's Quarry Site.

An analysis of the predicted results from dispersion modelling is presented below. Maximum predicted ground level concentrations and deposition rates at each of the identified receptors have been predicted and added to the adopted background levels to determine the cumulative impact, which can then be compared against the assessment criteria.

In addition to the conservative approach taken in the dispersion modelling, it is acknowledged that tall, thick vegetation surrounds the site in all directions. This would assist to dampen wind speeds (the meteorological models used do account substantially to this 'drag' on the wind speeds) and filter airborne dust as it travels from the site. These conditions cannot be fully represented in the dispersion model and therefore adds a level of conservatism to model predictions.

**Table 5.3** displays the predicted 24-hour average PM10 concentrations at each receptor – highest one-day event in the year. Predicted results indicate compliance with the 24-hour average PM10 criterion at all receptors for both average and peak production rates.

**Table 5.3 Predicted PM<sub>10</sub> 24-hour average ground level concentration (µg/m<sub>3</sub>)**

Receiver	Cumulative criterion	Adopted background	Adopted incremental impact criterion	Peak production rate		Average production rate	
				No controls	With controls	No controls	With controls
R1	50	15	35	10	2	4	1
R2				10	3	4	1
R3				6	2	2	<1
R4				5	1	2	<1
R5				5	1	2	<1
R6				3	1	1	<1
R7				4	1	1	<1
R8				5	1	2	<1
R9				5	1	2	<1
R10				3	1	1	<1
R11				4	1	2	<1

**Total suspended particles (TSP)**

Predictions of maximum ground level TSP concentrations have been made based on peak production rates without dust control measures.

**Table 5.4** shows the maximum predicted ground level TSP concentration levels, which indicate that even without dust control measures, the predicted incremental impact at the most exposed sensitive receptor is well below the TSP annual average criterion of 90 µg/m<sup>3</sup>. It is also evident from the results that even with the addition of a typical TSP background concentration of 30µg/m<sup>3</sup>, the total (cumulative) impact would still be well below the assessment criterion.

**Table 5.4 Predicted TSP annual average concentrations at peak production rate**

Receptor	TSP concentration (µg/m <sup>3</sup> )
R1	3
R2	3
R3	2
R4	1
R5	<1
R6	<1
R7	<1
R8	<1
R9	<1
R10	<1
R11	<1

**Dust deposition**

Predictions of dust deposition rates have been made based on the peak production rate.

In the absence of site-specific dust deposition data, a conservative background dust deposition level of 2 g/m<sup>2</sup>/month was adopted. **Table 5.5** shows the maximum predicted incremental dust deposition rates at sensitive receptors for emissions with no controls. The incremental dust deposition criterion of 2 g/m<sup>2</sup>/month is expected to be comprehensively met at all identified receptors.

**Table 5.5 Predicted dust deposition rates at peak production rate**

Receptor	Dust deposition (g/m <sup>2</sup> /month)
R1	0.02
R2	0.02
R3	0.02
R4	0.01
R5	0.01
R6	0.01
R7	0.01
R8	0.01
R9	0.01
R10	0.01
R11	0.01

### 5.5.3 Air Quality Management Plan

[Development Approval SSD 6624 Schedule 3 condition 14]  
 [Environment Protection Licence 11649 condition O3.1]

An Air Quality Management Plan was prepared to satisfy Development Approval SSD 6624 Schedule 3 condition 14 and submitted to DPE in May 2016. The Air Quality Management Plan was approved by DPE on 9 May 2016.

Control measures and commitments addressed under the Air Quality Management Plan section 4, to satisfy Development Approval SSD 6624 Schedule 3 condition 14 are:

Project Approval Schedule 3 Condition 14 and 15 Requirement and Control Measure	Status	Compliance Status
The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. The plan must		
(a) be submitted to the Secretary within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	The Air Quality Management Plan was submitted to DPE on 5 May 2017 and the revised plan was approved on 9 May 2017.	Compliant
(b) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> <li>• compliance with the relevant conditions of this consent;</li> <li>• best practice management is being employed; and</li> <li>• the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li> </ul>	Air Quality Management Plan section 4 describes Control Measures for air quality from ground disturbance, vehicle movements and blasting operations, and management under adverse weather conditions.  Section 5 describes Air Monitoring Protocol and Evaluation of Compliance.	Compliant

(c) describe the proposed air quality management system;	The Air Quality Management Plan describes the overall air quality management system	Compliant
(d) include an air quality monitoring program that: <ul style="list-style-type: none"> <li>is capable of evaluating the performance of the development;</li> <li>includes a protocol for determining any exceedances of the relevant conditions of consent;</li> <li>effectively supports the air quality management system; and</li> <li>evaluates and reports on the adequacy of the air quality management system.</li> </ul>	Air Quality Management Plan Section 5 describes Air Quality Monitoring Protocol and Evaluation of Compliance including of regularly evaluating the performance of the project, including dust compliance monitoring at the nearest affected residence  Air Quality Management Plan section 5.2 includes a Contingency Plan while section 5.3 addresses Reporting. Section 6 provides a mechanism for regular Review and Improvement	Compliant
15 The Applicant must implement the approved Air Quality Management Plan as approved from time to time by the Secretary.	Due to delays in the purchase of equipment Air Quality Monitoring has not been undertaken. Air Quality Monitoring Equipment has been purchased and will be installed shortly (pers. Com Mark Newman 3.08.2017)	Non-Compliant – Low Risk
<b>Air Quality Management Plan Control Measures</b>		
<u>Dust Control</u> During adverse meteorological conditions and extraordinary events (i.e., bushfires, prescribed burning, dust storms, sea fog, fire incidents) quarry operations will reduce and ultimately cease.	During periods of high wind areas that may generate dust are dampened using a water truck. Activities capable of generating dust may be curtailed.	Compliant
The area of surface disturbance is to be minimised and progressive rehabilitation must be undertaken at the site.	The area of surface disturbance is being minimised and progressive rehabilitation is being undertaken at the site.	Compliant
Water sprays are required on crushing and screening plant, when dust is visible.	Water sprays are applied on crushing and screening plant, when dust is visible.	Compliant
Haul truck routes will be watered as required, particularly during peak periods of high frequency vehicle movements and extended dry spells.	Water truck is used on internal roads as required to control dust generation.	Compliant
Loaded trucks leaving the construction site will be covered to minimise the transport of dust off site	Loaded trucks leaving the construction site are covered to minimise the transport of dust off site	Compliant
If off-site dust impacts are noted as being an issue (e.g. complaints from neighbours or visible and extensive dust plumes), dust monitoring should be undertaken.	There is no evidence of complaints from neighbours regarding dust or visible or extensive dust plumes	Not Active /Not Triggered
The following mitigation measures are to be implemented to assist in minimising the off-site dust impacts from blasting at the quarry. <ul style="list-style-type: none"> <li>Identified sensitive receptors should be notified when blasting is planned to occur.</li> </ul>	Table 4 (Environmental Control Measures) of the Blast Management Plan specifies measures referenced as B10 and B11 with respect to community notification	Compliant

<ul style="list-style-type: none"> <li>Where possible, blasting should not occur during times when winds are in the direction of the nearest receptors, and should preferably occur during times when winds are calm or blowing away from the nearest receptors.</li> </ul>	Blasting does not occur during times when winds are in the direction of the nearest receptors	Compliant
<ul style="list-style-type: none"> <li>Water sprays should be used as dust suppression just before and during the blast.</li> </ul>	Water sprays are used as dust suppression just before and during the blast	Compliant
<ul style="list-style-type: none"> <li>Blast mats such as hessian or rubber matting may be used to suppress impacts from blasting, including fly rock and particulate emissions.</li> </ul>	Adjustments to the Blast Management Plan have been considered and it is recommended that the plan be resubmitted with changes to Condition B6	Observation

#### 5.5.4 Meteorological Measurements

[Development Approval SSD 6624 Schedule 3 condition 16]

[Environment Protection Licence 11649 condition M4.1- M4.2]

An automated meteorological station installed on Sly's Quarry site, is located adjacent to the weighbridge. The meteorological station has been in a location that satisfies the criteria for the location of a weather station as described in AS 2922:1987 Ambient Air - Guide for the Siting of Sampling Units (NSW DECCW Method AM-1), and the NSW DECCW Approved methods for the sampling and analysis of air pollutants in NSW (DECC, 2005).

The Sly's Quarry meteorological station complies with the Development Consent Schedule 3 condition 16 and EPL 11649 condition M4, and the requirements in the "Approved Methods for Sampling of Air Pollutants in NSW" Table 1.

The meteorological station records:

- Wind speed (m/s) and wind direction(degrees);
- Temperature (at 2m and 10m above ground);
- rainfall (in mm)
- humidity (%);
- relative pressure (mmHg); and
- absolute pressure

The meteorological station operates continuously and provided weather data from 15 March to 5 August 2017.

#### 5.5.5 Air Quality Criteria

[Development Approval SSD 6624 Schedule 3 condition 12]

Development Approval SSD 6624 Schedule 3 condition 12, specifies the air quality criteria to be achieved at any residence on privately-owned land:

Pollutant	Averaging Period	Criterion
PM10	24 hours	50 ug/m3
	Annual	30 ug/m3
TSP	Annual	90 ug/m3
Dust Deposition (insoluble fraction)	Annual	2g/m <sup>2</sup> /month*



\*Maximum Increment. Maximum allowable cumulative impact of 4 g/m<sup>2</sup>/month

### 5.5.6 Air Quality Monitoring Results

At the time of the site audit inspection no air quality monitoring had been undertaken. It is our understanding that the operator and his consultant has been in discussion with the EPA on the most appropriate and cost-effective air quality monitoring device. We were advised by Mr Newman (pers.com 7 September 2017) that the air quality monitoring devices have now been installed.

### 5.5.7 Conclusions

The Air Quality Management Plan and dust control measures implemented at Sly's Quarry appear adequate for Sly's Quarry operations and activities however no air quality monitoring has been undertaken to affirm compliance with monitoring criteria.

Dust issues occurring from high wind events have been managed in accordance with the Air Quality Management Plan, with operations/activities that have the potential to generate dust curtailed in higher exposed areas where there is potential for dispersion of dust to neighbouring residences. No complaints were received between 9 May 2017 and 5 August 2017 related to dust / air quality.

## 5.6 Soil and Water Management

The quarry generally complies with the various approval conditions and environmental measures regarding soil and water management however some measures have only recently been implemented.

The quarry complies with all the Development Approval soil and water conditions including EPA's requirements with respect to the Soil and Water Management Plan however the installation of groundwater monitoring bores has only recently been completed and monitoring of these bores had not commenced at the time of the audit inspection.

Non-compliance was found in relation to some environmental measures regarding soil and water management. These non-compliances were generally low risk and relate to:

- Baseline water quality monitoring of drainage line points has not been undertaken. This non-compliance is rated Low Risk.
- Quarterly monitoring of the groundwater monitoring wells has not commenced. This non-compliance is rated Low Risk.
- Impervious bunded facilities have not been provided for vehicle/plant maintenance areas. This non-compliance is rated Low Risk.
- The storage system for waste oil and batteries is not compliant. This non-compliance is rated Low Risk.

Compliance with some conditions requires verification. This includes:

- Weekly monitoring of erosion and sediment controls
- Spill kit monitoring
- Provision of spill kits at refuelling sites and the training of personnel in their use
- Construction details for the three groundwater monitoring bores.

### 5.6.1 Existing Environment

The geology of the area comprises sandstone formations.

Drainage lines with intermittent flows are located on the site. These drainage lines are diverted around the quarry works area and bypass the site sediment basins.

Surface water from the quarry works area and stockpile areas drains to an initial sediment pond which overflows to the main sediment basin. Surface waters from the site office, weighbridges, wash plant and other outbuildings along the site is directed to three smaller sediment basins. These basins also overflow to the main sediment basin. The main sediment basin is the licensed discharge point from the site and has been increased in size from about 12.6ML to 40ML capacity.

Regarding groundwater, existing quarry depths have not intercepted groundwater.

### **5.6.2 Development Approval Conditions Summary**

Environmental performance conditions relating to soil and water are detailed in Condition 18 to 21 inclusive of Schedule 3 of the Development Approval SSD 6624. These conditions are detailed further in this section but can be summarised as:

- Condition 18 – water supply - ensure the sites available water supply (rainwater / stormwater capture) is sufficient for all stages of the development
- Condition 19 – discharges - comply with the discharge limits in the operations Environment Protection Licence (EPL 11649)
- Condition 20 – prepare a Soil and Water Management Plan that includes a:
  - site water balance
  - surface water management plan
  - groundwater management plan
- Condition 21 – implement the Soil and Water Management Plan.

### **5.6.3 Soil and Water Management Plan Summary**

The Soil and Water Management Plan (SWMP) was prepared by GHD Consultants Pty Ltd (May 2017) and was approved by DPE on 9 May 2017.

The site water balance in the SWMP indicates there will be sufficient runoff from the quarry operational area to meet operational water requirements.

Surplus water captured in the basin system will be settled and treated if necessary prior to discharge in accordance with the operations Environment Protection Licence.

Surface water management for the site involves the use of:

- standard erosion and sediment control measures
- bunding of refuelling areas and fuel and chemical storage facilities
- a sediment basin system which included an increase in basin capacity.

Groundwater management for the site involves installation of three groundwater monitoring bores with monitoring of groundwater levels and basic groundwater quality data (pH and electrical conductivity).

The environmental controls in the SWMP are detailed in the table in this section.

Inspections and monitoring required by the SWMP and EMS includes:

- daily monitoring of weather, rainfall
- weekly monitoring (and following rain events) of erosion and sediment controls
- water quality monitoring of drainage lines in two locations (WQ1 and WQ2) when rain exceeds 10mm in a day (test for oil and grease, pH, TSS)

- water quality monitoring of discharges from the final sediment basin outlet (monitoring point MP1) (test for oil and grease, pH, TSS)
- monitoring basin capacity following rain in accordance with the EPL
- inspect spill kits monthly and following use
- quarterly monitoring of groundwater monitoring bores (GW1, GW2 and GW3) (log water levels and test for pH and electrical conductivity).

#### 5.6.4 Environmental Management Strategy – Soil and Water Issues

The monitoring requirements listed in the EMS are described above. There are no reporting requirements specific to soil and water management apart from the general reporting requirements outlined in Section 8.5 of the EMS.

#### 5.6.5 Soil and Water Management Compliance Status

Condition	Status	Compliance Status
Development Approval SSD 6624 - Schedule 3 - Condition 18 to 21		
<b>Condition 18</b> <b>Water Supply</b> The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary	The water supply for current operations is adequately provided by water stored in the settling basins on the site.  Note: A site water balance for the operations indicates there will be sufficient runoff from the quarry operational area to meet operational water requirements. In addition, surplus water captured in a settling basin on site for treatment of excess of runoff for discharge (detailed in Section 3.2 of the SWMP).	Compliant Ongoing
<b>Condition 19</b> <b>Water Discharges</b> The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.	The quarry complies with the EPL discharge limits.  A Water Quality Monitoring Summary is provided on the quarry's website - <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a>  The summary covers the period from June 2016 to June 2017. The monitoring indicates the quarry complies with the EPL discharge limits. A copy of the summary is included in <b>Appendix E</b> .  General requirements of EPL 11649 are summarised further in this section. A copy of the licence is included in <b>Appendix B</b> .	Compliant Ongoing
<b>Condition 20</b> <b>Soil and Water Management Plan</b> The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must:	The Soil and Water Management Plan was approved by the Department of Planning and Environment on 9 May 2017	Compliant
(a) be prepared by suitably qualified and experienced person/s approved by the Secretary;	The SWMP was prepared by GHD and approved by the Department of Planning and Environment	Compliant
(b) be prepared in consultation with	EPA and DPI Water were consulted –	Compliant

Condition	Status	Compliance Status
the EPA and DPI Water;	correspondence included in Appendix A of SWMP	
(c) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; and	Exact dates unknown but it appears this timeframe was generally met	Compliant
(d) include the EPA's requirements as set out in Appendix 5;	Refer to notes further below	Compliant
(e) include a:		
(i) Site Water Balance that includes: <ul style="list-style-type: none"> <li>• details of:               <ul style="list-style-type: none"> <li>○ sources and security of water supply;</li> <li>○ water use and management on site;</li> <li>○ any off-site water transfers; and</li> <li>○ reporting procedures; and</li> </ul> </li> <li>• measures that would be implemented to minimise clean water use on site;</li> </ul>	Detailed in Section 3.2 of the SWMP  Note: The site water balance indicates there will be sufficient runoff from the quarry operational area to meet operational water requirements. In addition, surplus water captured in a settling basin on site for treatment of excess of runoff for discharge.	Compliant
(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 development;</li> <li>• a detailed description of the surface water management system on site including the:               <ul style="list-style-type: none"> <li>○ clean water diversion system;</li> <li>○ erosion and sediment controls;</li> <li>○ dirty water management system;</li> <li>○ water storages; and</li> <li>○ mitigation measures outlined in the EIS; and</li> </ul> </li> <li>• a program to monitor and report on:               <ul style="list-style-type: none"> <li>○ any surface water discharges;</li> <li>○ the effectiveness of the water management system,</li> <li>○ the quality of water discharged from the site to the environment;</li> <li>○ surface water flows and quality in local watercourses;</li> </ul> </li> </ul>	Detailed in Section 4 of the SWMP	Compliant
(iii) Groundwater Management Plan that includes: <ul style="list-style-type: none"> <li>• a provision that requires the Applicant to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the</li> </ul>	Detailed in Section 4 of the SWMP	Compliant

Condition	Status	Compliance Status
<p>quarry from the quarry face or floor; and</p> <ul style="list-style-type: none"> <li>• a monitoring program to manage potential impacts, if any, on the alluvium and associated surface water source near the proposed extraction area that includes: <ul style="list-style-type: none"> <li>○ a minimum of three monitoring bores with automatic water level recording instrumentation or other method agreed with DPI-Water;</li> <li>○ identification of a methodology for determining threshold water level criteria;</li> <li>○ contingency measures in the event of a breach of thresholds; and</li> <li>○ a program to regularly report on monitoring.</li> </ul> </li> </ul>	<p>Note: three bores were installed on 02/08/2017 as per Figure 5-1 in the SWMP (pers. comm. Mark Newman, 4/08/2017).</p>	
<p>Condition 21 <b>Soil and Water Management Plan</b> The Applicant must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.</p>	<p>This audit indicates the SWMP is generally being implemented but with some non-compliances as detailed further below.</p>	<p>Compliant</p>
<p><b>Development Approval SSD 6624 – Appendix 5 - EPA’S REQUIREMENTS FOR THE SOIL AND WATER MANAGEMENT PLAN</b></p> <p>1. The Soil and Water Management Plan required under condition 20 of Schedule 3 must:</p>		
<p>a) describe stormwater management measures to control pollutants at the source and contain them within the site;</p>	<p>Detailed in Section 4 of the SWMP</p>	<p>Compliant</p>
<p>b) describe erosion and sediment control measures to minimise disturbance of land, minimise water flow through the site and filter, trap or detain sediment;</p>	<p>Detailed in Section 4 of the SWMP</p>	<p>Compliant</p>
<p>c) describe measures to maintain and monitor any stormwater controls;</p>	<p>Detailed in Section 5 of the SWMP</p>	<p>Compliant</p>
<p>d) describe methods of storage of topsoil and associated erosion and sediment control measures;</p>	<p>Detailed in Section 4 of the SWMP</p>	<p>Compliant</p>
<p>e) describe waste water treatment measures, including systems for the reuse and/or recycling of waste water and measures for treating the unavoidable discharges from the site to meet specific water quality requirements;</p>	<p>Detailed in Section 3.2 and 4 of the SWMP</p>	<p>Compliant</p>
<p>f) describe the size and location of sediment basins for each stage of the quarry development in accordance with the sizing requirements of the <i>Managing Urban Stormwater Soils and Construction: Volume 1 and 2E</i></p>	<p>Detailed in Appendix A of the SWMP</p>	<p>Compliant</p>

Condition	Status	Compliance Status
guidelines based on a minimum standard of 90 <sup>th</sup> percentile five-day rainfall event (75 mm); and		
g) include a water balance to ensure the design of the volume of sediment basins required for stormwater capture and treatment is not compromised by water storage required for re-use purposes. Such dual-purpose basins must be designed and managed to accommodate both stormwater management and water re-use objectives.	Detailed in Section 3.2 of the SWMP	Compliant
<b>Environmental Management Strategy - Environmental monitoring (Section 8.2 in the EMS)</b>		
Daily monitoring of weather	Daily monitoring is undertaken and recorded. The monitoring is used in the Water Quality Monitoring Summary provided on the quarry's website - <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a> A copy of the summary is included in <b>Appendix E.</b>	Compliant Ongoing
Daily monitoring of rainfall		
Weekly monitoring of erosion and sediment (and following rain)	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 4/08/2017) however no verifiable evidence has been provided.	Not verified
Baseline monitoring following rain	Water quality monitoring of drainage lines in two locations (WQ1 and WQ2) is required when rain exceeds 10mm in a day. The samples are to be tested for oil and grease, pH and TSS. This has not been undertaken to date	Non-Compliance – Low Risk Not triggered
Basin monitoring during discharge	Daily monitoring is undertaken and recorded. The monitoring is used in the Water Quality Monitoring Summary provided on the quarry's website - <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a> A copy of the summary is included in <b>Appendix E.</b>	Compliant Ongoing
Spill kit monitoring monthly and following use	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 4/08/2017) however no verifiable evidence has been provided.	Not verified
Quarterly monitoring of groundwater	Three bores were installed on 02/08/2017 as per Figure 5-1 in the SWMP (pers. comm. Mark Newman, 4/08/2017). The bores require purging prior to installation of water level data loggers. This had not been undertaken at the time of the audit inspection.	Non-Compliance – Low Risk
<b>Soil and Water Management Plan - Environmental control measures (Table 4.1 in the SWMP)</b>		
<b>Soil</b>		

Condition	Status	Compliance Status
SW01 - Extract the resource in stages to minimise the area of disturbance at any one time.	The staging plan 2 of the Development Consent) outlines appropriate limits to the area of disturbance. Operations to date comply with this plan.	Compliant Ongoing
SW02 - Remove soil and stockpile for use in the rehabilitation works.	Topsoil is stockpiled in areas which are adequately bunded – observed during audit inspection on 04/08/2017.  Note: material extracted from sediment basins is also stored in bunded area (observations – 04/08/2017)	Compliant Ongoing
SW03 - Implement erosion and sediment controls in accordance with <i>Managing Urban Stormwater Soils and Construction – Volume 2e Mines and quarries</i> (Landcom, 2004) (Appendix B)	Erosion and sediment controls appropriately installed and adequately maintained – observed during audit inspection on 04/08/2017.	Compliant Ongoing
SW04 - Implement the rehabilitation plan.	The extent of works has not yet required commencement of rehabilitation works.	Not active / Not triggered
<b>Surface water</b>		
SW05 - Comply with all relevant EPL conditions relating to soil and water management.	General requirements of EPL 11649 are summarised further in this section. A copy of the licence is included in <b>Appendix B</b> ,  The quarry complies with the EPL discharge limits based on the Water Quality Monitoring Summary is provided on the quarry's website - <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a> The summary covers the period from June 2016 to June 2017.  Other operating requirements of EPL 11649 regarding Soil and Water Management are met. These include: - Sizing of the sediment basins to capture all runoff from a 5 - day rainfall event up to 75mm - Diversion of runoff from upslope of the disturbance area	Compliant Ongoing
SW06 - Where available, and of appropriate quality, the quarry operation will use recycled runoff for quarry activities.	Captured runoff is used for dust suppression and vehicle washing (pers. comm. Mark Newman, 4/08/2017).	Compliant Ongoing
SW07 - Erosion and sediment controls are to be implemented in accordance with <i>Managing Urban Stormwater Soils and Construction – Volume 2e Mines and quarries</i> (Landcom, 2004) (Appendix B)	Erosion and sediment controls appropriately installed and adequately maintained – observed during audit inspection on 04/08/2017.	Compliant Ongoing
SW08 - The capacity of the existing sediment basin will be increased to 40ML.	The capacity of the existing sediment basin has been increased to 40ML (pers. comm. Mark Newman, 4/08/2017). The increased basin was confirmed during audit inspection on 04/08/2017.	Compliant
SW09 - Designated, impervious bunded facilities will be provided for cleaning	Bunded facilities are not provided for cleaning / maintenance of vehicles.	Non-Compliance – Low Risk

Condition	Status	Compliance Status
and/or maintenance of vehicles, plant or equipment. These facilities will be located at least 20 metres away from natural and built drainage lines.	<p>Audit inspection indicates vehicles are maintained under a carport adjacent to workshop area. The carport maintenance area is open sided and gravel based. The workshop has concrete floor. There is no bunding in place either for carport area or for floor in workshop shed.</p> <p>Trucks are washed and degreased in open area which drains into sediment and erosion control system. Water from sediment basins is recycled to wash vehicles and degreaser.</p> <p>The above arrangement does not comply with the SWMP. This arrangement potentially contaminates the captured water with oil and grease and cleaning agents which could lead to non-compliance with the EPL discharge criteria.</p>	
<p>SW10 - All chemicals, fuels and oils stored at the premises must be contained within appropriately designed bunded areas that meet the following requirements:</p> <ul style="list-style-type: none"> <li>a) comply with any relevant Australian Standards for the liquids being stored</li> <li>b) have impervious flooring and walls</li> <li>c) have a minimum capacity of 110% of the volume of the largest container stored within the bund.</li> </ul>	<p>The storage of chemicals, fuels and oils is detailed further in this section. The storage of diesel fuels and chemicals on the site is considered adequate.</p> <p>The storage system for waste oil requires some modifications with a spill safe system to capture spillage and bollards to protect it from vehicle damage.</p> <p>Batteries need to be stored in an enclosed roofed area.</p>	Non-Compliance – Low Risk
SW11 - Spill kits will be provided at all chemical storage facilities/compound sites and staff trained in their use	A spill safe kit is available in the workshop– observed during audit inspection on 04/08/2017.	Staff Training Non-Compliance Low Risk
<p>SW12 - Where refuelling on site is required, the following management practices will be implemented:</p> <ul style="list-style-type: none"> <li>• Refuelling will be undertaken on level ground, within the designated refuelling areas with appropriate bunding and/or absorbent material, at least 20 metres from drainage lines, waterways and/or environmentally sensitive areas</li> <li>• Spill kits will be readily available and personnel trained in their use.</li> <li>• Hand tools will be refuelled within lined trays of site vehicles wherever possible.</li> </ul> <p>Any contaminated material will be disposed at an appropriately licensed facility and used spill kit materials replaced.</p>	<p>The refuelling location was observed to be adequate – audit inspection on 04/08/2017.</p> <p>Refer to Waste section regarding contaminated material.</p>	<p>Compliant Ongoing</p> <p>Not verified (regarding spill kits)</p>
SW13 - Regular checks of vehicles working at the quarry will be conducted	Mobile plant is checked daily. This is recorded using a checklist.	Compliant Ongoing



Condition	Status	Compliance Status
to ensure that no oils or fuels are leaking.	Note: Driver's Code of Conduct requires drivers to inspect their vehicle daily prior to start up and record check in the Drivers daily worksheet or pre-start book. Any vehicle faults are also required to be repaired and recorded in vehicle maintenance book and reported to a manager.  Refer to Traffic Management section for further details.	
SW14 - A suitable meteorological station is to be installed in the vicinity of the site that complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants in New South Wales</i> guideline.	A suitable meteorological station is to be installed near the site – observed during audit inspection on 04/08/2017.	Compliant
SW15 - Mulch stockpiles will be constructed with an impervious perimeter bund at least 300mm high, a sump capable of capturing 75 mm of rainfall and a stable outlet.	Mulch stockpiles are adequately bunded – observed during audit inspection on 04/08/2017.	Compliant Ongoing
Groundwater		
SW16 All new and existing monitoring bores require licencing under Part 5 of the Water Act 1912.  If the quarry intercepts groundwater, DPI Water will be contacted to obtain the appropriate licence	Bores used only for monitoring no longer require licencing under Part 5 of the Water Act 1912  The quarry has not intercepted groundwater to date (pers. comm. Mark Newman, 4/08/2017).	Not Applicable
SW17 Install the three wells, shown on Figure 5-1, in accordance with <i>Minimum Construction Requirements for Water Bores in Australia</i> (NUDLC, 2011).	Three bores were installed on 02/08/2017 as per Figure 5-1 in the SWMP (pers. comm. Mark Newman, 4/08/2017).  Bore construction details were not provided.	Compliant (regarding installation of three bores)  Not verified (regarding construction details)

### 5.6.6 Environment Protection Licence (EPL) Discharge Limits

EPL No. 11649 for the quarry operations includes the following requirements for water discharges:

- The monitoring point is from the final sediment basin
- No visible oil and grease in discharges
- pH of discharges to be in the range of 6.5 – 8.5
- Total suspended solids to be less than 50 mg/L (100 percentile)
- The above limits do not apply to discharges from > 75mm rainfall over any consecutive five-day period.

The operating conditions of EPL 11649 also require:

- the sediment basins to capture all runoff from a 5 - day rainfall event up to 75mm
- treatment of the sediment basins if necessary to ensure the above limits are achieved
- diversion of runoff from upslope of the disturbance area.

### 5.6.7 Storage of Chemicals, Fuels and Oils

The following notes are based on observations from the audit inspection on 4 August 2017.

### *Waste Oil*

Waste oil is collected and stored in a below-ground 5,000 litre steel tank which is located to the east of the workshop/shed. Waste oil is poured into a 50mm diameter galvanised pipe standing 1m above the ground. Waste oil is collected by JJ Richards as required for recycling.

The above system has the potential to result in spillages or be damaged by vehicles.

It is recommended that a spill safe system is used to capture spillage. The system should include bollards to protect it from vehicle damage.

### *Batteries*

Used batteries are stored in an open area to the east of the workshop / shed.

It is recommended the batteries are stored in the workshop or a suitably enclosed, roofed area.

### *Diesel Fuel*

Diesel fuel is stored in a 11,200-litre capacity self-bunded storage unit. The storage system and bunded capacity is considered adequate.

It is noted there are two redundant above-ground diesel fuel storage tanks. One is located adjacent to the chemical storage shed in a concrete bunded area, the other is in the shed adjacent to the workshop in an unbunded area. It was noted that both redundant tanks are owned by Caltex and the quarry operator is waiting for Caltex to remove the redundant tanks from the site (pers. comm. Mark Newman, 4/08/2017).

### *Chemicals*

Chemicals are stored in a roofed chemical storage shed which has a concrete floor, bunded sides (concrete-blockwork). The storage system and bunded capacity is considered adequate.

Photos of chemical, fuel and oil storage are provided in **Appendix C**.

## **5.6.8 Non-Compliances**

The non-compliances for soil and water management where in relation to the following:

- Baseline water quality monitoring of drainage line points WQ1 and WQ2 has not been undertaken. Monitoring is required when rain exceeds 10mm in a day. The monitoring points are to be tested for oil and grease, pH and TSS. This is considered 'Low Risk' as it fails to identify any potential water quality impacts the quarry operations may be having on the drainage lines and downstream receiving environment.
- Quarterly monitoring of the groundwater monitoring wells. The three bores were only recently installed (02/08/2017). The bores require purging prior to installation of water level data loggers. This had not been undertaken at the time of the audit inspection. This is considered 'Low Risk' as it fails to identify any potential impacts the quarry operations may be having on groundwater quality and groundwater levels.
- Impervious bunded facilities have not been provided for vehicle/plant maintenance areas. The audit inspection indicates vehicles are maintained in an area with gravel base and no bunding. Trucks are washed and degreased in open area which drains into sediment and erosion control system. Water from sediment basins is recycled to wash vehicles and degreaser.
- The storage system for waste oil and batteries is not compliant. The storage tank for waste oil requires some modifications with a spill safe system to capture spillage and

bollards to protect the pipe inlet to the storage tank. Stored batteries need to be relocated to an enclosed roofed area. This is considered 'Low Risk' because it is not overly likely to occur and the potential for environmental consequence is relatively low.

The following conditions were not verified:

- Weekly monitoring of erosion and sediment controls (and following rain) (EMS and SWMP requirement)
- Spill kit monitoring - monthly and following use. The quarry manager indicated this is occurring however no verifiable evidence has been provided.
- The provision of spill kits at refuelling sites and the training of personnel in their use was not verified.
- Construction details or borehole logs of the three groundwater monitoring bores was not provided to confirm they were in accordance with Minimum Construction Requirements for Water Bores in Australia (NUDLC, 2011)

### 5.6.9 Incidents and Complaints

Complaints and incidents are recorded in a register and posted on the quarry's website. The register includes date, complainant/incident, response measures and sign-off by quarry manager. A copy of the register is included in **Appendix F**.

There is one complaint relating to soil and water management. The complaint was adequately addressed:

1. Contractor doing roadworks in front of quarry not having erosion and sediment control measures in place:
  - a. The works were not performed by the quarry or directly related to quarry operations.  
**Response:** Newman Quarrying provided contact details of contractor and council inspector overseeing works to Dept of Planning and Environment. The contractor installed sediment fences following the above.

The response is considered adequate and no further measures are suggested.

### 5.6.10 Environmental Performance

The environmental performance of the quarry with respect to soil and water management is considered satisfactory to date. However, to ensure future satisfactory performance, the following matters require addressing:

- compliance is required with the baseline water quality monitoring, groundwater monitoring, and bunding of the vehicle/plant maintenance areas
- improved storage of waste oil and batteries
- verification of compliance with:
  - monitoring of erosion and sediment controls
  - spill kit monitoring
  - provision of spill kits at refuelling sites and the training of personnel in their use
  - Construction details of the three groundwater monitoring bores.

### 5.6.11 Recommendations

It is recommended verification of the above matters and the non-compliances are addressed as soon as possible.

The recommended works to address the non-compliances involve:

- commence baseline water quality monitoring as detailed in the SWMP
- groundwater monitoring:
  - confirm groundwater bores have been constructed correctly
  - purge the bores prior to installation of water level data loggers
  - commence logging and sampling as detailed in the SWMP
- vehicle/plant cleaning and maintenance area: establish a bunded hardstand area with an appropriate wastewater collection and treatment/reuse or storage/transfer system
- modify the waste oil storage tank by replacing inlet pipe with a spill safe system to capture spillage and bollards to protect it from vehicle damage.
- Relocate the stored batteries to the workshop or a suitably enclosed, roofed area.

#### **5.6.12 Consultation**

NSW Environment Protection Authority (EPA), and Department of Primary Industries – Water (DPI – Water) were consulted in respect to preparation of the Soil and Water Management Plan. Copies of the correspondence are included in Appendix A of the SWMP.

EPA did not have any comments on the SWMP.

DPI – Water provided comments relating to:

- the groundwater monitoring locations
- no existing monitoring wells to be used
- water quality parameters
- frequency of sampling
- inclusion of groundwater level data loggers
- inclusion of a reference to the proposed wells being constructed in accordance with Minimum Construction Requirements for Water Bores in Australia (NUDLC, 2011).

The above matters were addressed in the SWMP.

## **5.7 Traffic Management**

The quarry generally complies with the various approval conditions and environmental measures regarding transport.

The quarry complies with all the Development Approval transport conditions. These relate to keeping record of truck movements, truck operational aspects and preparing and implementing a Traffic Management Plan.

Non-compliance was found in relation to some measures in the Traffic Management Plan. These non-compliances were low risk and relate to:

- the intersection upgrade for the access road and Tullymorgan-Jackybulbin Road. The upgrade works are generally complete except for the following matters:
  - Install Give Way sign at exit from the site
  - Widen the batter slightly in accordance with Council request
  - Install truck warning signs on Tullymorgan-Jackybulbin Road.
  - This non-compliance is rated Low Risk.

### **5.7.1 Development Approval Conditions Summary**

Environmental performance conditions relating to transport are detailed in Condition 22 to 25 inclusive of Schedule 3 of the Development Approval SSD 6624. These conditions are detailed further in this section but can be summarised as:

- Condition 22 – keeping record of all laden truck movements to and from the site and publishing the records on the quarry’s website
- Condition 23 – operational conditions relating to:
  - covering of loads
  - cleaning trucks before they exit the site
  - easy identification of quarry trucks
  - avoiding queuing of trucks on Tullymorgan-Jackybulbin Road prior to the quarry opening.
- Condition 24 – preparation of a Traffic Management Plan
- Condition 25 – implementing the Traffic Management Plan.

### 5.7.2 Traffic Management Plan Summary

The Traffic Management Plan (TMP) was prepared by GHD Consultants Pty Ltd (May 2017) to satisfy Project Approval Schedule 3 condition 24 and to meet the requirements of the mitigation measures outlined in the Environmental Impact Statement (EIS) for Sly’s Quarry and all relevant legislation. The Traffic Management Plan was approved by DPE on 9 May 2017.

The environmental traffic controls in the TMP are detailed in **Appendix A** and are summarised as:

- T01 – maintenance of the site access road
- T02 – drivers to conform to a Code of Conduct (contained in the TMP)
- T03 – back-loading of haulage trucks where practicable to minimise trips
- T04 – upgrade the intersection of the site access road with Tullymorgan-Jackybulbin Road
- T05 – open quarry gates at 6:30am to avoid trucks queuing in Tullymorgan-Jackybulbin Road prior to quarry operations
- T06 – clean Tullymorgan-Jackybulbin Road as required
- T07 – install a rumble grid at the weighbridge
- T08 – no more than 125 laden trucks to be received or dispatched per day
- T09 – delivery of topsoil and mulch to use backfilled quarry product trucks
- T10 – maintain plant and equipment in a proper and efficient manner.

Inspections and monitoring required by the TMP and EMS includes:

- Routine weekly inspections by Quarry Manager (or delegate) to identify issues such as speeding, tracking, uncovered loads etc
- Monitor and record truck movements to and from the site including time of arrival and dispatch.

### 5.7.3 Environmental Management Strategy - Transport Issues

The EMS requires weekly routine monitoring with respect to transport. There are no other transport-specific reporting requirements apart from the general reporting requirements outlined in Section 8.5 of the EMS.

### 5.7.4 Traffic Management Compliance Status

Condition	Status	Compliance Status

Condition	Status	Compliance Status
<b>Development Approval SSD 6624 - Schedule 3 - Condition 22 to 25</b>		
Condition 22 <b>Monitoring of Product Transport</b> The Applicant 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.	A daily record of truck movements has been recorded on the quarry's website: <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a>  The website summary covers all days from May 2016 to May 2017. A copy is included in <b>Appendix G</b> .	Compliant Ongoing
Condition 23 <b>Operating Conditions</b> The Applicant must:		
(a) ensure that all laden trucks entering or exiting the site have their loads covered	Trucks were observed to comply with the covered load requirement during the audit site inspection (4 August 2017). The Driver's Code of Conduct notes that all laden trucks entering or exiting the site are to have their loads covered, except for loads consisting solely of boulders.	Compliant Ongoing
(b) ensure that all laden trucks exiting the site are cleaned of material that may fall on the road, before leaving the site;	Trucks pass over a rumble grate to dislodge material prior to existing the site.  Trucks exiting the site were observed to be generally clean during the audit site inspection on 04/08/2017.  The Driver's Code of Conduct notes that all trucks are to be cleaned of material that may fall on the road, before leaving the site. It also notes that vehicles should be maintained to a clean and tidy standard.	Compliant Ongoing
(c) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the development so they can be easily identified by road users; and	Business name is adequately signed on doors of trucks – observed during the audit site inspection on 04/08/2017.	Compliant Ongoing
(d) if necessary, allow for the parking of early-arriving trucks (i.e. between 6:30 am and 7 am) within the site to avoid queuing on Tullymorgan-Jackybulbin Road.	The quarry gates are opened at 6:30am Monday to Saturday to allow trucks to wait inside the site until the quarry operations commence at 7am. Quarry operations do not occur on Sundays or public holidays.	Compliant Ongoing
Condition 24 <b>Traffic Management Plan</b> The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:	The Traffic Management Plan was approved by the Department of Planning and Environment on 9 May 2017	Compliant
(a) be prepared in consultation with the RMS and Council;	RMS and Council were consulted – refer to Appendix A of TMP	Compliant
(b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	Exact dates unknown but it appears this timeframe was generally met	Compliant
(c) describe the processes in place for the control of truck	Refer to <i>Traffic Management Plan - Environmental controls and mitigation</i>	Compliant

Condition	Status	Compliance Status
movements entering and exiting the site;	<i>measures</i> further below.	
(d) include a review of the existing intersection at the entrance to the quarry on Tullymorgan-Jackybulbin Road, which involves: (i) undertaking a survey of the dimensions of the existing intersection to assess whether it meets the minimum road design dimensions for a BAR/BAL treatment in accordance with the relevant road design guideline and/or standard; and (ii) if found to not meet these dimensions, propose a works program for the upgrade of the intersection to meet the relevant road design guideline and/or standard and a timeframe for completion of the works;	Intersection design included in Appendix B of the TMP. Intersection upgrade included as part of the <i>Traffic Management Plan - Environmental controls and mitigation measures</i> further below	Compliant
(e) 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, with a particular focus on: (i) ensuring truck drivers are aware of the school bus stop and turning area adjacent to the intersection of Tullymorgan-Jackybulbin Road and the Pacific Highway, its likely hours of use and take appropriate measures to avoid interacting with school buses and school pupils; and (ii) minimising the potential for fauna strike on Tullymorgan-Jackybulbin Road; and	Drivers' Code of Conduct included in Appendix C of the TMP.  Note: All drivers have completed training in respect to Driver's Code of Conduct (pers. comm. Mark Newman, 4/08/2017)	Compliant
(f) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct;	All drivers complete training in respect to Driver's Code of Conduct (pers. comm. Mark Newman, 4/08/2017)  The TMP includes routine weekly inspections by the Quarry Manager (or delegate) to identify any ad-hoc traffic issues such as speeding, tracking, uncovered loads. Refer to <i>Traffic Management Plan - Environmental inspections and monitoring</i> further below.	Compliant
(g) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry; and	The TMP includes a range of measures such as rumble grid, cleaning vehicles, street sweeping. Refer to <i>Traffic Management Plan - Environmental controls and mitigation measures</i> further below	Compliant
(h) propose measures to	The TMP includes a requirement for gates to	Compliant

Condition	Status	Compliance Status
accommodate the parking of early-arriving trucks within the site, rather than on the public road network.	open at 6:30am. Refer to <i>Traffic Management Plan - Environmental controls and mitigation measures</i> further below	
Condition 25 <b>Traffic Management Plan</b> The Applicant must implement the approved Traffic Management Plan as approved from time to time by the Secretary.	This audit indicates the TMP is generally being implemented but with some non-compliances as detailed further below.	Compliant
<b>Traffic Management Plan - Environmental controls and mitigation measures to address traffic impacts (Table 4.1 in the TMP)</b>		
T01 - The maintenance of the site access road should be reviewed and if necessary, frequency of maintenance should be increased to cope with the increased heavy vehicle movements generated by the proposed development.	The access road is in good condition and was undergoing an upgrade. At the time of the audit on 04/08/2017 the access road was being prepared for a bitumen seal which will extend some 200m from Tullymorgan-Jackybulbin Road to the weighbridge.	Compliant Ongoing
T02 - Vehicles should conform to a code of conduct (Appendix C) for the transport of materials on public roads.	Vehicle use, maintenance and care was in accordance with the Driver's Code of Conduct based on observations at the audit inspection and based on discussions with Mark Newman.	Compliant Ongoing
T03 - Where practicable, haulage vehicles should be back-loaded to carry loads on both inward and outward journeys, to minimise total vehicle movements.	This is not occurring due to 'busy' nature of the year with focus on selling product (pers. comm. Mark Newman, 4/08/2017)	Not Triggered
T04 - Upgrade the access and Tullymorgan-Jackybulbin Road intersection in accordance with the design in Appendix B by 31 July 2017.	The intersection upgrade has generally been completed in accordance with the design but with some outstanding works: <ul style="list-style-type: none"> <li>• Give Way sign to be installed at exit from the site</li> <li>• Widen the batter slightly in accordance with request from Council's inspector (pers. comm. Mark Newman, 4/08/2017)</li> <li>• Install the truck warning signs (W5-22A) on Tullymorgan-Jackybulbin Road as per the design drawing</li> </ul>	Non-Compliance – Low Risk
T05 - The quarry gates will be opened at 6:30 am to allow trucks to wait until the quarry commences operating for the day.	The quarry gates are opened at 6:30am Monday to Saturday to allow trucks to wait inside the site until the quarry operations commence at 7am. Quarry operations do not occur on Sundays or public holidays.	Compliant Ongoing
T06 - Engage a street sweeper to clean Tullymorgan-Jackybulbin Road as required.	Mark Newman said the road is swept daily by a contractor (pers. comm. Mark Newman, 4/08/2017)  The road surface appeared clean during the audit inspection on 04/08/2017.  Note: the road condition was generally good except for some potholes in the middle of the road approximately 800m east of the site.	Compliant Ongoing
T07 - Install a rumble grid at the	Installed	Compliant



Condition	Status	Compliance Status
weighbridge	Note: Trucks were observed to pass over the rumble grate prior to leaving the site during the audit site inspection (4 August 2017).	
T08 - The quarry is not to receive or dispatch more than 125 laden trucks on any day	The daily record of truck movements on the quarry's website indicates there has not been more than 125 laden trucks on any day. There has been a total of six days when the number of laden truck movements has reached 125 in the period from May 2016 to May 2017	Compliant Ongoing
T09 - The delivery of topsoil and mulch must be transported by backfilled quarry product trucks	This is not occurring due to 'busy' nature of the year with focus on selling product (pers. comm. Mark Newman, 4/08/2017)	Non-Compliance – Low Risk
T10 - Plant and equipment are to be operated and maintained in a proper and efficient manner	Mobile plant is checked daily. This is recorded using a checklist.  Note: Driver's Code of Conduct requires drivers to inspect their vehicle daily prior to start up and record check in the Drivers daily worksheet or pre-start book. Any vehicle faults are also required to be repaired and recorded in vehicle maintenance book and reported to a manager.	Compliant Ongoing
<b>Traffic Management Plan - Environmental inspections and monitoring (Section 5.1 in the TMP)</b>		
Routine weekly inspections by the Quarry Manager (or delegate) will occur throughout the operational lifetime of the quarry to identify any ad-hoc traffic issues such as speeding, tracking, uncovered loads.	Routine weekly inspections are undertaken (pers. comm. Mark Newman, 4/08/2017).  Note: complaints and incidents are recorded in a register and posted on the quarry's website. The register includes date, complainant/incident, response measures and sign-off by quarry manager.  Note: there has been a complaint of trucks speeding. Response included installing new speed signs and 'toolbox talk' to drivers which is considered adequate.	Written verification Required
Truck movements to and from the site (including time of arrival and dispatch) will be monitored and recorded.	A daily record of truck movements has been recorded on the quarry's website: <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a>  The website summary covers all days from May 2016 to May 2017. A copy is included in <b>Appendix G</b> .	Compliant Ongoing
<b>Environmental Management Strategy - Environmental monitoring (Section 8.2 in the EMS)</b>		
Routine weekly monitoring of the Traffic Management Plan	Routine weekly inspections are undertaken (pers. comm. Mark Newman, 4/08/2017).  Note: complaints and incidents are recorded in a register and posted on the quarry's	Compliant Ongoing

Condition	Status	Compliance Status
	website. The register includes date, complainant/incident, response measures and sign-off by quarry manager.	

### 5.7.5 Non-Compliances

The non-compliances where in relation to the following TMP measures:

- upgrade of the intersection of the site access road with Tullymorgan-Jackybulbin Road (moderate-risk)

The non-compliances regarding the intersection upgrade should be completed as soon as possible. These works involve:

- Widening the batter slightly in accordance with a Council request
- Installing a Give Way sign at the exit from the site and installing truck warning signs on Tullymorgan-Jackybulbin Road in accordance with the design drawing in Appendix B of the TMP.

### 5.7.6 Incidents and Complaints

Complaints and incidents are recorded in a register and posted on the quarry's website. The register includes date, complainant/incident, response measures and sign-off by quarry manager. A copy of the register is included in **Appendix F**.

There are four incidents relating to transport as follows. All incidents were adequately addressed:

1. Tailgate popped on truck - spilling rocks on to road: This occurred when the truck hit a large pothole. **Response:** Rocks were cleaned up by quarry staff ASAP; Dept of Planning and Environment were notified; Council was notified of potholes. The response is considered adequate and no further measures are suggested.
2. Vehicles driving at high speed: A specific truck was not identified. **Response:** All quarry drivers have been inducted on Driver's Code of Conduct; a follow-up 'toolbox talk' was given to drivers; new speed signs were installed. The response is considered adequate and no further measures are suggested.
3. Mud on road: **Response:** Immediate investigation found no mud on road. Road had wet tyre marks coming out of gate due to street sweeper washing gateway. Mud is east of quarry gate from potholes on council road verge. The response is considered adequate and no further measures are suggested.
4. Contractor informed quarry of incident on road reserve 100m west of gate: **Response:** Regulator, mines department and WorkCover informed of contractor incident on council road reserve 100m west of quarry gate. The response is considered adequate and no further measures are suggested.

### 5.7.7 Environmental Performance

The environmental performance of the quarry with respect to transport is considered satisfactory provided the non-compliance associated with the intersection upgrade is addressed.

### 5.7.8 Recommendations

It is recommended the non-compliances regarding the intersection upgrade are addressed as soon as possible. These works involve:

- Widening the batter slightly in accordance with a Council request
- Installing a Give Way sign at the exit from the site and installing truck warning signs on Tullymorgan-Jackybulbin Road in accordance with the design drawing in Appendix B of the TMP.

In respect to the two non-compliances relating to back-loading trucks, the compliance is considered low-risk and it is recommended back-loading is done where practicable and pursued as part of a continuous improvement program however it is not considered a high priority.

### 5.7.9 Consultation

Clarence Valley Council, Roads and Maritime Services (RMS) and Department of Planning and Environment were consulted in respect to transport matters. Copies of the correspondence are included in **Appendix D**.

RMS generally required that compliance was achieved with the Development Consent conditions.

Department of Planning and Environment noted they have received complaints relating to traffic and road conditions and requested this is addressed in the audit, and specifically:

- The intersection upgrade;
- Road safety practices by the truck drivers; and
- The road condition of Tullymorgan-Jackybulbin Road.

The above matters have been addressed in this section.

## 5.8 Bushfire

[Development Approval SSD 6624 Schedule 3 condition 40]

### 5.8.1 Environmental Assessment

CVC has mapped the site as 'Vegetation Category 1' bushfire prone land'. A bushfire risk assessment was prepared (see Table 3-1 Environmental Impact Statement, GHD March 2015) which demonstrated compliance with *Planning for Bush Fire Protection* (NSW RFS, 2006), as required by Section 79BA of the EP&A Act.

### 5.8.2 Bushfire Management Plan

A Bushfire Management Plan was prepared by GHD (2016) to the satisfaction of the DPE.

Development Consent	Status	Compliance
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Schedule 3 Condition 40 Requirement and Control Measure		Status
The Applicant must		
(a) prepare a Bushfire Management Plan for the development to the satisfaction of the RFS	A Bushfire Management Plan was prepared by GHD (2016) to the satisfaction of the DPE. There is no evidence of endorsement by the RFS in correspondence reviewed by the auditor	Compliant
(b) ensure that the development is suitably equipped to respond to any fires on site;	<p>The access and egress roads from Sly's Quarry site are maintained to ensure safe access and egress in the event an evacuation is called.</p> <p>Access to all Access to all Sly's Quarry site facilities and water storages would be provided to the RFS and any reasonable assistance offered in the event of a fire. Quarry site facilities and water storages would be provided to the RFS and any reasonable assistance offered in the event of a fire.</p> <p>An Asset Protection Zones (APZ) has been established around the administration buildings and infrastructure areas.</p>	Compliant
(c) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	Not triggered	Not Triggered
41 The Applicant must implement the Bushfire Management Plan.	No evidence of Induction of new staff members, contractors, visitors and site users to include bushfire awareness, reporting and response actions to fire danger, and evacuation procedures is required	Non-Compliant – Moderate Risk

### 5.8.3 Conclusion

A Bushfire Management Plan for Sly's Quarry was prepared in October 2016. The Bushfire Management was reviewed by DPE. Asset Protection Zones (APZ) have been established around the administration buildings and infrastructure areas. Fuel loads within the APZ's are monitored and reduced as required with advice in relation to fuel load management within the APZ and project site sought from the NSW RFS and/or CVC.

## 5.9 Waste Management

[Development Approval SSD 6624 Schedule 3 conditions 36 to 37]  
[Environment Protection Licence 11649 conditions L3.1]

### 5.9.1 Environmental Assessment – Waste Management

[Environmental Impact Statement for Sly's Quarry Extensions, section 5.9 and 5.10, March 2015]

The generation and management of waste from Sly's Quarry operations was assessed in the Environmental Impact Statement section 5.9 and 5.10, GHD March 2015. The quarry generates various waste streams including construction and excavation waste, vegetation waste, packaging materials and liquid wastes. Quarrying involves the stripping and emplacement of topsoil and overburden, extraction, screening and stockpiling of the raw materials and product loading and distribution.

All waste would continue to be managed in accordance with the requirements of the Waste Avoidance and Resource Recovery Act 2001, the PoEO Act 1997, the Waste Classification Guidelines (EPA, 2014) and the principles of the waste management hierarchy.

### 5.9.2 Waste Management Plan

A Waste Management Plan was prepared to satisfy Development Consent Schedule 3 condition 36 and approved by DPE on 9 May 2015. Waste management hierarchy is the basis of the Sly's Quarry Waste Management Plan. The Plan identifies each waste stream and the Waste Management Matrix outlines the source / storage requirements / waste collection, treatment and disposal, and waste tracking requirements.

Development Consent Schedule 3 Condition 36 Requirement and Control Measure	Status	Compliance Status
The Applicant must		
(a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;	On 23 February 2017 Newman's Quarry have received an <i>Approval to Operate</i> the Onsite Site Sewage Management System from CVC issued under section 68 of the Local Government Act 1999. At the time of audit inspection, the OSMS appears to be operated satisfactorily	Compliant
(b) minimise the waste generated by the development;	Excess excavated material and liquid waste is used on site as fill and/or in rehabilitation works.	Compliant
(c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and	Waste materials are reused or collected for recycling where possible	Compliant
(d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	In relation to the waste monitoring, the routine monitoring is to be recorded on the <i>Environmental Inspection Checklist</i> . There is no verifiable evidence that this is occurring	Administrative Non-compliance
37. Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.	Noted, there is no evidence that the applicant has received waste at the site for storage, treatment, processing, reprocessing or disposal.	Not triggered

## 5.10 Dangerous Goods

[Development Approval SSD 6624 Schedule 3 conditions 39]

[Environment Protection Licence 11649 conditions O5.9]

11,200 litres of diesel is stored in a self-bunded above ground container located to the immediate north of the workshop in accordance with AS1940 and AS1596, and the Dangerous Goods Code.

## 5.11 Visual

[Development Approval SSD 6624 Schedule 3 conditions 35]

The visual assessment in the EIS (GHD March 2015) concluded there would not be a significant impact on visual amenity as a result of the proposal. The existing and proposed quarry is visually obscured from the majority of the surrounding area by the topography, viewing distance and surrounding vegetation.

## 5.12 Heritage Management

[Environmental Impact Statement section 5.7, GHD March 2015]

[Environmental Impact Statement, Appendix I, GHD March 2015]

### 5.12.1 Environmental Assessment

A Due Diligence Assessment that was carried out during preparation of the EIS addressed both historic and Aboriginal cultural heritage. For Aboriginal cultural heritage, a desktop assessment including searches of applicable Indigenous heritage registers was undertaken along with consultation with a representative from the Yaegl local Aboriginal land council (LALC). The following conclusions were drawn:

- No Indigenous cultural heritage sites or relics were identified within the proposed expansion areas of Sly's Quarry.
- No areas have been identified that are considered to potentially contain subsurface deposits of significant Aboriginal heritage.
- All the proposed quarry has been disturbed in a manner which constitutes 'disturbance' within the meaning of the Due Diligence Code and is consistent with the Due Diligence Code.
- The Yaegl LALC representative agreed in discussion that no further Aboriginal cultural heritage investigation was required.

For historic cultural heritage, a desktop review concluded that no historically significant cultural heritage sites were near the quarry.

### 5.12.2 Heritage Management

[Development Approval SSD 6624 Schedule 3 condition 26]

Development Consent Schedule 3 Condition 26 Requirement and Control Measure	Status	Compliance Status
If any item or object of Aboriginal heritage significance is identified on site, the Applicant must ensure that:		
(a) all work in the immediate vicinity of the suspected Aboriginal item or object ceases immediately;	Not triggered Detailed response is provided in Table 4.1 of Heritage Management Plan	Not triggered
(b) a 10 m buffer area around the	Not triggered	Not triggered

suspected item or object is cordoned off; and	Detailed response is provided in Table 4.1 of Heritage Management Plan	
(c) the OEH is contacted immediately.	Not triggered Detailed response is provided in Table 4.1 of Heritage Management Plan	Not triggered
Work in the vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i> .	Not triggered Detailed response is provided in Table 4.1 of Heritage Management Plan	Not triggered

### 5.12.3 Conclusions

A Heritage Management Plan was prepared in March 2015 to satisfy the requirements of this condition. The Heritage Management Plan was approved by DPE on 9 May 2016.

No sites of Aboriginal origin or potential archaeological deposits within Sly's Quarry project site were identified during the heritage surveys. No heritage items have been encountered on Sly's Quarry site between May 2016 and 5 August 2017.

## 5.13 Biodiversity and Rehabilitation

[Development Approval SSD 6624 Schedule 3 condition 27 to 34]

### 5.13.1 Flora and Fauna

#### 5.13.1.1 Environmental Assessment

An Environmental Impact Statement (EIS) was prepared in March 2015. This document provides details of the ecological attributes of the site. It is noted Stage 1 of the Quarry's operation plan is not included in the assessment as this area is under an existing approval. As such, the EIS and this audit refers only to the Operational Stages 2 and 3 of the site.

The EIS describes a total of 102 flora species were recorded within the study area belonging to two plant communities namely:

- Blackbutt - bloodwood dry heathy open forest on sandstones of the northern North Coast (NR114); and
- Blackbutt - Turpentine dry heathy open forest on sandstones of the lower Clarence of the North Coast (NR123).

The EIS describes a total of 22 fauna species (21 birds, 1 reptile) recorded within the study area. These species were recorded by way of opportunistic sightings rather than a targeted survey effort. The EIS estimates the range and number of fauna species is likely to be greater. An assessment of habitat value was undertaken to identify potential species at the site and the likely impacts of the proposal.

The proposal includes the clearing of approximately 10.5 hectares of native vegetation, which comprises 4.23 hectares of Blackbutt - Bloodwood dry heathy open forest and 6.27 hectares of Blackbutt - Turpentine dry heathy open forest.

The following is a summary of the ecological components to be impacted by the proposal:

- No threatened ecological communities;
- One threatened flora species - Bordered Guinea Flower (*Hibbertia marginata*), and the possibility of a further two EPBC Act listed flora species [Leafless Tongue Orchid (*Cryptostylis hunteriana*) and A Grass (*Paspalidium grandispiculatum*)];

- No threatened fauna species have been recorded within the study area; however potential habitat for three EPBC Act (Grey-headed Flying Fox, Koala and Spotted-tailed Quoll) and 23 TSC Act threatened fauna species exists (refer EIS 2015);
- One EPBC Act migratory bird species (Rainbow Bee-eater) was recorded during surveys and there is also potential habitat for three other migratory species (Fork-tailed Swift, White-throated Needle-tail and Satin Flycatcher); and
- No aquatic threatened biota listed under the FM Act or their habitats are likely to occur in the study area or to be affected by the project. However, it is noted small drainage lines do occur which would provide water to creeks in the surrounding locality during period of high rainfall.

The EIS describes the ecological mitigation of adverse effects arising from the proposal has been presented according to the hierarchy of avoidance, mitigation and offsetting of impacts.

Regarding offsetting the impacts, the EIS details a calculation of a total of 768 ecosystem credits and 17,437 species credits would be required to offset the impacts of the project. Since the completion of the EIS, further negotiation is apparent as the approved biodiversity credit with Consent Condition No. 27 is as follows:

<b>Credit type</b>	<b>Number of Credits</b>
<b>Ecosystem Credits</b>	
NR 115 Blackbutt-bloodwood dry heathy open forest	567
NR123 Blackbutt-Turpentine dry heathy open forest	327
<b>Total</b>	<b>894</b>
<b>Species Credits</b>	
Bordered Guinea Flower ( <i>Hibbertia marginata</i> )	15,820
Koala ( <i>Phascolarctos cinerus</i> )	317
Common planigale ( <i>Planigale maculata</i> )	317
Squirrel glider ( <i>Petaurus norfolcensis</i> )	268
Brush-tailed phascogale ( <i>Phascogale tapoatafa</i> )	244
<b>Total</b>	<b>16966</b>

The EIS describes a preliminary assessment of a potential biobank site, south of Jackybulbin Road, revealed that the vegetation types and condition are comparable with those identified within the proposed quarry footprint.

#### 5.13.1.2 Biodiversity and Rehabilitation Management Plan [Development Consent Schedule 3 Condition 27 to 34]

<b>Development Consent Schedule 3 Condition 27 to 34 Requirement and Control Measure</b>	<b>Status</b>	<b>Compliance Status</b>
The Applicant must		
<b>27 Biodiversity Offset Strategy</b> assess in detail the biodiversity values of its proposed Biodiversity Offset Strategy (described in the EIS and shown conceptually in Appendix 6) using the <i>BioBanking Assessment Methodology</i> (OEH, 2014) and must retire ecosystem and species credits as set out in Table 5, to the satisfaction of the Secretary.	An updated BRMP including the Biodiversity Offset Strategy (BOS) matters is due 30 November 2017.	Not Triggered
<b>28 Security of Offsets</b> Within 18 months of this consent, unless otherwise agreed with the Secretary, the Applicant must make suitable arrangements to provide appropriate long-term security for the Biodiversity Offset Strategy, to the satisfaction of the Secretary.	An updated BRMP including the Biodiversity Offset Strategy (BOS) matters is due 30 November 2017.	Not Triggered
<b>29 Rehabilitation Objectives</b>	The BRMP has been	Not Triggered



Development Consent Schedule 3 Condition 27 to 34 Requirement and Control Measure	Status	Compliance Status
<p>The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and the conceptual rehabilitation plan in Appendix 3 and must comply with the objectives in Table 6.</p> <p>Rehabilitation Objectives (see Appendix C)</p>	<p>completed and approved (3 May 2017). However, the BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program. Rehabilitation will be ongoing throughout and beyond the life of the Quarry's operation</p>	
<p>30 <b>Progressive Rehabilitation</b> The Applicant 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 further disturbance in future.</i></p>	<p>The BRMP has been completed and approved (3 May 2017). An updated BRMP including the Biodiversity Offset Strategy matters is due 30 November 2017. The BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program</p>	<p>Not Triggered</p>
<p>31 <b>Biodiversity and Rehabilitation Management Plan</b> The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with OEH and Council;</li> <li>(b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;</li> <li>(c) be approved by the Secretary, prior to commencing quarrying operations in Stages 2 or 3 (refer Appendix 2), unless the Secretary agrees otherwise</li> <li>(d) provide details of the conceptual final landform and associated land uses for the site;</li> <li>(e) describe how the implementation of the Biodiversity Offset Strategy would be integrated with the overall rehabilitation of the site;</li> <li>(f) include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and rehabilitation of the site, including triggers for any necessary remedial action;</li> <li>(g) describe the short, medium and long-term measures that would be implemented to: <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 consent;</li> </ul> </li> <li>(h) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3-year period following initial approval of the plan) including the procedures to be implemented for: <ul style="list-style-type: none"> <li>• maximising the salvage of environmental resources</li> </ul> </li> </ul>	<p>The BRMP was reviewed. The document was submitted on 18th November 2016 (after receiving an approved extension) and the plan approved on 3 May 2017. It is noted the plan has not been implemented as clearing within Stage 2 of the quarry has not commenced. Thereby, the plan has not been triggered.</p> <p>The BRMP is considered comprehensive and meets all the requirements of the condition. A revised plan with the inclusion of Biodiversity Offset Strategy matters is due 30 November 2017. Revisions of the plan are required throughout the duration of the quarry's operation as such, this provides opportunities to update</p>	<p>Not triggered</p>

Development Consent Schedule 3 Condition 27 to 34 Requirement and Control Measure	Status	Compliance Status
<p>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;</p> <ul style="list-style-type: none"> <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 and conserving habitat for the Bordered Guinea Flower (<i>Hibbertia marginata</i>);</li> <li>• protecting vegetation and fauna habitat outside the approved disturbance area on-site;</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>• avoiding and minimising the spread of Exotic Rust Fungi of the order Uredinales pathogenic on plants of the family Myrtaceae (Myrtle Rust), <i>Phytophthora cinnamomi</i> (Phytophthora) and Chytrid fungus;</li> <li>• collecting and propagating seed;</li> <li>• controlling weeds and feral pests;</li> <li>• controlling erosion;</li> <li>• ensuring no obstruction of legal public access along the Crown public road referred to as 'Sly's Road' in accordance with public rights of access under the <i>Roads Act 1993</i>; and</li> <li>• controlling access to Sly's Road, including managing public safety risks associated with rights of access over Sly's Road by installing appropriate fencing and signage; and</li> <li>• managing bushfire risk;</li> </ul> <p>(i) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;  . <i>NSW Government Department of Planning and Environment 13</i></p> <p>(j) identify the potential risks to the successful implementation of the Biodiversity Offset Strategy, and include a description of the contingency measures that would be implemented to mitigate these risks; and</p> <p>(k) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>	<p>the plan in relation to monitoring, performance and completion criteria and the like. These updates should also include revisions on planting schedules and a review of new threatened species records and/or new listings of species in the locality.</p>	
<p><b>32 Biodiversity and Rehabilitation Management Plan</b>  The Applicant must implement the approved Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.</p>	<p>Section 6 of the BRMP, outlines opportunities to review and improve the plan</p>	<p>Not Triggered</p>
<p><b>33 Conservation and Rehabilitation Bond</b>  Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant must lodge a Biodiversity and Rehabilitation Bond with the Department to ensure that the Biodiversity Offset Strategy and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and relevant conditions of</p>	<p>An updated BRMP including the Biodiversity Offset Strategy matters is due 30 November 2017.</p>	<p>Not Triggered</p>

Development Consent Schedule 3 Condition 27 to 34 Requirement and Control Measure	Status	Compliance Status
<p>this consent. The sum of the bond must be determined by:</p> <p>(a) calculating the cost of implementing the Biodiversity Offset Strategy over the next 3 years;</p> <p>(b) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and</p> <p>(c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs,</p> <p>to the satisfaction of the Secretary.</p>		
<p>34</p> <p>Within 3 months of each Independent Environmental Audit (see condition 10 of Schedule 5), the Applicant must review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:</p> <p>(a) effects of inflation;</p> <p>(b) likely cost of implementing the Biodiversity Offset Strategy and rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and</p> <p>(c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date.</p>	<p>An updated BRMP including the Biodiversity Offset Strategy matters is due 30 November 2017.</p> <p>The BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program</p>	<p>Not Triggered</p>

The Biodiversity and Rehabilitation Management Plan (BRMP) was prepared to satisfy the requirements of Consent Condition No. 31. This plan was submitted on 18th November 2016 (after receiving an approved extension) and the plan approved on 3 May 2017. It is noted the plan has not been implemented as clearing within Stage 2 of the quarry has not commenced. It is also a revised plan with the inclusion of Biodiversity Offset Strategy matters is due 30 November 2017.

The following targets have been established for the management of biodiversity during the operational lifetime of Sly's Quarry:

- Ensure full compliance with the relevant legislative requirements and Conditions of Approval;
- No fauna fatalities;
- No unapproved disturbance of vegetation; and
- No new occurrences of weeds or pathogens on site.

The BRMP is considered comprehensive and meets all the requirements of the condition. Revisions of the plan are required throughout the duration of the quarry's operation and as such, provide opportunities to update the plan in relation to monitoring, performance and completion criteria and the like. These updates should also include revisions on planting schedules (based on performance) and a review of new threatened species records and/or new listings of species within the locality.

### 5.13.2 Biodiversity Offset Strategy

The preparation and implementation for the long-term security of the biodiversity assets will occur by preparation of a Biodiversity Offset Strategy (BOS). The BOS is currently being prepared (B Luffman, Senior Environmental Scientist/Planner, GHD, pers. com. 31 August 2017). This document is due for submission by November 2017. The long-term security of the biodiversity assets will be secured by Conservation and Rehabilitation Bond which is also due in November 2017. Throughout the lifespan of the quarry, opportunities to revise the BOS and the

bond will occur based on performance and cost estimations for the next 3 years of quarry operations.

### 5.13.3 Conclusion

The Biodiversity and Rehabilitation Management Plan (BRMP) was prepared to satisfy the requirements of Consent Condition No. 31. This plan was submitted and has been approved (9 May 2017). The implementation of this plan will not occur until clearing is proposed within Stage 2 of the quarry's operation. As such, the commencement of this plan has not been triggered.

A revised plan with the inclusion of Biodiversity Offset Strategy matters is due 30 November 2017.

## 5.14 Community Complaints

Community complaints received by Newman Quarrying Pty Ltd related to Sly's Quarry operations between May 2016 and August 2017 are handled and actioned by the Quarry Manager in accordance with the complaints handling and response procedures outlined in each management plan. Six (6) complaints were received by Newman Quarrying Pty Ltd between 5 May 2016 and August 2017:

Date	Complaint/Issue	Response/Action
26 May 2016	tailgate popped on truck spilling rocks on to road when the truck hit a large pothole.	Cleaned up by quarry staff ASAP Newman notified DPE incident Newman notified CVC of potholes
19 October 2016	a local not being notified of blasts	Newman blast management plan has not been approved by DPE yet. Neighbour is being notified 1 week prior to blasts by text msg. Neighbour is not a resident just owns a block 2.5km west.
19 October 2016	vehicles driving at high speed	Newman Traffic management plan not approved by DPE yet. All drivers have signed our code of conduct. Not all trucks work for Newman. New speed signs installed. Drivers toolboxed. No Vehicle rego given so Newman can't pursue
22 June 2017	Mud on road	Newman immediate investigation no mud on road. Road had wet tyre marks coming out of gate due to street sweeper washing gateway. Mud is east of quarry gate from potholes on council road verge that have not been repaired for over 1 year.
30 June 2017	Incident on road reserve 100m west of gate	DPE, mines department and WorkCover informed of contractor incident on council road reserve 100m west of quarry gate
20 July 2017	Complaints about contractors doing road works on council road reserve at front of quarry not having silt fence installed	Newman provided all contact details of contractor and council inspector overseeing works to DPE inspector. Contractor installed sediment fence as requested photo's taken

## 6. Conclusions and Recommendations

The independent environmental audit of the Sly's Quarry expansion conducted in August 2017 indicates that the development is generally in accordance with the project description and predictions outlined in the Environmental Assessment for the Sly's Quarry expansion, March 2015.

The site inspection, document review and discussions with relevant Quarry personnel were undertaken during the site visit and audit program in August 2017. Additional information for verification of compliance with the Project Approval conditions was provided by Newman Quarrying as requested by the auditor following the site visit.

The findings of the independent environmental audit were:

### Overall Conclusion

The operation of the Sly's Quarry Expansion at the date of this audit (August 2017), generally demonstrated compliance with the Development Consent conditions and the Environment Protection Licence conditions.

The audit findings that indicated non-compliances only occurred on isolated occasions within the 1 year period of this audit and did not result in harm to the environment or ongoing nuisance to the community. A summary of the findings that were identified as non-compliant are listed below:

### Development Approval SSD-6624

#### Audit Result                      Non-Compliant Low Risk

Schedule No and Condition No	Issue	Comments
<b>Air Quality</b>		
Schedule 3 Condition 15	The Applicant must implement the approved Air Quality Management Plan as approved from time to time by the Secretary.	Due to delays in the purchase of equipment Air Quality Monitoring has not been undertaken. Air Quality Monitoring Equipment has been purchased and will be installed shortly (pers. Com Mark Newman 3.08.2017)
<b>Soil and Water</b>		
Environmental Management Strategy - Environmental monitoring (Section 8.2 in the EMS)	Weekly monitoring of erosion and sediment (and following rain)	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 4/08/2017) however no verifiable evidence has been provided.
Environmental Management Strategy - Environmental monitoring (Section 8.2 in the EMS)	Baseline monitoring following rain	Water quality monitoring of drainage lines in two locations (WQ1 and WQ2) is required when rain exceeds 10mm in a day. The samples are to be tested for oil and grease, pH and TSS. This has not been undertaken to date

Schedule No and Condition No	Issue	Comments
Environmental Management Strategy - Environmental monitoring (Section 8.2 in the EMS)	Spill kit monitoring monthly and following use	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 4/08/2017) however no verifiable evidence has been provided.
Environmental Management Strategy - Environmental monitoring (Section 8.2 in the EMS)	Quarterly monitoring of groundwater	Three bores were installed on 02/08/2017 as per Figure 5-1 in the SWMP (pers. comm. Mark Newman, 4/08/2017). The bores require purging prior to installation of water level data loggers. This had not been undertaken at the time of the audit inspection.
Soil and Water Management Plan - Environmental control measures (Table 4.1 in the SWMP)	SW09 - Designated, impervious bunded facilities will be provided for cleaning and/or maintenance of vehicles, plant or equipment. These facilities will be located at least 20 metres away from natural and built drainage lines.	Bunded facilities are not provided for cleaning / maintenance of vehicles.  Audit inspection indicates vehicles are maintained under a carport adjacent to workshop area. The carport maintenance area is open sided and gravel based. The workshop has concrete floor. There is no bunding in place either for carport area or for floor in workshop shed. Trucks are washed and degreased in open area which drains into sediment and erosion control system. Water from sediment basins is recycled to wash vehicles and degreaser. The above arrangement does not comply with the SWMP. This arrangement potentially contaminates the captured water with oil and grease and cleaning agents which could lead to non-compliance with the EPL discharge criteria.
Soil and Water Management Plan - Environmental control measures (Table 4.1 in the SWMP)	SW10 - All chemicals, fuels and oils stored at the premises must be contained within appropriately designed bunded areas that meet the following requirements: a) comply with any relevant Australian Standards for the liquids being stored b) have impervious flooring and walls c) have a minimum capacity of 110% of the volume of the largest container stored within the bund.	The storage of chemicals, fuels and oils is detailed further in this section. The storage of diesel fuels and chemicals on the site is considered adequate. The storage system for waste oil requires some modifications with a spill safe system to capture spillage and bollards to protect it from vehicle damage. Batteries need to be stored in an enclosed roofed area.
Soil and Water Management Plan - Environmental control measures (Table 4.1 in the SWMP)	SW11 - Spill kits will be provided at all chemical storage facilities/compound sites and staff trained in their use	A spill safe kit is available in the workshop– observed during audit inspection on 04/08/2017. Staff training has not been verified
Soil and Water Management Plan - Environmental control measures (Table 4.1 in the SWMP)	SW17 Install the three wells, shown on Figure 5-1, in accordance with <i>Minimum Construction Requirements for Water Bores in Australia</i> (NUDLC, 2011)	Three bores were installed on 02/08/2017 as per Figure 5-1 in the SWMP (pers. comm. Mark Newman, 4/08/2017).  Bore construction details were not provided.
	EPL M4.1 The licensee is required to install and maintain a rainfall depth measuring device.	A rain depth gauge is to be installed in the final sediment basin

Schedule No and Condition No	Issue	Comments
<b>Traffic</b>		
Traffic Management Plan - Environmental controls and mitigation measures to address traffic impacts (Table 4.1 in the TMP)	T03 - Where practicable, haulage vehicles should be back-loaded to carry loads on both inward and outward journeys, to minimise total vehicle movements	This is not occurring due to 'busy' nature of the year with focus on selling product (pers. comm. Mark Newman, 4/08/2017)
Traffic Management Plan - Environmental controls and mitigation measures to address traffic impacts (Table 4.1 in the TMP)	T04 - Upgrade the access and Tullymorgan-Jackybulbin Road intersection in accordance with the design in Appendix B by 31 July 2017.	The intersection upgrade has generally been completed in accordance with the design but with some outstanding works: <ul style="list-style-type: none"> <li>• Give Way sign to be installed at exit from the site</li> <li>• Widen the batter slightly in accordance with request from Council's inspector (pers. comm. Mark Newman, 4/08/2017)</li> </ul> Install the truck warning signs (W5-22A) on Tullymorgan-Jackybulbin Road as per the design drawing
Traffic Management Plan - Environmental controls and mitigation measures to address traffic impacts (Table 4.1 in the TMP)	T09 - The delivery of topsoil and mulch must be transported by backfilled quarry product trucks	This is not occurring due to 'busy' nature of the year with focus on selling product (pers. comm. Mark Newman, 4/08/2017)
<b>Bushfire</b>		
	The Applicant must implement the Bushfire Management Plan	No evidence of Induction of new staff members, contractors, visitors and site users to include bushfire awareness, reporting and response actions to fire danger, and evacuation procedures is required
<b>Waste Oil Storage</b>		
	Compliance with Waste Management Plan	Waste oil is collected and stored in a below-ground 5,000 litre steel tank which is located to the east of the workshop/shed. Waste oil is poured into a 50mm diameter galvanised pipe standing 1m above the ground. Waste oil is collected by JJ Richards as required for recycling.  The above system has the potential to result in spillages or be damaged by vehicles.

#### Recommendations

1. Air Quality Monitoring is to be undertaken in accordance with AQMP and EPL 11649 requirements and report provided as per DA consent SSD 6624 and EPL 11649 condition
2. A spill safe system is used to capture spillage when dispensing waste oil to the underground tank. The system should include bollards to protect it from vehicle damage.
3. A Leak detection system is to be implemented to manage the structural integrity of the underground waste oil tank
4. Groundwater bore construction details and the results of monitoring reported as per DA consent SSD 6624 and EPL 11649 conditions
5. A Designated, impervious bunded facility should be provided for cleaning and/or maintenance of vehicles, plant or equipment that discharges to a suitably designed wastewater treatment and dispersal system

- 6. Staff are to be trained in the use of spill safe equipment
- 7. Site Induction and ongoing training in environmental awareness and the requirements of the various environmental management plans be implemented to staff, contractors and visitors as appropriate
- 8. The intersection upgrade is to be completed with installation of required signage
- 9. It is recommended the non-compliances regarding the intersection upgrade are addressed as soon as possible. These works involve:
  - Widening the batter slightly in accordance with a Council request
  - Installing a Give Way sign at the exit from the site and installing truck warning signs on Tullymorgan-Jackybulbin Road in accordance with the design drawing in Appendix B of the TMP.
- 10. It is recommended that the operator:
  - commence baseline water quality monitoring as detailed in the SWMP
  - Relocate the stored batteries to the workshop or a suitably enclosed, roofed area.
- 11. The quarry manager maintains a record of blast initiation dates and times independent of the drill and blast contractor;
- 12. Consideration be given to adjusting the configuration of the blast monitoring equipment to permit continuous recording (histogram capability) to verify ground vibration and air overpressure results for those occasions where the blast has not generated levels exceeding the threshold values. Further lowering of the threshold levels is not however proposed.
- 13. The licensee is required to install and maintain a rainfall depth measuring device in the final sedimentation basin.

**Audit Result                      Non-Compliance – Moderate Risk**

Schedule No and Condition No	Issue	Comments
<b>Bushfire</b>		
Schedule 3 Condition 41	The Applicant must implement the Bushfire Management Plan	No evidence of Induction of new staff members, contractors, visitors and site users to include bushfire awareness, reporting and response actions to fire danger, and evacuation procedures has been provided

**Recommendation:**

- 1. Bushfire awareness induction is to be provided to new staff members, contractors, visitors and site users



# A Development Approval

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>SCHEDULE 2 ADMINISTRATIVE CONDITIONS</b>			
	<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>			
1	In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.			Noted
	<b>TERMS OF APPROVAL</b>			
2	The Applicant must carry out the development: (a) generally in accordance with the EIS; and (b) in accordance with the conditions of this consent and the Development Layout Plans.  Note: The Development Layout Plans are shown in section 2	EIS (GHD March 2015)  Development Consent SSD 6624	The Sly's Quarry Expansion project is being developed generally in accordance with the EIS March 2015, the conditions of Development Consent and general layout of the project Appendix 1 and Appendix 2 of the Development Consent.	Compliant - Ongoing
3	If there is any inconsistency between the documents in condition 2(a), the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.		No inconsistencies were noted between the documents listed in Schedule 2 condition 2 and the expansion of Sly's Quarry at the date of this audit (August 2017).	Noted

Condition No	Development Consent Condition	Verification	Comments	Compliance
4	<p>The Applicant must comply with any requirement/s of the Secretary arising from the Department's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents);</p> <p>(b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and</p> <p>(c) the implementation of any actions or measures contained in these documents.</p> <p><b>LIMITATIONS ON CONSENT</b></p> <p><b>Quarrying Operations</b></p>		<p>Newman's Quarrying P/L have prepared and submitted the reports,</p> <p>strategies, plans, programs, reviews, audits required by the conditions of this Development Consent.</p>	Compliant - Ongoing
5	<p>The Applicant may carry out quarrying operations on the site until 31 May 2041.</p> <p><i>Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.</i></p>			Noted
6	The Applicant must not undertake quarrying operations below a level of 44 m AHD.		Quarrying operations have not occurred to below 44 m AHD	Compliant - Ongoing
7	The Applicant must not extract more than 500,000 tonnes of quarry products from the site in any calendar year.		Extraction of materials from Sly's Quarry site was less than 500,000 tonnes between May 2016 and May 2017.	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Quarry Product Transport</b>			
8	The Applicant must not: (a) transport more than 500,000 tonnes of quarry products from the site during any calendar year; (b) receive or dispatch more than 125 laden trucks from the site on any day; or (c) receive more than 10,000 tonnes of topsoil and 5,000 m3 of mulch during any calendar year.	Sly's Quarry Truck Movements, May 2016 to May 2017	Transport of extracted materials between May 2016 and May 2017 indicated: a) less than 500,000 tonnes of quarry products had been transported during any calendar year; (b) laden trucks receive or dispatch from Sly's Quarry did not exceed more than 125 on any day; or (c) less than 10,000 tonnes of topsoil and 5,000 m3 of mulch was received at Sly's Quarry during any calendar year.	Compliant
9	The delivery of topsoil and mulch permitted by condition 8 (c) above must be transported by backfilled quarry product trucks only		The quarry has been too busy to transport any backfilled material	Compliant not triggered
	<b>SURRENDER OF EXISTING DEVELOPMENT CONSENTS</b>			
10	Within 12 months of the date of this consent, or as otherwise agreed by the Secretary, the Applicant must surrender all existing development consents for extractive industry for the site in accordance with the EP&A Regulation. <i>Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&amp;A Act. Surrendering of consent should not be understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.</i>	Letter to CVC re Surrender of DA 1997/111 dated 23 May 2016	Newman Quarrying P/L surrendered DA 1997/11, on 25 May 2016	Compliant and Complete

Condition No	Development Consent Condition	Verification	Comments	Compliance
11	Prior to the surrender of existing development consents, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of these consents.			Noted
	<b>STRUCTURAL ADEQUACY</b>			
12	The Applicant must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. <i>Notes:</i> • Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works; and • Part 8 of the EP&A Regulation sets out the requirements for the certification of the development or project.		No new buildings constructed at Sly's Quarry site between May 2016 and August 2017.	Not Applicable
	<b>DEMOLITION</b>			
13	The Applicant must ensure that all demolition work is carried out in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures</i> , or its latest version.		No demolition of buildings or structures occurred between May 2016 and August 2017	Not Applicable
	<b>PROTECTION OF PUBLIC INFRASTRUCTURE</b>			
14	The Applicant must: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.  <i>Note: This condition does not apply to damage to roads caused as a result of general road usage</i>		No public infrastructure was damaged or relocated because of Sly's Quarry project activities, No public infrastructure was damaged or relocated because of the Sly's Quarry project activities, between May 2016 and August	Not Applicable

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<i>or otherwise addressed by contributions required by condition 19 of this consent.</i>		2017.	
	<b>OPERATION OF PLANT AND EQUIPMENT</b>			
15	The Applicant must ensure that all the plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.		Newman Quarrying have a workshop on-site and the quarry plant and equipment used on site is maintained and operated in a proper and efficient condition	Compliant Ongoing
	<b>PRODUCTION DATA</b>			
16	The Applicant must: (a) provide annual quarry production data to DRE using the standard form for that purpose; and (b) include a copy of this data in the Annual Review (see condition 9 of Schedule 5).	2016 Annual Review	<b>Annual production data has been reported to DRE and the data is included in the Annual Review</b> Nemwns have not been sent for year ending 30-6-17 which are usually come in September/October each year.	Compliant
	<b>IDENTIFICATION OF APPROVED EXTRACTION LIMITS</b>			

Condition No	Development Consent Condition	Verification	Comments	Compliance
17	By 30 November 2016, unless otherwise agreed with the Secretary, the Applicant must: 17. (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	Extraction Limit Survey Plan (NDC 30.08.2016)	The boundaries of the approved limits of extraction for Sly's Quarry lease activities have been Marked out by a registered surveyor and the boundaries marked for the various activity areas.	Compliant
18	While quarrying operations are being carried out, the Applicant must ensure that these boundaries are clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.		The boundaries of the approved limits of Sly's Quarry lease activities have been marked	Compliant ongoing
	<b>CONTRIBUTIONS TO COUNCIL</b>			
19	The Applicant must pay to Council an annual financial contribution toward the maintenance of Tullymorgan-Jackybulbin Road. The contribution must be determined in accordance with the <i>Maclean Shire Council S.94 Contribution Plan for Maintenance of Quarry Roads</i> , November 1994, or any subsequent relevant contributions plan adopted by Council. The contribution must be paid to Council within one month of the date of this consent each year and reported in the Annual Review required in condition 9 of Schedule 5.		S 94 Contribution paid to CVC by Newman Quarrying on 29.06.2017	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance										
	<b>SCHEDULE 3</b> <b>ENVIRONMENTAL PERFORMANCE CONDITIONS</b>													
	<b>NOISE</b>													
	<b>Hours of Operation</b>													
1	<p>The Applicant must comply with the operating hours set out in Table 1.</p> <table border="1"> <thead> <tr> <th>Activity</th> <th>Permissible Hours</th> </tr> </thead> <tbody> <tr> <td>Employee Arrival</td> <td>From 6:30am Monday To Saturday inclusive From 7:30am on Sundays or public holidays if engaged in maintenance</td> </tr> <tr> <td>Quarrying operations including loading and dispatch of laden trucks</td> <td>Site security or other similar activities 7am - 6pm Monday to Friday 7am to 1pm Saturdays 7 am to 4 pm Saturday if fulfilling a contract for the supply of quarry products to the Pacific Highway update project (SSD 4963)* At no time on Sundays or Public Holidays</td> </tr> <tr> <td>Blasting</td> <td>9 am to 3 pm Monday to Friday (except 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	Employee Arrival	From 6:30am Monday To Saturday inclusive From 7:30am on Sundays or public holidays if engaged in maintenance	Quarrying operations including loading and dispatch of laden trucks	Site security or other similar activities 7am - 6pm Monday to Friday 7am to 1pm Saturdays 7 am to 4 pm Saturday if fulfilling a contract for the supply of quarry products to the Pacific Highway update project (SSD 4963)* At no time on Sundays or Public Holidays	Blasting	9 am to 3 pm Monday to Friday (except public holidays)	Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence	Table 2.2 EMS	Hours of operation of Sly's Quarry activities are in accordance with the limits in Development Consent Schedule 3 condition 1.	Compliant Ongoing
Activity	Permissible Hours													
Employee Arrival	From 6:30am Monday To Saturday inclusive From 7:30am on Sundays or public holidays if engaged in maintenance													
Quarrying operations including loading and dispatch of laden trucks	Site security or other similar activities 7am - 6pm Monday to Friday 7am to 1pm Saturdays 7 am to 4 pm Saturday if fulfilling a contract for the supply of quarry products to the Pacific Highway update project (SSD 4963)* At no time on Sundays or Public Holidays													
Blasting	9 am to 3 pm Monday to Friday (except public holidays)													
Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence													



Condition No	Development Consent Condition	Verification	Comments	Compliance
	<i>*Note: Evidence of contracts that cover those periods during which extended Saturday afternoon operating hours are undertaken must be reported in the Annual Review required by condition 9 of Schedule 5.</i>			
2	<p>The following activities may be carried out on the site outside the hours specified in condition 1:</p> <p>(a) delivery or dispatch of materials as requested by Police or other authorities; and  (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm.</p> <p>In such circumstances, the Applicant must notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.</p>	Mark Newman pers.com 4/08/2017	Work outside of standard operating hours has not occurred between May 2016 and 4 August 2017	Not Triggered
	<b>Noise Impact Assessment Criteria</b>			
3	<p>The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 3.2 at any residence on privately-owned land. Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.</p> <p>However, the noise criteria in Table 2 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</p>		Noise Monitoring undertaken by GHD in October 2016, February 2017 and May 2017 indicate noise levels at the nearest affected levels at less than 35 dB(A) LAeq (15 minute)	Compliant Ongoing

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Operating Conditions</b>			
4	<p>The Applicant must:</p> <p>(a) implement best practice management to minimise the operational and road transportation noise of the development;</p> <p>(b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4);</p> <p>(c) carry out noise monitoring (at least every 3 months or as otherwise agreed with the Secretary) to determine whether the development is complying with the relevant conditions of this consent; and</p> <p>(d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent,</p> <p>to the satisfaction of the Secretary.</p> <p><i>Note: Required frequency of noise monitoring may be reduced if approved by the Secretary.</i></p>	Noise Management Plan approved by DPE 9 May 2016	<p>Best Practice Management Practices have been adopted by Newman Quarrying to minimise noise impacts</p> <p>The initial noise monitoring event post Development Consent SSD 6624 occurred on 26 October 2016, (5 months) then 23 February 2017 (3 months) and then 29 May 2017 (3 months).</p> <p>Noise monitoring indicates compliance with noise criteria. Apart from the initial exceedance, the frequency of noise monitoring has been undertaken in accordance with consent conditions</p> <p>No noise complaints have been received</p> <p>There had been no change or modification to require additional noise monitoring</p> <p>Noise Monitoring Data indicates compliance with noise criteria</p>	

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Noise Management Plan</b>			
5	<p>The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA;</p> <p>(b) be submitted to the Secretary within 6 months of the date of this consent, unless otherwise agreed by the Secretary;</p> <p>(c) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> <li>• compliance with the noise criteria in this consent;</li> <li>• best practice management is being employed; and</li> <li>• the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 4);</li> </ul> <p>(d) describe the proposed noise management system; and</p> <p>(e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2 and the road noise criteria in the EIS, and which evaluates and reports on the effectiveness of the noise management system on site.</p>	Noise Management Plan approved by DPE 9 May 2016	<p>The Noise Management Plan was submitted to DPE on 5 May 2017 and the revised plan was approved on 9 May 2017.</p> <p>Noise Management Plan section 4 describes Control Measures for noise from the quarry and transport operations, and management under adverse weather conditions.</p> <p>Section 5 describes Noise Monitoring Protocol and Evaluation of Compliance.</p> <p>The Noise Management Plan describes the overall noise management system</p> <p>Noise Management Plan Section 5 describes Noise Monitoring Protocol and Evaluation of Compliance including of regularly evaluating the performance of the project, including road traffic noise and noise compliance monitoring at the nearest affected residence Noise Management Plan section 5.2 includes a Contingency Plan while section 5.3 addresses Reporting. Section 6 provides a</p>	<b>Compliant</b>

Condition No	Development Consent Condition	Verification	Comments	Compliance												
			mechanism for regular Review and Improvement													
6	The Applicant must implement the approved Noise Management Plan as approved from time to time by 6.the Secretary.			Noted												
	<b>BLASTING</b>															
7	<p><b>Blasting Assessment Criteria</b></p> <p>The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 3.</p> <table border="1"> <caption>Table 3: Blasting criteria</caption> <thead> <tr> <th>Location</th> <th>Airblast Overpressure (dB(Lin Peak))</th> <th>Ground Vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td>Any residence on privately owned land, or any public infrastructure</td> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td></td> <td>115</td> <td>5</td> <td>5% of the total blasts over a 12 mth period</td> </tr> </tbody> </table> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 3, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable exceedance	Any residence on privately owned land, or any public infrastructure	120	10	0%		115	5	5% of the total blasts over a 12 mth period	Blast Monitoring in accordance with Condition 7	<p>Blasting activities have been monitored in accordance with the requirements of the Blast Management Plan.</p> <p>The maximum recorded vibration level and airblast overpressure level at Location R3 was 0.40mm/s and 101.0dB respectively. Both values are compliant with Condition 7.</p>	Compliant
Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable exceedance													
Any residence on privately owned land, or any public infrastructure	120	10	0%													
	115	5	5% of the total blasts over a 12 mth period													

Condition No	Development Consent Condition	Verification	Comments	Compliance
8	<p>Blasting Frequency</p> <p>The Applicant may carry out a maximum of 2 blasts per calendar 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>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.</p>	Blast Monitoring Sly's Quarry 2016/2017	A review of blast events confirms that Blast Frequency has not exceeded 2 blasts per calendar month	Compliant
9	<p>Operating Conditions</p> <p>During blasting operations, the Applicant must:</p> <p>(a) implement best practice management to:</p> <ul style="list-style-type: none"> <li>• protect the safety of people and livestock in the areas surrounding blasting operations;</li> <li>• protect public or private infrastructure/property in the surrounding area from damage from blasting operations and</li> <li>• minimise the dust and fume emissions of blasting;</li> </ul> <p>(b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and</p> <p>(c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>	Blast Management Plan May 2016	The Blast Management Plan provides Environmental control measures including Notification procedures for residents; Potential Blast-Related Impacts and Control Measures for properties, safety, fly- rock / dust / fume management, and air-blast overpressure;	Compliant
	<b>Blast Management Plan</b>			
10	<p>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary.</p> <p>This plan must:</p> <p>(a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;</p> <p>(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;</p> <p>(c) include measures to manage flyrock;</p> <p>(d) include a monitoring program for evaluating and reporting on compliance with the</p>	Blast Management Plan approved by DPE on 9 May 2016	<p>The Blast Management Plan was submitted to DPE on 5 May 2017 and the revised plan was approved on 9 May 2017.</p> <p>Blast Management Plan section 4 describes Control Measures for blasts from the quarry and management under adverse</p>	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<p>blasting criteria in this consent;  (e) include community notification procedures for the blasting schedule, in particular to nearby residences; and  (f) include a protocol for investigating and responding to complaints.</p>		<p>weather conditions.</p> <p>Section 5 describes Blast Monitoring Protocol and Evaluation of Compliance.</p> <p>The Blast Management Plan describes the overall blast management system</p> <p>Blast Management Plan Section 5 describes Blast Monitoring Protocol and Evaluation of Compliance including of regularly evaluating the performance of the project, including Blast compliance monitoring at the nearest affected residence  Blast Management Plan section 5.2 includes a Contingency Plan while section 5.3 addresses Reporting. Section 6 provides a mechanism for regular Review and Improvement</p>	
11	The Applicant must implement the approved Blast Management Plan as approved from time to time by the Secretary.			Observation

Condition No	Development Consent Condition	Verification	Comments	Compliance															
	<b>AIR QUALITY</b>																		
	Air Quality Impact Assessment Criteria																		
12	<p>The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed 12.so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM10)</td> <td>Annual</td> <td><sup>a,d</sup> 30 µg/m3</td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM10)</td> <td>24 Hour</td> <td><sup>b</sup> 50 µg/m3</td> </tr> <tr> <td>Total suspended particulates (TSP)</td> <td>Annual</td> <td><sup>a,d</sup> 90 µg/m3</td> </tr> <tr> <td>c Deposited dust</td> <td>Annual</td> <td><sup>b</sup> 2 g/m2/month    <sup>a,d</sup> 4 g/m2/month</td> </tr> </tbody> </table> <p><i>Notes to Table 4:</i>  <i>a Cumulative impact (i.e. increase in concentrations due to the development plus background concentrations due to all other sources).</i>  <i>b Incremental impact (i.e. increase in concentrations due to the development alone, with zero allowable exceedances of the criteria over the life of the development.</i>  <i>c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method. d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</i>  <i>e "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 13, 14 and 15 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.</i></p>	Pollutant	Averaging Period	Criterion	Particulate matter < 10 µm (PM10)	Annual	<sup>a,d</sup> 30 µg/m3	Particulate matter < 10 µm (PM10)	24 Hour	<sup>b</sup> 50 µg/m3	Total suspended particulates (TSP)	Annual	<sup>a,d</sup> 90 µg/m3	c Deposited dust	Annual	<sup>b</sup> 2 g/m2/month <sup>a,d</sup> 4 g/m2/month	Air Quality Management Plan approved by DPE (May 2016)	Air Quality Monitoring had not been undertaken at the date of site audit (4/08/2017)	Non-Compliant Low Risk
Pollutant	Averaging Period	Criterion																	
Particulate matter < 10 µm (PM10)	Annual	<sup>a,d</sup> 30 µg/m3																	
Particulate matter < 10 µm (PM10)	24 Hour	<sup>b</sup> 50 µg/m3																	
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c Deposited dust	Annual	<sup>b</sup> 2 g/m2/month <sup>a,d</sup> 4 g/m2/month																	

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Operating Conditions</b>			
13	<p>The Applicant must:</p> <p>(a) implement best practice management to minimise the dust emissions of the development;</p> <p>(b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;</p> <p>(c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 4);</p> <p>(d) monitor and report on compliance with the relevant air quality conditions in this consent; and</p> <p>(e) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.</p>	Air Quality Management Plan approved by DPE May 2016	<p>BMP has been employed by Newman Quarrying in accordance with the AQMP</p> <p>Blasting should not occur during times when winds are in the direction of the nearest receptors, and preferably occur during times when winds are calm or blowing away from the nearest receptors.</p>	Compliant
	<b>Air Quality Management Plan</b>			
14	<p>The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agree by the Secretary;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> <li>• compliance with the relevant conditions of this consent;</li> <li>• best practice management is being employed; and</li> <li>• the air quality impacts of the development 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 development;</li> <li>• includes a protocol for determining any exceedances of the relevant conditions of consent;</li> <li>• effectively supports the air quality management system; and</li> <li>• evaluates and reports on the adequacy of the air quality management system.</li> </ul>	AQMP was prepared by GHD and approved by DPE on 9 May 2016	<p>a) The Air Quality Management Plan was prepared to satisfy this Development consent condition and was approved by DPE on 9 May 2016. The AQMP was prepared in consultation with DPE and a draft copy of the Plan provided to DPE for review and comment</p> <p>Informal discussions were also held with the EPA, particularly with respect to the proposed air quality monitoring program and locations and type of air quality monitoring.</p>	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
			b) measures implemented are: consistent with best management practices effective in controlling dust from the quarry activities; during periods of high wind speeds Sly's Quarry activities capable of generating dust are curtailed in the higher exposed areas monitoring results <u>are to be</u> assessed by the Quarry Manager or Quarry Supervisor for compliance with relevant conditions; c) the Air Quality Management Plan presents the air quality management system for Sly's Quarry; d) section 5 addresses air quality monitoring and compliance	
15	Due to delays in the purchase of equipment Air Quality Monitoring has not been undertaken.		Air Quality Monitoring Equipment has been purchased and will be installed shortly (pers. Com Mark Newman 3.08.2017)	<b>Non - Compliant Low Risk</b>

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Meteorological Monitoring</b>			
16	For the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants in New South Wales</i> guideline.	Development Consent SSD 6624 No 16	Development Consent SSD 6624 No 16 describes the requirements for a weather station to be available on Sly's Quarry site. A weather monitoring station is in a satisfactory location adjacent to the weighbridge and measures wind speed and direction, temperature, rainfall and relative humidity. The station results are relayed to the computer system in the Sly's Quarry office and is available for on site management of activities.	Compliant
	<b>Greenhouse Gas Emissions</b>			
17	The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.	AQMP section 3 Greenhouse Gas	Key actions adopted and implemented at Sly's Quarry to minimise release of GHG are: <ul style="list-style-type: none"> <li>• Opportunities for the use of biodiesel will be investigated and used where possible.</li> <li>• Efficient plant and vehicles will be used where reasonable and feasible to do so.</li> <li>• Turn off engines when not in use.</li> </ul> All machinery and vehicles will be maintained in good working order and made to comply with	

Condition No	Development Consent Condition	Verification	Comments	Compliance
			relevant exhaust standards	
	<b>SOIL AND WATER</b>			
	Water Supply			
18	The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary	Section 3.2 of the Soil and Water Management Plan (GHD, 2017) details a site water balance for the operations.	<p>The water supply for current operations is adequately provided by water stored in the settling basins on the site.</p> <p>The site water balance indicates there will be sufficient runoff from the quarry operational area to meet operational water requirements. In addition, surplus water captured in a settling basin on site for treatment of excess of runoff for discharge.</p>	Compliant - Ongoing
	<b>Water Discharges</b>			
19	The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.	<p>A Water Quality Monitoring Summary is provided on the quarry's website - <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a></p> <p>A copy of the summary is</p>	<p>The quarry complies with the EPL discharge limits.</p> <p>The summary covers the period from June 2016 to June 2017. The monitoring indicates the quarry complies with the EPL discharge limits.</p>	Compliant - Ongoing

Condition No	Development Consent Condition	Verification	Comments	Compliance
		included in <b>Appendix E.</b>		
	<b>Soil and Water Management Plan</b>			
20	<p>The Applicant must prepare a Soil and Water Management Plan for the development 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; (b) be prepared in consultation with the EPA and DPI Water;</p> <p>(c) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; and</p> <p>(d) include the EPA's requirements as set out in Appendix 5; (e) 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>○ sources and security of water supply;</li> <li>○ water use and management on site;</li> <li>○ any off-site water transfers; and</li> <li>○ reporting procedures; and</li> </ul> </li> <li>• measures that would be implemented to minimise clean water use on site; (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 development;</li> <li>• a detailed description of the surface water management system on site</li> </ul> </li> </ul>	Letter from Department of Planning and Environment dated 9 May 2017	The Soil and Water Management Plan was approved by the Department of Planning and Environment on 9 May 2017	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<p>including the:</p> <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;</li> <li>o water storages; and</li> <li>o mitigation measures outlined in the EIS; and</li> </ul> <ul style="list-style-type: none"> <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> <p>(iii) Groundwater Management Plan that includes:</p> <ul style="list-style-type: none"> <li>• a provision that requires the Applicant 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 the alluvium and associated surface water source near the proposed extraction area that includes: <ul style="list-style-type: none"> <li>o a minimum of three monitoring bores with automatic water level recording instrumentation or other method agreed with DPI-Water;</li> <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>			

Condition No	Development Consent Condition	Verification	Comments	Compliance
21	The Applicant must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.	SWMP prepared by GHD	The SWMP was prepared by GHD and approved by the Department of Planning and Environment	Compliant
	<b>TRANSPORT</b>			
	Monitoring of Product Transport			
22	The Applicant 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.	A daily record of truck movements has been recorded on the quarry's website: <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a> A copy is included in <b>Appendix G.</b>	The daily record of truck movements summary on the website covers all days from May 2016 to May 2017.	Compliant
	<b>Operating Conditions</b>			
23	The Applicant must: (a) 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;	Trucks were observed to comply with the covered load requirement during the audit site inspection (4 August 2017).	The Driver's Code of Conduct notes that all laden trucks entering or exiting the site are to have their loads covered, except for loads consisting solely of boulders.	Compliant - Ongoing

Condition No	Development Consent Condition	Verification	Comments	Compliance
	(b) ensure that all laden trucks exiting the site are cleaned of material that may fall on the road, before leaving the site;	Trucks exiting the site were observed to be generally clean during the audit site inspection on 04/08/2017.	Trucks pass over a rumble grate to dislodge material prior to exiting the site.  The Driver's Code of Conduct notes that all trucks are to be cleaned of material that may fall on the road, before leaving the site. It also notes that vehicles should be maintained to a clean and tidy standard.	Compliant - Ongoing
	(c) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the development so they can be easily identified by road users;	Observations during site inspection on 04/08/2017.	Business name is adequately signed on doors of trucks – observed during the audit site inspection on 04/08/2017.	Compliant - Ongoing
	(d) if necessary, allow for the parking of early-arriving trucks (i.e. between 6:30 am and 7 am) within the site to avoid queuing on Tullymorgan-Jackybulbin Road.	Detailed in Traffic Management Plan.  Confirmed by Quarry Manager during audit (pers. comm. Mark Newman, 4/08/2017).	The quarry gates are opened at 6:30am Monday to Saturday to allow trucks to wait inside the site until the quarry operations commence at 7am. Quarry operations do not occur on Sundays or public holidays.	Compliant - Ongoing

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Traffic Management Plan</b>			
24	The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must:	Correspondence in Appendix A of TMP	RMS and Council were consulted – refer to	Compliant
	(a) be prepared in consultation with the RMS and Council;			
	(b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	Correspondence provided by GHD.	Exact dates unknown but it appears this timeframe was generally met	Compliant
	(c) describe the processes in place for the control of truck movements entering and exiting the site;		Refer to <i>Traffic Management Plan - Environmental controls and mitigation measures</i> further below.	Compliant
	(d) include a review of the existing intersection at the entrance to the quarry on Tullymorgan-Jackybulbin Road, which involves: (i) undertaking a survey of the dimensions of the existing intersection to assess whether it meets the minimum road design dimensions for a BAR/BAL treatment in accordance with the relevant road design guideline and/or standard; and (ii) if found to not meet these dimensions, propose a works program for the upgrade of the intersection to meet the relevant road design guideline and/or standard and a timeframe for completion of the works;	Intersection design included in Appendix B of the TMP.	Intersection upgrade included as part of the <i>Traffic Management Plan - Environmental controls and mitigation measures</i> further below	Compliant
	(e) 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, with a particular focus on: (i) ensuring truck drivers are aware of the school bus stop and turning area adjacent to the intersection of Tullymorgan-Jackybulbin Road and the Pacific Highway, its likely hours of use and take appropriate measures to avoid interacting with school buses and school pupils; and (ii) minimising the potential for fauna strike on Tullymorgan-Jackybulbin	Drivers' Code of Conduct included in Appendix C of the TMP.	All drivers have completed training in respect to Driver's Code of Conduct (pers. comm. Mark Newman, 4/08/2017)	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	Road;			
	(f) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct;	All drivers complete training in respect to Driver's Code of Conduct and routine inspections by Quarry manager are undertaken (pers. comm. Mark Newman, 4/08/2017)	The TMP includes routine weekly inspections by the Quarry Manager (or delegate) to identify any ad-hoc traffic issues such as speeding, tracking, uncovered loads. Refer to <i>Traffic Management Plan - Environmental inspections and monitoring</i> further below.	Compliant
	(g) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry	Observations during site inspection on 04/08/2017.	The TMP includes a range of measures such as rumble grid, cleaning vehicles, street sweeping. Refer to <i>Traffic Management Plan - Environmental controls and mitigation measures</i> further below	Compliant
	(h) propose measures to accommodate the parking of early-arriving trucks within the site, rather than on the public road network.	Detailed in Traffic Management Plan.  Confirmed by Quarry Manager	The quarry gates are opened at 6:30am Monday to Saturday to allow trucks to wait inside the site until the quarry operations commence at 7am. Quarry operations do not occur on Sundays or public holidays.	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
		during audit (pers. comm. Mark Newman, 4/08/2017)		
25	The Applicant must implement the approved Traffic Management Plan as approved from time to time by the Secretary.		The TMP has been implemented	Compliant
	<b>ABORIGINAL HERITAGE</b>			
26	<p>If any item or object of Aboriginal heritage significance is identified on site, the Applicant must ensure that: (a) all work in the immediate vicinity of the suspected Aboriginal item or object ceases immediately;</p> <p>(b) a 10 m buffer area around the suspected item or object is cordoned off; and</p> <p>(c) the OEH is contacted immediately.</p> <p>Work in the vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i>.</p> <p>provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i>.</p>			Noted
	<b>BIODIVERSITY AND REHABILITATION</b>			
	<b>Biodiversity Offset Strategy</b>			
27	The Applicant must assess in detail the biodiversity values of its proposed Biodiversity Offset Strategy (described in the EIS and shown conceptually in Appendix 6) using the <i>BioBanking Assessment Methodology</i> (OEH, 2014) and must retire ecosystem and species credits as set out in Table 5, to the satisfaction of the		An updated BRMP including the Biodiversity Offset Strategy (BOS) matters is due 30 November 2017.	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance																				
	Secretary. <i>Table 5: Biodiversity credits to be retired</i> <table border="1"> <thead> <tr> <th>Credit Type</th> <th>Number of Credits</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>Ecosystem Credits</b></td> </tr> <tr> <td>NR 115 Blackbutt-bloodwood dry heathy open forest</td> <td>567</td> </tr> <tr> <td>NR123 Blackbutt-Turpentine dry heathy open forest</td> <td>327</td> </tr> <tr> <td colspan="2"><b>Species Credits</b></td> </tr> <tr> <td>Bordered Guinea Flower (<i>Hibbertia marginata</i>)</td> <td>15,820</td> </tr> <tr> <td>Koala (<i>Phascolarctos cinerus</i>)</td> <td>317</td> </tr> <tr> <td>Common planigale (<i>Planigale maculata</i>)</td> <td>317</td> </tr> <tr> <td>Squirrel glider (<i>Petaurus norfolcensis</i>)</td> <td>268</td> </tr> <tr> <td>Brush-tailed phascogale (<i>Phascogale tapoatafa</i>)</td> <td>244</td> </tr> </tbody> </table>	Credit Type	Number of Credits	<b>Ecosystem Credits</b>		NR 115 Blackbutt-bloodwood dry heathy open forest	567	NR123 Blackbutt-Turpentine dry heathy open forest	327	<b>Species Credits</b>		Bordered Guinea Flower ( <i>Hibbertia marginata</i> )	15,820	Koala ( <i>Phascolarctos cinerus</i> )	317	Common planigale ( <i>Planigale maculata</i> )	317	Squirrel glider ( <i>Petaurus norfolcensis</i> )	268	Brush-tailed phascogale ( <i>Phascogale tapoatafa</i> )	244			
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	<b>Security of Offsets</b>																							
28	Within 18 months of this consent, unless otherwise agreed with the Secretary, the Applicant must make suitable arrangements to provide appropriate long-term security for the Biodiversity Offset Strategy, to the satisfaction of the Secretary.		An updated BRMP including the Biodiversity Offset Strategy matters is due 30 November 2017.	Not triggered																				
	<b>Rehabilitation Objectives</b>																							
29	The Applicant must rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and the conceptual rehabilitation plan in Appendix 3 and must comply with the objectives in Table 6. <i>Table 6: Rehabilitation Objectives</i>		The BRMP has been completed and approved (3 May 2017). However, the BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program. Rehabilitation will be ongoing	Not triggered																				

Condition No	Development Consent Condition	Verification	Comments	Compliance												
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	<b>Progressive Rehabilitation</b>															
30	<p>The Applicant 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 further disturbance in future.</i></p>		The BRMP has been completed and approved (3 May 2017). An updated BRMP including the Biodiversity Offset Strategy matters is due 30 November 2017. The BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program	Not triggered												

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Biodiversity and Rehabilitation Management Plan</b>			
31	<p>The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH and Council;</p> <p>(b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;</p> <p>(c) be approved by the Secretary, prior to commencing quarrying operations in Stages 2 or 3 (refer Appendix 2), unless the Secretary agrees otherwise</p> <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 would be integrated with the overall rehabilitation of the site;</p> <p>(f) include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy and rehabilitation of the site, including triggers for any necessary remedial action; (g) describe the short, medium and long-term measures that would 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 consent;</li> </ul> <p>(h) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3-year period following 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> </ul>		<p>The BRMP was reviewed. The document was submitted on 18th November 2016 (after receiving an approved extension) and the plan approved on 3 May 2017. It is noted the plan has not been implemented as clearing within Stage 2 of the quarry has not commenced. Thereby, the plan has not been triggered.</p> <p>The BRMP is considered comprehensive and meets all the requirements of the condition. A revised plan with the inclusion of Biodiversity Offset Strategy matters is due 30 November 2017. Revisions of the plan are required throughout the duration of the quarry's operation as such, this provides opportunities to update the plan in relation to monitoring, performance and completion criteria and the like. These updates should also include revisions on planting schedules and a review of new threatened species records and/or new listings of species in</p>	Not triggered

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<ul style="list-style-type: none"> <li>• protecting and conserving habitat for the Bordered Guinea Flower (<i>Hibbertia marginata</i>);</li> <li>• protecting vegetation and fauna habitat outside the approved disturbance area on-site;</li> <li>• minimising the impacts on native fauna, including undertaking pre-clearance surveys; <ul style="list-style-type: none"> <li>• establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers;</li> </ul> </li> <li>• ensuring minimal environmental consequences for threatened species, populations and habitats; <ul style="list-style-type: none"> <li>• avoiding and minimising the spread of Exotic Rust Fungi of the order Uredinales pathogenic on plants of the family Myrtaceae (Myrtle Rust), <i>Phytophthora cinnamomi</i> (Phytophthora) and Chytrid fungus;</li> </ul> </li> <li>• collecting and propagating seed;</li> <li>• controlling weeds and feral pests;</li> <li>• controlling erosion;</li> <li>• ensuring no obstruction of legal public access along the Crown public road referred to as 'Sly's Road' in accordance with public rights of access under the <i>Roads Act 1993</i>; and <ul style="list-style-type: none"> <li>• controlling access to Sly's Road, including managing public safety risks associated with rights of access over Sly's Road by installing appropriate fencing and signage; and</li> <li>• managing bushfire risk;</li> </ul> </li> </ul> <p>(i) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;</p> <p>(j) identify the potential risks to the successful implementation of the Biodiversity Offset Strategy, and include a description of the contingency measures that would be implemented to mitigate these risks; and</p> <p>(k) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>		the locality.	

Condition No	Development Consent Condition	Verification	Comments	Compliance
32	The Applicant must implement the approved Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.		The BRMP, Section 6 outlines opportunities to review and improve the plan	Not triggered
	<b>Conservation and Rehabilitation Bond</b>			
33	<p>Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant must lodge a Biodiversity and Rehabilitation Bond with the Department to ensure that the Biodiversity Offset Strategy and rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the plan and relevant conditions of this consent. The sum of the bond must be determined by:</p> <p>(a) calculating the cost of implementing the Biodiversity Offset Strategy over the next 3 years;</p> <p>(b) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and</p> <p>(c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>• <i>Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement, or transfer to conservation reserve estate can be used to reduce the liability of the Conservation and Rehabilitation Bond.</i></li> <li>• <i>If capital and other expenditure required by the Biodiversity and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure.</i></li> <li>• <i>If the Biodiversity Offset Strategy and/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the Secretary, then the Secretary will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy and rehabilitation of the site are not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.</i></li> </ul>		An updated BRMP including the Biodiversity Offset Strategy matters is due 30 November 2017.	Not triggered

Condition No	Development Consent Condition	Verification	Comments	Compliance
34	<p>Within 3 months of each Independent Environmental Audit (see condition 10 of Schedule 5), the Applicant must review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the:</p> <ul style="list-style-type: none"> <li>(a) effects of inflation;</li> <li>(b) likely cost of implementing the Biodiversity Offset Strategy and rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and</li> <li>(c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date.</li> </ul>		Independent Environment Audit was undertaken on 4 August 2017	Not Triggered
	<b>VISUAL</b>			
35	The Applicant must implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary, including those mitigation measures listed in the EIS.	<p>Development Consent Schedule 3 Condition 35</p> <p>Visual assessment EIS (GHD March 2015)</p>	The proposed quarry is visually obscured from the majority of the surrounding area by the topography, viewing distance and surrounding vegetation.	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>WASTE</b>			
36	The Applicant must: (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;	ATO issued by CVC for OSMS 23/02/2017	OSMS operating satisfactorily	Compliant
	(b) minimise the waste generated by the development;	Waste Management Plan May 2016	The waste generated by Sly's Quarry project activities is reused where possible	
	(c) ensure that the waste generated by the development is appropriately stored, handled, and disposed of;	Waste Management Plan May 2016	All waste is segregated into separate bins, containers or tanks for collection, recycling/disposal	
	d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Waste Management Plan May 2016	On 30/10/2016 DEP confirmed by letter that the initial annual review should cover the period from the date of consent until 30/06/2017	Not Triggered
37	Except as expressly permitted in an EPL, the Applicant must not receive waste at the site for storage, treatment, processing, reprocessing or disposal.		Sly's Quarry does not receive waste at the site for storage, treatment, processing, reprocessing or disposal	Compliant
	<b>LIQUID STORAGE</b>			
38	The Applicant must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.		The storage of diesel fuels and chemicals on the site is considered adequate. The storage system for waste oil requires some modifications with a spill safe system to capture spillage and bollards to protect it	Non-Compliant Low Risk

Condition No	Development Consent Condition	Verification	Comments	Compliance
			from vehicle damage. Batteries need to be stored in an enclosed roofed area.	
	<b>DANGEROUS GOODS</b>			
39	The Applicant must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the <i>Dangerous Goods Code</i> .	EIS March 2015	Fuels are storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	Compliant
	<b>BUSHFIRE</b>			
40	The Applicant must: (a) prepare a Bushfire Management Plan to the satisfaction of the RFS; (b) ensure that the development is suitably equipped to respond to any fires on site; and (c) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	Bushfire Management Plan, May 2016	A Bushfire Management Plan for Sly's  Quarry was prepared in May 2016 to address the requirements of Development Consent SSD 6624  Schedule 3 condition 40 and approved by the DPE:	Compliant
41	The Applicant must implement the Bushfire Management Plan.	Bushfire Management Plan, May	The Bushfire Management Plan has been implemented	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
		2016		
	<b>SCHEDULE 4</b>			
	<b>ADDITIONAL PROCEDURES</b>			
	<b>NOTIFICATION OF LANDOWNERS</b>			
1	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>(a) an exceedance of any relevant criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and</p> <p>(b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned).</p>			Not Activated
2	<p>If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.</p> <p>If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant must:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:</p>			Not Activated

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<ul style="list-style-type: none"> <li>• consult with the landowner to determine his/her concerns;</li> <li>• conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and</li> <li>• if the development is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and</li> </ul> <p>(b) give the Secretary and landowner a copy of the independent review.</p>			
	<b>SCHEDULE 5</b>			
	<b>ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>			
	<b>ENVIRONMENTAL MANAGEMENT</b>			
	<b>Environmental Management Strategy</b>			
1	<p>If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <p>(a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;</p> <p>(b) be prepared in consultation with Council;</p> <p>(c) provide the strategic framework for environmental management of the development; (d) identify the statutory approvals that apply to the development;</p> <p>(e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</p> <p>(f) describe the procedures that would 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 development;</li> <li>• receive, record, handle and respond to complaints;</li> <li>• resolve any disputes that may arise during the course of the development;</li> <li>• respond to any non-compliance;</li> </ul>	<p>Environmental Management Strategy, May 2016 Letter from DPE re Approval of Environmental Management Strategy, 9 May 2016</p>	<p>An Environmental Management Strategy was prepared to satisfy Project Approval Schedule 5 condition 1 and approved by DPE on 19 May 2016</p> <p>section 1 addresses the Strategic Framework for environmental management;</p>	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<ul style="list-style-type: none"> <li>respond to emergencies; and include:</li> <li>copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>a clear plan depicting all the monitoring to be carried out under the conditions of this consent.</li> </ul>			
2	The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.		<p>section 3 identifies Legal and Other Requirements for Sly's Quarry</p> <p>section 4.3 addresses Roles and Responsibilities of all key personnel involved in the environmental management of Sly's Quarry;</p> <p>The EMS describes processes in Section 5: training and awareness;</p> <p>Section 6 incidents and emergencies</p> <p>Section 7 Communication</p> <p>And complaints handling</p>	Compliant
	<b>Management Plan Requirements</b>			
3	<p>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> <li>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> </ul>	Development Consent References: Schedule 3, condition 5 Noise	The Management Plans required under this Development Consent have been prepared generally in accordance with the guidelines outlined in Development Consent Schedule 5 condition 3. The requirements	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<ul style="list-style-type: none"> <li>• any relevant limits or performance measures/criteria; and</li> <li>• the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>• impacts and environmental performance of the development; and</li> <li>• effectiveness of any management measures (see (c) above);</li> </ul> <p>(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>• incidents;</li> <li>• complaints;</li> <li>• non-compliances with statutory requirements; and</li> <li>• exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul> <p>(h) a protocol for periodic review of the plan.</p> <p><b>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</b></p>	<p>Management Plan (NMP) Schedule 3, condition 10 Blast Management Plan (BMP) Schedule 3, condition 14 Air Quality Monitoring Program (AQMP) Schedule 3, condition 20 Soil and Water Management Plan (SWMP) Schedule 3, condition 24 Traffic Management Plan (TMP) Schedule 3, condition 31 Biodiversity and Rehabilitation Management Plan (BRMP) Schedule 3, condition 40 Bushfire Management Plan (BMP)</p>	<p>are addressed under the following section headings in each Plan:</p> <p><b>baseline data</b> - Existing Environment and Potential Impacts and Environmental Assessment March 2015) Specialist Consultant</p> <p><b>relevant statutory requirements - Legal and Other Requirements</b></p> <p>description of the management measures to be implemented – Control Measures</p> <p>program to monitor and report on impacts and environmental performance</p> <p>contingency plan</p> <p>incidents – Incident Reporting</p> <p>Complaints Handling and Response;</p> <p>Evaluation of Compliance</p> <p>Plan Review</p>	

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<b>Revision of Strategies, Plans &amp; Programs</b>			
4	<p>Within 3 months of the submission of an:</p> <p>(a) Annual Review under condition 9 below; (b) incident report under condition 7 below; (c) audit report under condition 10 below; and (d) any modifications to this consent, the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.</p> <p><b>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.</b></p>		<p>Due to delays in approvals of management plans the applicant sought and DPE agreed in correspondence dated 31/10/2016 that the initial annual report could be delayed until September 2017</p> <p>No incident reports were triggered</p>	Not Triggered
	<b>Updating and Staging of Strategies, Plans or Programs</b>			
5	<p>To ensure that strategies, plans or programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• While any strategy, plan or program may be submitted on a staged basis, the</li> </ul>			Noted

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<p><i>Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times.</i></p> <ul style="list-style-type: none"> <li><i>• If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.</i></li> </ul>			
	<b>Adaptive Management</b>			
6	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</p> <p>(c) implement remediation measures as directed by the Secretary to the satisfaction of the Secretary.</p>			Noted
	<b>Community Consultative Committee</b>			
7	<p>If directed by the Secretary, the Applicant must establish and operate a Community Consultative Committee(CCC) for the development to the satisfaction of the Secretary. Any such CCC must be operated in general accordance with the <i>Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments</i> (Department of Planning, 2007, or its latest version).</p> <p><i>Notes:</i></p>			Noted



Condition No	Development Consent Condition	Verification	Comments	Compliance
	<ul style="list-style-type: none"> <li>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</li> <li>In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.</li> </ul>			
	<b>REPORTING</b>			
	<b>Incident Reporting</b>			
8	The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.		No reportable incidents were notified between May 2016 and 4 August 2017.	Not triggered
	<b>Regular Reporting</b>			
9	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	www.newmansquarrying.com.au	Monitoring results, complaints and are available on the on Newman Quarrying website with the website being updated at least each quarter.	Compliant
	<b>Annual Review</b>			
10	By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must: <ul style="list-style-type: none"> <li>(a) describe the development (including any rehabilitation) that was carried out in the previous financial year,</li> </ul>		Due to delays in approvals of management plans the applicant sought and DPE agreed in correspondence dated 31/10/2016	Not Triggered

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<p>and the development that is proposed to be carried out over the current financial year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• requirements of any plan or program required under this consent;</li> <li>• monitoring results of previous years; and</li> <li>• relevant predictions in the EIS;</li> </ul> <p>(c) identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.</p>		that the initial annual report could be delayed until September 2017	
	<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>			
11	<p>Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) include consultation with the relevant agencies and (if established) the CCC;</p> <p>(c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);</p> <p>(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;</p>	Letter from DPE re Approval of Independent Auditor, 3 July 2017	<p>Consultation occurred with relevant agencies (DPE, RMS, CVC, OEH, EPA and DPI-Water);</p> <p>Section 4 of this audit report assesses</p> <p>environmental performance of the project and compliance with the relevant requirements in this approval and EPL 11649 is addressed in section 4 and Attachments to this audit;</p>	Compliant

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<p>and (e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals.</p> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</i></p>		<p>section 4 of this audit report reviews the adequacy of the approved Environmental Management Strategy, Environmental Management Plans and programs</p> <p>section 5 of this report provides any recommended measures or actions to improve the environmental performance of the project(if required), and/or any assessment, plan or program required under the approvals.</p>	
12	<p>Within 6 weeks of completion of this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, Council, the EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report.</p>	Development Consent SSD 6624	Audit is currently underway	Noted
	<b>ACCESS TO INFORMATION</b>			
13	<p>Within 6 months of the date of this consent, the Applicant must:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>the documents listed in condition 2(a) of Schedule 2;</li> <li>current statutory approvals for the development;</li> <li>all approved strategies, plans and programs required under the conditions of this consent; <ul style="list-style-type: none"> <li>a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li> </ul> </li> <li>a complaints register, updated monthly;</li> <li>the annual reviews of the development;</li> <li>any independent environmental audit, and the Applicant's response to</li> </ul>	Development Consent SSD 6624	<p>The following information publicly available on its website:</p> <p>Environmental Protection License 11649 Sly's Quarry Development Consent SSD 6624 Response to EIS Submissions EIS, Mar 2015 Environmental Management Strategy Air Quality Blast Management</p>	

Condition No	Development Consent Condition	Verification	Comments	Compliance
	<p>the recommendations in any audit; and</p> <ul style="list-style-type: none"> <li>• any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>		<p>Heritage Management Plan  Noise Management  Transport  Waste Management  Water Management  Community Complaints</p>	

# Attachment B Environment Protection Licence 11649

Condition No	EPL Condition	Verification	Comment	Compliance						
1	<b>Administrative Conditions</b>									
A1.1	<p>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.</p> <table border="1"> <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		Sly's Quarry activities have been conducted between May 2016 and 4 August 2017 in compliance with their scheduled activity classification, fee-based activity classification and the scale of the operation.	Compliant
Scheduled Activity	Fee Based Activity	Scale								
Extractive activities	Land-based extractive activity	> 100000 - 500000 T annual capacity to extract, process or store								

Condition No	EPL Condition	Verification	Comment	Compliance
A1.2	Notwithstanding A1.1, the scale of the land-based extractive activity authorised under this licence must not exceed 500,000 tonnes per annum, being the amount equivalent to the extraction limit approved by the development consent granted under the <i>Environmental Planning and Assessment Act 1979</i> for the premises specified in A2.		Sly's Quarry activities have not exceeded 500,000 tonnes per annum the scale of the operation.	Compliant
A2	<b>Premises or plant to which this licence applies</b>			
A2.1	The licence applies to the following premises: Newman Quarry Jackybulbin Mororo NSW 2469 Lot 2 DP 1055044		Sly's Quarry operations are conducted on Lot 2 DP 1055044 Jackybulbin Road Mororo NSW 2469 Premises boundary defined on the Plan titled Figure 3: <i>Sly's Quarry Proposed Quarry Expansion Stages of extraction</i> Drawing No 22-175-001 GHD	Compliant
A3	<b>Other Activities</b>			
A3.1	This licence applies to all other activities carried on at the premises, including: Ancillary Activities: Crushing, Grinding or Separating Works Extractive Industries			Noted

Condition No	EPL Condition	Verification	Comment	Compliance
A4	<b>Information Supplied to the EPA</b>			
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition, the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.			Noted
2	<b>Discharges to Air and Water and Applications to Land</b>			
P1	<b>Location of monitoring/discharge points and areas</b>			
P1.1	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.			Noted
P1.2	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.	Soil and Water Management Plan, May 2016	No discharge occurred between 9 May 2016 and 4 August 2017	Not Triggered

Condition No	EPL Condition	Verification	Comment	Compliance								
	<p><b>Water and Land</b></p> <table border="1"> <thead> <tr> <th>EPA Identification No</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Sediment Basin Discharge</td> <td>Sediment Basin Discharge</td> <td>Discharge from final sediment basin located at 518323E and 6757911N.</td> </tr> </tbody> </table>	EPA Identification No	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Sediment Basin Discharge	Sediment Basin Discharge	Discharge from final sediment basin located at 518323E and 6757911N.		EPA discharge point No 1	
EPA Identification No	Type of Monitoring Point	Type of Discharge Point	Location Description									
1	Sediment Basin Discharge	Sediment Basin Discharge	Discharge from final sediment basin located at 518323E and 6757911N.									
3	<b>Limit Conditions</b>											
L1	<b>Pollution of Waters</b>											
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.			Noted								
L1.2	The licensee must take all practical measures to avoid or minimise oil and grease, TSS etc. contained in wet weather discharges.			Noted								
L2	<b>Concentration Limits</b>											



Condition No	EPL Condition	Verification	Comment	Compliance												
L2.1	For each monitoring/discharge point or utilisation area specified in the table\&s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.			Noted												
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.			Noted												
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\&s.			Noted												
L2.4	<p>Water and/or Land Concentration Limits</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>Oil and Grease</td> <td>Visible</td> <td>Nil Visible</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>6.5-8.5</td> </tr> <tr> <td>Total Suspended Solids</td> <td>milligrams per litre</td> <td>50</td> </tr> </tbody> </table>	Pollutant	Units of Measure	100 percentile concentration limit	Oil and Grease	Visible	Nil Visible	pH	pH	6.5-8.5	Total Suspended Solids	milligrams per litre	50		No discharge occurred between 9 May 2016 and 4 August 2017 EPA discharge point No 1	Not Triggered
Pollutant	Units of Measure	100 percentile concentration limit														
Oil and Grease	Visible	Nil Visible														
pH	pH	6.5-8.5														
Total Suspended Solids	milligrams per litre	50														
L2.5	The concentration limits in the above table do not apply to any discharge from the final sediment basin arising from rainfall exceeding 75mm in total falling over any consecutive five-day period			Noted												
L3	<b>Waste</b>															

Condition No	EPL Condition	Verification	Comment	Compliance
L3.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.		No waste generated outside the premises to be received at Sly's Quarry site for storage, treatment, processing, reprocessing or disposal between May 2016 and 4 August 2017.	Compliant
L4	<b>Noise Limits</b>			
L4.1	Noise from the premises must not exceed an LAeq (15 minute) noise emission criterion of 35 dB(A), except as expressly provided by this licence.		Attended noise monitoring conducted by GHD for Sly's Quarry has demonstrated that the operations and activities are compliant with the noise criteria in EPL 11649 condition L4.1.	Compliant
L4.2	For the purposes of compliance with the above condition: a) noise from the premises must be measured or computed from at 30 metres from residential Receiver 3 as identified in the Noise Impact Assessment (April 2015) for the proposal; b) noise from the premises must be measured over a period of 15 minutes using the "FAST" response on the sound level meter. c) A modifying factor correction must be applied for tonal, impulsive, or intermittent noise in accordance with the document NSW Industrial Noise Policy (NSW EPA, January 2000).		Noise monitoring was conducted in accordance with EPL condition L4.2 (a, b and c)	Compliant
L4.3	The noise limits set out in above apply under all meteorological conditions except for the following: a) Wind Speeds greater than 3 metres/second at 10 metres above ground level; or b) Temperature inversion conditions up to 30 C/100m and wind speeds greater than 2 metres/second at 10 metres above ground		Noise monitoring was conducted in consideration of metrological constraints identified in EPL condition	Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
	level; or c) Temperature inversion conditions greater than 3oC/100m.		L4.3 (a, b and c)	
L5	<b>Blasting</b>			
L5.1	Blasting operations at the premises may only take place between 09:00 and 15:00 Monday to Friday. (Where compelling safety reasons exist, the Authority may permit a blast to occur outside the abovementioned hours. Prior written (or facsimile) notification of any such blast must be made to the Authority).		Blasting at Sly's Quarry has only been carried out between 900 hours and 1500 hours Monday to Friday. No blasting has occurred on weekends or Public Holidays.	Compliant
L5.2	The time of blasting, the air-blast overpressure level from blasting operations and the ground vibration peak particle velocity from blasting operations must be measured from Receiver 3 for each blast.			Noted
L5.3	The airblast overpressure level from blasting operations in or on the premises must not exceed: a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and b) 120 dB (Lin Peak) at any time.		No blast monitoring between May 2016 and 4 August 2017 recorded overpressure results greater than the 120dBL criteria	Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
L5.4	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period; and b) 10 mm/s at any time.		No blast monitoring between May 2016 and 4 August 2017 recorded vibration results greater than the 5mm/s criteria.	Compliant
L5.5	All sensitive receivers are to be given at least 24 hours notice when blasting is to be undertaken.		Sensitive Receivers are contacted 24 hours at least 24 hours notice when blasting is to be undertaken.	Compliant
L6	<b>Hours of Operation</b>			
L6.1	L6.1 Noise generating activities at the premises must be conducted during the following hours: <ul style="list-style-type: none"> <li>• 7:00 am and 6:00 pm Monday to Friday;</li> <li>• 8:00 am and 1:00 pm Saturday;</li> <li>• at no time on Sundays and Public Holidays.</li> </ul> Note: Saturday working hours are extended to 7am to 4pm only for the purposes of fulfilling a contract for the supply of quarry products to the Pacific Highway upgrade project (SSD 4963).		Operations at Sly's Quarry have occurred within the hours of operation specified in EPL 11649 Condition L6.1, and Development Consent SSD 6624 Schedule 3 condition 1	Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
L6.2	This condition does not apply to the delivery of material outside the hours of operation permitted by condition L6.1, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible or within a reasonable period in the case of emergency.			Noted
4	<b>Operating Conditions</b>			
O1	<b>Activities must be carried out in a competent manner</b>			
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.		The processing, handling, movement and storage of materials and substances used to carry out Sly's Quarry activities are carried out in a competent manner.	Compliant
O2	<b>Maintenance of plant and equipment</b>			
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.		All equipment and vehicles operated at Sly's Quarry by Newmans Quarrying P/L are maintained in accordance with the manufacturer's	Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
			specifications at the on-site workshops.	
O3	<b>Dust</b>			
O3.1	Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	Air Quality Management Plan May 2016	Operations and activities at Sly's Quarry were observed to be managed to minimise the generation and emission of dust from the premises.	Compliant ongoing
O4	<b>Emergency Response</b>			
O4.1	Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. Details of the requirements can be found on the EPA website via the following link <a href="http://www.epa.nsw.gov.au/legislation/poefaqspirmps.htm">http://www.epa.nsw.gov.au/legislation/poefaqspirmps.htm</a>	Pollution Incident Response Management Plan (PIRMP) is located on <a href="http://www.newmansquarrying.com.au">www.newmansquarrying.com.au</a>	A current Pollution Incident Response Management Plan (PIRMP) for Sly's Quarry is located on the Newmans Quarrying Website	Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
O5	<b>Process and Management</b>			
O5.1	Soil and Water Management			
O5.2	The sites sediment basin/s must be maintained and operated to ensure that: a) All runoff from a 5 - day rainfall event up to 75 mm (the 90th percentile 5-day rain event) is captured. b) Any discharge from the sediment basin that occurs as a result of rainfall below the 5-day total of 75mm must meet the limit conditions specified in condition L2.4.	A Water Quality Monitoring Summary is provided on the quarry's website - <a href="http://newmanquarrying.com.au/files/">http://newmanquarrying.com.au/files/</a>  A copy of the summary is included in <b>Appendix E</b> .	The quarry complies with the EPL discharge limits.  The Water Quality Monitoring Summary covers the period from June 2016 to June 2017. The monitoring indicates the quarry complies with the EPL discharge limits.	Compliant
O5.3	Sediment basins must be treated, if required, to reduce the Total Suspended Solids level to the concentration limit of 50 mg/L provided by the EPA's recommended conditions of approval, or a licence under the Protection of the Environment Operations Act 1997, before being released to the environment.	Water Quality Monitoring Summary included in <b>Appendix E</b> .	No treatment has been required to date	Compliant
O5.4	The licensee must maximise the diversion of run-on waters from lands upslope and around the site whilst land disturbance activities are being undertaken.	Soil and Water Management Plan (GHD, 2017) and observations during site audit inspection on 4/08/2017		Compliant
O5.5	The licensee must maximise the diversion of stormwater runoff containing suspended solids to sediment basins installed on the premises.	Soil and Water Management Plan (GHD, 2017) and observations during site audit inspection on 4/08/2017		Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
O5.6	Where sediment basins are necessary, all sediment basins and associated drainage must be installed and commissioned prior to the commencement of any clearing or grubbing works within the catchment area of the sediment basin that may cause sediment to leave the site.	Soil and Water Management Plan (GHD, 2017)		Compliant
O5.7	The licensee must ensure the design storage capacity of the sediment basins installed on the premises is reinstated within 5 days of the cessation of a rainfall event that causes runoff to occur on or from the premises.	Soil and Water Management Plan (GHD, 2017) and observations during site audit inspection on 4/08/2017		Compliant
O5.8	The applicant must ensure that sampling point(s) for water discharged from the sediment basin(s) are provided and maintained in an appropriate condition to permit: a) the clear identification of each sediment basin and discharge point; b) the collection of representative samples of the water discharged from the sediment basin(s); and c) access to sampling point(s) at all times by an authorised officer of the EPA.	Soil and Water Management Plan (GHD, 2017) and observations during site audit inspection on 4/08/2017		Compliant
	<b>Fuel and Chemical Storage</b>			
O5.9	All chemicals, fuels and oils stored at the premises must be contained within appropriately designed bunded areas that meet the following requirements: a) comply with any relevant Australian Standards for the liquids being stored; and b) have impervious flooring and walls; and c) have a minimum capacity of 110% of the volume of the largest	Observations during site audit inspection on 4/08/2017	The storage of chemicals, fuels and oils is detailed further in this section. The storage of diesel fuels and chemicals on the site is considered adequate. The storage system for	Non-Compliance – Low Risk



Condition No	EPL Condition	Verification	Comment	Compliance
	<p>container stored within the bund.</p> <p>Note: Additional information on bunding design, construction and maintenance can be found in the EPA's Guide: "Storing and Handling Liquids: Environmental Protection, Participants Manual"</p>		<p>waste oil requires some modifications with a spill safe system to capture spillage and bollards to protect it from vehicle damage.</p> <p>Batteries need to be stored in an enclosed roofed area.</p>	
5	<b>Monitoring and Recording Conditions</b>			
M1	<b>Monitoring Records</b>			
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.		Monitoring required to be conducted by this licence are recorded and retained by Newman Quarrying in accordance with this condition.	Compliant ongoing
M1.2	All records required to be kept by this licence must be: <ul style="list-style-type: none"> <li>a) in a legible form, or in a form that can readily be reduced to a legible form;</li> <li>b) kept for at least 4 years after the monitoring or event to which they relate took place; and</li> <li>c) produced in a legible form to any authorised officer of the EPA who asks to see them.</li> </ul>		Records and documentation associated with the operation of Sly's Quarry is kept in a legible form and available on request from the Site Manager. Environmental monitoring results are available on the Newmans	Compliant ongoing

Condition No	EPL Condition	Verification	Comment	Compliance																
			Quarrying website.																	
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.		Monitoring records for samples collected from Sly's Quarry to satisfy the requirements of this EPL and include the date, time, monitoring point identification and name of the person who collected the sample.	Compliant ongoing																
M2	<b>Requirement to monitor concentration of pollutants discharged</b>																			
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:			Noted																
M2.2	Water and/ or Land Monitoring Requirements Point 1 <table border="1" data-bbox="427 1070 1160 1326"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Oil and Grease</td> <td>Visible</td> <td>Special Frequency 1</td> <td>Visual Inspection</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>Special Frequency 1</td> <td>Grab Sample</td> </tr> <tr> <td>Total Suspended Solids</td> <td>milligrams per litre</td> <td>Special Frequency 1</td> <td>Grab Sample</td> </tr> </tbody> </table>	Pollutant	Units of Measure	Frequency	Sampling Method	Oil and Grease	Visible	Special Frequency 1	Visual Inspection	pH	pH	Special Frequency 1	Grab Sample	Total Suspended Solids	milligrams per litre	Special Frequency 1	Grab Sample	Soil and Water Management Plan	Water monitoring conducted for Sly's Quarry site currently includes: EPA Identification No. 1 overflow form sediment basin in accordance with EPL condition M2.2.	
Pollutant	Units of Measure	Frequency	Sampling Method																	
Oil and Grease	Visible	Special Frequency 1	Visual Inspection																	
pH	pH	Special Frequency 1	Grab Sample																	
Total Suspended Solids	milligrams per litre	Special Frequency 1	Grab Sample																	

Condition No	EPL Condition	Verification	Comment	Compliance
M2.3	Special Frequency 1 means sampling once <24 hours prior to actively emptying the ponds and during each discharge event arising from rainfall less than 75mm falling in total over a period of up to five days duration.			Noted
M3	<b>Testing methods - concentration limits</b>			
M3.1	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.			Noted
M4	<b>Environmental monitoring</b>			
M4.1	The licensee is required to install and maintain a rainfall depth measuring device.		Yet to be installed	Non-Compliant Low Risk
M4.2	Rainfall at the premises must be measured and recorded in millimetres per 24-hour period, at the same time each day. Note: The rainfall monitoring data collected in compliance with Condition M4.2 can be used to determine compliance with L2.5.		Newman Quarrying have installed a weather station. Rainfall events are recorded automatically and fed into the Newman Quarrying computer for	Compliant ongoing

Condition No	EPL Condition	Verification	Comment	Compliance
			upload to website.	
M5	<b>Recording of pollution complaints</b>			
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.		All complaints received by Newman Quarrying in relation to the operation and activities of Sly's Quarry are recorded on the Complaints Register and are available on the company website.	Compliant ongoing
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Complaints Register on Newman Quarrying website	The Community Complaints Register records: date of the complaint; method by which the complaint was made; <ul style="list-style-type: none"> <li>• any personal details of the complainant where provided;</li> </ul> nature of the complaint; action taken and any follow-up contact with the complainant.	

Condition No	EPL Condition	Verification	Comment	Compliance
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.		A summary of all complaints is posted on the Newman Quarrying website.	Compliant
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.			Noted
M6	<b>Telephone complaints line</b>			
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.		Contact telephone numbers for Newman Quarrying is on the signage at the entrance to Sly's Quarry site are listed on the Newman Quarrying website – Contact Us.	Compliant
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.		The contact telephone number for Sly's Quarry is notified on the Entrance to the quarry and on the Newman Quarrying website – Contact Us.	Compliant
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.			Noted

Condition No	EPL Condition	Verification	Comment	Compliance
6	<b>Reporting Conditions</b>			
R1	<b>Annual return documents</b>			
R1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> <li>1. a Statement of Compliance,</li> <li>2. a Monitoring and Complaints Summary,</li> <li>3. a Statement of Compliance - Licence Conditions,</li> <li>4. a Statement of Compliance - Load based Fee,</li> <li>5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,</li> <li>6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data,</li> <li>7. a Statement of Compliance - Environmental Management Systems and Practices; and</li> <li>8. a Statement of Compliance - Environmental Improvement Works.</li> </ol> <p>At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</p>	Environment Protection Licence 11649	The Annual Returns for EPL 11649 have been submitted to the EPA on the approved forms including a signed Statement of Compliance; and a Monitoring and Complaints Summary.	Compliant
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.			Noted
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to			Not

Condition No	EPL Condition	Verification	Comment	Compliance
	the new licensee is granted; and			Applicable
	b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.			
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.			Not Applicable
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Annual Return 11 June 2017 to 3 August 2017 Annual Return 11 Jun 2016 to 15 August 2016	The Annual Returns for EPL 11649 have been submitted to the EPA on the approved forms within 60 days of the end of each reporting period.	Compliant
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Annual Return 11 June 2017 to 3 August 2017 Annual Return 11 Jun 2016 to 15 August 2016	A copy of each Annual Return supplied to the EPA is retained by Newman Quarrying	Compliant
R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Annual Return 11 June 2017 to 3 August 2017 Annual Return 11 Jun 2016 to 15 August 2016	The Annual Returns for EPL 11649 have been submitted to the EPA on the approved forms signed/certified by	

Condition No	EPL Condition	Verification	Comment	Compliance
		August 2016	Company Directors.	
R1.8	<p>The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.</p> <p>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</p> <p>Note: An application to transfer a licence must be made in the approved form for this purpose</p>		No blast limit exceedance occurred between May 2016 and 4 August 2017.	Not Triggered
R2	<b>Notification of environmental harm</b>			
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.			Noted
R2.2	<p>The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.</p> <p>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</p>			Noted
R3	<b>Written report</b>			



Condition No	EPL Condition	Verification	Comment	Compliance
R3.1	<p>Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <p>a) where this licence applies to premises, an event has occurred at the premises; or</p> <p>b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.</p>			Noted
R3.2	<p>The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.</p>			Noted
R3.3	<p>The request may require a report which includes any or all of the following information:</p> <p>a) the cause, time and duration of the event;</p> <p>b) the type, volume and concentration of every pollutant discharged as a result of the event;</p> <p>c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;</p> <p>d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;</p> <p>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</p> <p>f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</p> <p>g) any other relevant matters.</p>			Noted

Condition No	EPL Condition	Verification	Comment	Compliance
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.			
<b>7</b>	<b>General Conditions</b>			
G1	<b>Copy of licence kept at the premises or plant</b>			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.			Compliant
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.			Noted
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.			Noted
<b>8</b>	<b>Special Conditions</b>			
E1	<b>Soil and Water Management</b>			

Condition No	EPL Condition	Verification	Comment	Compliance
E1.1	<p>A <i>Soil and Water Management Plan</i> (SWMP) must be developed which outlines all management and mitigation measures relating to stormwater management, erosion and sediment control. This must be prepared in accordance with <i>Managing Urban Stormwater Soils and Construction Volume 1 and Volume 2 E. Mines and quarries</i>. The Soil and Water Management Plan must</p> <ul style="list-style-type: none"> <li>• outline of stormwater management measures to control pollutants at the source and contain them within the site.</li> <li>• outline of erosion and sediment control measures to minimise disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment.</li> <li>• describe measures for maintaining and monitoring any stormwater controls.</li> <li>• provide details of method of storage of topsoil and associated erosion and sediment control</li> <li>• describe waste water treatment measures; systems for reusing/recycling waste water; and methods of treating any unavoidable discharge from the site to meet specified water quality requirements.</li> <li>• describe the size and location of the sediment basins for each stage of the development of the quarry.</li> </ul> <p>The sediment basins must meet the design and operational standards of <i>Managing Urban Stormwater Soils and Construction: Volume 1 and Volume 2 E. Mines and quarries</i>. This document requires a minimum standard of 90 percentile five-day rainfall event (75mm) to be used to determine basin sizing for quarries.</p> <ul style="list-style-type: none"> <li>• If sediment basins are proposed to be used as water storage for re-use purposes on site (eg for dust suppression, process water, etc) a water balance must be conducted to ensure that the design volume of the basin required for stormwater capture and treatment is not compromised by water storage required for re-use purposes. Such dual-purpose basins need to be accurately designed and managed to accommodate both stormwater management and water re-use objectives.</li> </ul>	Soil and Water Management Plan 9 May 2017 submitted to the EPA prior to 31 August 2016	Detailed in Section 4 and 5 of the SWMP	Compliant

Condition No	EPL Condition	Verification	Comment	Compliance
	<ul style="list-style-type: none"> <li>Detail a progressive rehabilitation plan for the quarry, including the exhausted quarry areas "B" and "C".</li> </ul> <p>The SWMP is to be submitted to the EPA by 31 August 2016.</p>			
E2	<b>Noise Compliance Assessment</b>		Detailed in Section 4 of the SWMP	
E2.1	A noise compliance assessment must be undertaken within two months of commencement of the proposed increased extraction rate. The assessment must be conducted by a suitably qualified and experienced acoustical practitioner and shall assess compliance with noise criteria presented above. A report must be provided to the EPA within 1 month of the assessment.	Noise Management Plan May 2016	A Noise Compliance Assessment was conducted by GHD in October 2016 which was within 2 months after increased extraction	Compliant

## C Site Photos

# Sly's Quarry Expansion

41/2017

Friday, 4 August 2017

Prepared for Newmans Quarry Environmental Audit

**Identified 25 Issues**

Tim Fitzroy

Tim Fitzroy & Associates

## Truck wash



Unroofed Vehicle wash area draining to 4 sediment basins. Use of degreasers.

## Truck wash degreaser



Use of degreasers and truck wash discharging to sediment basins

## Quarry



Quarry looking north

## Road intersection



Looking west

Batter to be completed and signs to be installed

## Residence R3



Old sawmill site currently vacant," nearest affected residence"

## Groundwater bore no 3



Standing water level 1.0m bgl, groundwater Depth 6m

## Road intersection looking east



## Waste oil storage



Waste oil storage,  
bund and roofed

## Waste oil storage internal



## Crusher and screen



## Quarry operation



Pulveriser, loader,  
excavator, screen  
crusher in operation.

Dry conditions, minimal  
dust

## Groundwater bore no 1



Located upstream of  
quarry, adjacent to  
rehabilitation area



## Final sediment basin



## Sediment basin overflow



## Groundwater bore no 2



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## Diesel storage



Above diesel storage tank no longer in use. Recommend remove from site.

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## General waste & cardboard



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## Waste oil tank



5,000 litre waste oil tank underground, Serviced once a year. Recommend bollard around fill point, spill containment and leak detection management

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## Battery storage



Used batteries to be relocated inside workshop or roofed, banded area

## Aluminium can



Aluminium cans collected for recycling

## Shipping container



Sump oil and used batteries should be stored separately

## Metal Shed/workshop



## Old tank empty near shed

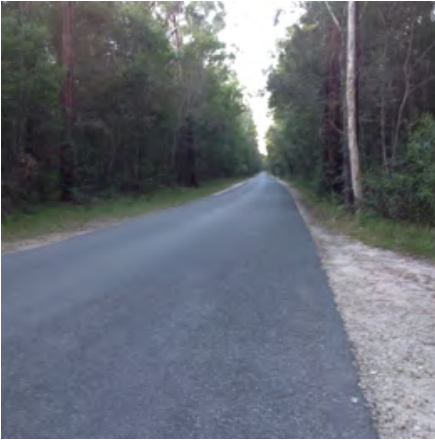


## On site wastewater system



Septic tank and trench on site wastewater management system

## Roadway looking east



Road in good condition recently upgraded to allow 57 tonne payload as part of National Heavy vehicle register

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## D Correspondence from Agencies

**Subject:** Fwd: Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Tullymorgan-Jackybulbin Road Mororo, NSW  
**From:** Jonathan Yantsch <jonathan.yantsch@dpi.nsw.gov.au>  
**Date:** 8/08/2017 11:35 AM  
**To:** tim@timfitzroy.com.au  
**CC:** James Sakker <james.sakker@dpi.nsw.gov.au>

Hi Tim

Thank you for email requesting that DPI Fisheries provide comment on the operation and governance of the Sly's Quarry Expansion, Lot 2 DP 1055044 Tullymorgan-Jackybulbin Road, Mororo, NSW.

The existing quarry footprint does not contain Key Fish Habitat (KFH). KFH is defined within the DPI Fisheries [Policy and guidelines for fish habitat conservation and management \(Update 2013\)](#). For this general location, among other features, KFH would generally consist of 3rd order or greater waterways defined by the Strahler method and using a 1:25,000 topographical map. Any plan for the quarry's expansion should consider whether the new footprint would contain KFH or whether access requirements would necessitate impacts to KFH, for example, road waterway crossings. If so, such interactions should be considered with regard to the aforementioned policy and guidelines.

It is noted that the existing quarry is located within close proximity to known and expected habitat of the threatened fish species Purple Spotted Gudgeon (PSG) and Oxleyan Pygmy Perch (OPP). The DPI Fisheries threatened species indicative distribution data can be viewed [here](#). Given the proximity of PSG and OPP to the existing quarry site, it is recommended that the environmental audit to be undertaken for the proposed quarry expansion includes an assessment of the potential impacts (i.e. a Species Impact Statement or Test of Significance) to these threatened species. Potential impacts to these species associated with an expansion of the quarry may include, but not be limited to, downstream water quality impacts associated with sediment inputs, and downstream water temperature, pH and flow characteristic changes associated with water pump-out activities.

[Assessment of Significance Guidelines](#) have been prepared to help applicants and/or proponents of a development or activity to interpret and apply the factors of assessment. These are the factors that need to be considered when assessing whether an action, development or activity is likely to significantly affect threatened species, populations or ecological communities, or their habitats. The guidelines clarify the specific terminology of the relevant legislation and provide clear interpretations of the factors of assessment.

Please contact me on the details below if you have any questions.

Regards

Jonathan

**Jonathan Yantsch** | Fisheries Manager, Aquatic Ecosystems (North Coast)

## **INDEPENDENT ENVIRONMENTAL AUDIT**

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

*(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;*

*(b) include consultation with the relevant agencies;*

*(c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);*

*(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and*

*(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy, plan or program required under the abovementioned approvals.*

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

11. *Within 6 weeks of completion of this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.*

As part of our pre audit activities we are seeking feedback from your agencies of any matters of concerns or comments you may wish to raise with respect to the operation and governance of the Sly's Quarry Expansion Lot 2 DP 1055044 Tullymorgan-Jackybulbin Road Mororo, NSW.

If you could please provide any comments or concerns by return email by 31 August 2017 that would be greatly appreciated.

Regards

Tim Fitzroy  
31 July 2017

--

Tim Fitzroy Tim Fitzroy & Associates m 0448 483837 p 02 66283837 f 02 66281349 e  
[tim@timfitzroy.com.au](mailto:tim@timfitzroy.com.au) [www.timfitzroy.com.au](http://www.timfitzroy.com.au) 52 Alston Avenue Alstonville NSW 2477

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Our Ref: DOC17/400170  
Your Ref: email dated 31/07/2017

Mr Tim Fitzroy  
Tim Fitzroy and Associates  
52 Alston Avenue  
Alstonville NSW 2477

Dear Mr Fitzroy

**Re: Environmental audit requirements for Sly's Quarry Expansion.**

Thank you for your email dated 31 July 2017 about the environmental audit proposed for Sly's Quarry Expansion project seeking comments from the Office of Environment and Heritage (OEH). I appreciate the opportunity to provide input.

In terms of appropriate content for environmental auditing of the Sly's Quarry expansion, the OEH is focused primarily on measures proposed to avoid and mitigate potential biodiversity impacts. Most of the management and mitigation measures relevant to biodiversity protection and management are contained within the Biodiversity and Rehabilitation Management Plan (BRMP). However, other measures relevant to the protection and management of biodiversity are also provided in the:

- a) Environmental Impact Statement (EIS);
- b) Soil and Water Management Plan (SWMP);
- c) Air Quality Management Plan (AQMP);
- d) Water Quality Management Plan (WQMP); and
- e) Environmental Management Strategy (EMS)

The OEH recommends that the following management and mitigation measures contained in the above-mentioned documents, plans and strategies are considered in the Environmental Auditing process:

1. Implementation of sediment and erosion controls specified in the SWMP;
2. Effective implementation of the proposed dust suppression measures detailed in the AQMP
3. Use of interim stabilisation measures used to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation;



4. Stockpiling of removed soil for rehabilitation works;
5. Bunding of mulch stockpiles;
6. Completion of baseline monitoring of surface and ground water resources;
7. Weekly completion of the Environmental Inspection Checklist;
8. Preparation of the post-clearing report by the project ecologist;
9. Ongoing evaluation of the environmental management performance;
10. Adequacy of the proposed site induction, toolbox talks and targeted environmental training in conveying information required for protecting and managing biodiversity and environmentally sensitive areas;
11. Compliance with the approved extent of vegetation clearing in accordance with detailed design and staging process;
12. Avoidance of areas of high ecological constraint (e.g. areas containing *Hibbertia marginata* and threatened ecological communities);
13. Location of compounds, site facilities, stockpiles and machinery in existing cleared areas;
14. Evidence of BRMP review and updating in response to the results of pre-clearing surveys;
15. Weed control undertaken in accordance with the BRMP;
16. Effective implementation of the plant and frog pathogen hygiene protocols;
17. Collection of seed prior to clearing works for use in rehabilitation works, particularly seed for *Hibbertia marginata*;
18. Preparation of a nest box management plan in consultation with the OEH;
19. Preparation and implementation of a Rehabilitation Plan for the former sand quarry area known as "Area C";
20. Undertaking of progressive rehabilitation in accordance with the BRMP; and
21. Completion of all monitoring commitments in accordance with the monitoring schedule provided in the EMS.

If you have any questions about our recommended components for the Environmental Audit, Mr Don Owner, Regional Operations Officer, Regional Operations, OEH, can be contacted on 66598233 or at don.owner@environment.nsw.gov.au.

Yours sincerely



1-9-17

**KRISTER WAERN**  
**A/Senior Team Leader Planning, North East**  
**Regional Operations**



Mr Tim Fitzroy  
Tim Fitzroy & Associates  
52 Alston Avenue  
ALSTONVILLE NSW 2477  
By email: [tim@timfitzroy.com.au](mailto:tim@timfitzroy.com.au)

Contact Tim Baker  
Phone (02) 6841 7403  
Email [Tim.Baker@dpi.nsw.gov.au](mailto:Tim.Baker@dpi.nsw.gov.au)  
Our ref OUT17/36388  
Your ref

Dear Tim

### Sly's Quarry Expansion Project – Independent Environmental Audit

I refer to your email dated 31 July 2017 requesting comments or concerns for consideration in a planned independent environmental audit of the Sly's Quarry. DPI Water's general comments are as follows:

DPI Water understands that the scope of the assessment as outlined under the development consent extends at least to compliance with:

- the conditions of consent;
- the statements of commitments as appended to the consent;
- any reporting or requirements within any relevant management plans prepared under the consent.
- all trigger action response plans for surface and groundwater impacts.

DPI Water requests that the audit considers compliance with the relevant water licensing and management requirements for the operation, specifically:

- Assessment as to whether the project holds the required water entitlements and licences under the *Water Management Act 2000* or *Water Act 1912* (as applicable);
- Compliance with the conditions of any water licences/approvals held.
- Quantification of both active and passive take by the project from each relevant water source and a comparison against previous predictions.
- Compliance with the management and monitoring requirements in the Water Management Plan and Water Monitoring Program for the site.

For further discussion please contact Tim Baker, Senior Water Regulation Officer (Dubbo) on (02) 6841 7403 or [Tim.Baker@dpi.nsw.gov.au](mailto:Tim.Baker@dpi.nsw.gov.au).

Yours sincerely

  
**Vickie Chatfield**  
Regional Manager, Water Regulatory Operations

## Roads and Maritime Services

Hi Tim,

Further to our telephone conversation on Friday 4 August 2017 regarding the Environmental Audit of Sly's Quarry, Mororo.

It is understood that an Environmental Audit of quarry operations under SSD\_6624 is being undertaken in accordance with Condition 10 of Schedule 5 of the development consent.

The key interests for Roads and Maritime are the safety and efficiency of the road network, traffic management, the integrity of infrastructure and the integration of land use and transport.

It is requested the audit consider the following;

- Verify records of laden truck movements and the publication of such records in accordance with Condition 22.
- Review procedures relating to the management of vehicles under Condition 23 to confirm appropriate measures are in place to ensure vehicles comply with requirements.
- Review the Traffic Management Plan (TMP) required under Condition 24 of the consent to confirm that all required actions have been completed, in particular the upgrade of the site access to Tullymorgan-Jackybulbin Road and the adoption of a Drivers Code of Conduct.
- Review operating procedures to ensure that measures identified under TMP are being implemented as required under Condition 25.

Should you have any further questions then please contact our office for further comment.

Regards

*Matt Adams*

A / Manager Land Use Assessment | Network & Safety Management  
Northern Region | Regional & Freight  
**Roads and Maritime Services**

## Department of Planning & Environment

Hi Tim,

Thankyou for consulting with the Department for the upcoming IEA of Sly's Quarry.

We have received a number of complaints in relation to traffic and road conditions for this operation. Can you please focus on conditions in relation to transport/traffic/roads, and consider specifically the following:

- Did Newman's get the quarry entry upgrade completed before 31 July 2017?
- Are the truck drivers operating in a safe and courteous way to other road users? and
- What is the condition of Tullymorgan-Jackybulbin Road? Are the trucks damaging the road? Are further works/controls required to ensure road safety?

In Table 4-1 of Appendix J (the Traffic Management Plan) of the EMS, Ref T04 states: Upgrade the access and Tullymorgan-Jackybulbin Road intersection in accordance with the design in Appendix B by 31 July 2017.

Please note that the Sly's quarry is required to submit the audit report and their response to the auditor recommendations ( i.e. an action plan with proposed actions and timing for completion) to the Department by the 29 September 2017.

If you have any further concerns in relation to the audit please don't hesitate to contact the Department.

regards,

**Leah Cook**

Team Leader - Compliance

Department of Planning & Environment

**Clarence Valley Council**

No response relating to transport was received from Council.

# E Water Quality Monitoring Summary

**WATER QUALITY MONITORING RESULTS JUNE 2016 - JUNE 2017**  
**SLY'S QUARRY**  
**JACKYBULBIN RD , MORORO**

DATE	WHO	WEATHER	RAIN PAST 24 HRS	RAIN PAST 5 DAYS	POINT	DISCHARGING?	TSS/TURB	PH	OIL	TREATED?	DISCHARGED?
6.6.16	mark n	cloudy	216	218	pond e	yes	18	6.5	no	no	yes
22.6.16	mark n	cloudy	0	52	pond e	no	26	7.4	no	no	yes
14.11.16	markn	cloudy	8	41	pond e	no	21	7.8	no	no	yes
29.11.16	mark n	rainy	2	43	pond e	no	28	7.6	no	no	yes
28.1.17	mark n	rainy	6	64	pond e	no	34	7.2	no	no	yes
3.3.17	mark n	cloudy	7	67	pond e	no	16	8.1	no	no	yes
23.5.17	mark n	fine	0	0	pond e	no	14	7.8	no	no	yes
21.6.17	mark n	cloudy	7	27	pond e	no	13	8	no	no	yes

# F Monitoring, Incidents and Complaints Register



<b>Complaints / Incident Register for Sly's Quarry</b>				
<b>Date</b>	<b>who complained</b>	<b>nature of complaint</b>	<b>response</b>	<b>sign off</b>
26.5.16	public / truck operator	tailgate popped on truck spilling rocks on to road when the truck hit a large pothole.	cleaned up by quarry staff ASAP notified state planning of incident notified cvc of holes but no action yet.	mark n
19.10.16	state planning passing on mr h	a local not being notified of blasts	our blast management plan has not been approved by state planning yet. Neighbour is being notified 1 week prior to blasts by text msg. mr h is not a resident just owns a block 2.5km west.	mark n
19.10.16	state planning passing on mr h	vehicles driving at high speed	traffic management plan not approved by state planning yet. All drivers have signed our code of conduct. Not all trucks work for me new speed signs installed. Drivers toolboxed. no rego given so cant take up personally.	mark n
22.6.17	Clarence Valley Council phone	Mud on road	immediate investigation no mud on road. Road had wet tyre marks coming out of gate due to street sweeper washing gateway. Mud is east of quarry gate from potholes on council road verge that have not been repaired for over 1 year.	mark n
30.6.17	Contractor informed quarry	incident on road reserve 100m west of gate	Regulator, mines department and workcover informed of contractor incident on council road reserve 100m west of quarry gate	mark n
20.7.17	dept of planning inspectors	annon. Complaints about contractors doing road works on councilroad reserve at front of quarry not having silt fence installed	Gave all contact details of contractor and council inspector overseeing works to planning inspector. Contractor installed sediment fence as requested photo's taken	mark n

## G Truck Movement Summary

**NEWMAN QUARRYING PTY LTD - SLYS QUARRY  
 LOADED TRUCK MOVEMENT SUMMARY  
 MAY 2016 - MAY 2017 DA APPROVED DATES**

	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
1ST	0	53	22	124	108	0	125	24	0	21	8	0	114
2ND	3	38	3	124	104	0	75	11	0	80	12	0	113
3RD	105	39	0	16	63	0	32	34	0	5	68	97	94
4TH	24	0	12	0	0	49	97	0	114	44	38	106	93
5TH	47	0	5	10	106	82	11	22	116	0	0	61	
6TH	61	31	45	3	111	124	0	35	101	84	103	35	
7TH	0	28	25	0	116	58	106	62	0	79	117	112	
8TH	0	39	25	68	50	38	125	107	0	9	107	39	
9TH	23	29	0	59	17	0	68	14	123	74	123	0	
10TH	54	12	0	14	54	101	61	8	115	110	124	73	
11TH	67	0	12	113	0	79	109	0	51	53	113	111	
12TH	40	0	29	100	17	92	41	88	12	0	0	98	
13TH	31	0	23	68	61	93	0	104	108	37	40	50	
14TH	9	6	124	0	67	108	125	111	72	58	4	0	
15TH	0	23	21	93	17	52	122	109	0	33	3	0	
16TH	45	30	2	112	11	0	71	71	105	28	8	0	
17TH	35	27	0	110	34	99	103	0	87	24	15	0	
18TH	47	2	20	125	0	115	83	0	124	3	0	87	
19TH	100	0	13	107	6	125	11	0	121	0	0	83	
20TH	100	17	119	36	70	32	0	0	106	8	3	118	
21ST	28	10	14	0	28	124	4	0	12	21	7	94	
22ND	0	5	101	76	53	78	12	0	0	17	92	77	
23RD	53	20	96	86	49	0	25	0	89	74	112	0	
24TH	72	33	0	9	0	125	40	0	73	53	113	99	
25TH	79	17	122	88	0	111	48	0	104	70	88	0	
26TH	89	0	116	85	84	118	0	0	0	0	0	26	
27TH	40	32	115	47	121	87	0	0	44	10	110	111	
28TH	20	57	106	0	110	106	14	0	0	0	119	95	
29TH	0	24	124	82	68	3	44	0	0	0	120	65	
30TH	53	17	111	97	12	0	20	0	33	0	0	0	
31ST	33		0	107		84		0	20				