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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Prepared for: Newman Quarrying Pty Ltd Job No: 14/2021 Version: FINAL Date: 23 June 2021 Tim Fitzroy & Associates ABN: 94120188829 ACN: 120188829 environmental

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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
Independent Audit	
Title of Audit	Sly's Quarry Expansion– Independent Environmental Audit 2021
I certify that I have undertaken the independent audit report and to the The audit has been undertaken in accordance with the auditing standard AS/NZS ISC The findings of the audit are report I have exercised due diligence at I have exercised due diligence at I have acted professionally, in an over-ride objectivity in conducting I am not related to any owner or employee, sharing a common employer, have sibling, parent, or child; I do not have any pecuniary intel reasonable likelihood or expectation of finance related (i.e. immediate family); Neither I nor my employer have were subject to this audit except as othe I have not accepted, nor intend t (apart from fair payment) from any interested party. I have not knowin The Independent Audit is an 'envi Environmental Planning and Asse include false or misleading informat produced to the Minister in connec- information is false or misleading is corporation, \$1 million and for an offences relating to false and misle misleading statement—maximum (False or misleading applications/ \$22,000, or both).	e independent audit and prepared the contents of the attached e best of my knowledge: in accordance with relevant approval condition(s) and in 0 19011:2014 and Post Approval Guidelines – Independent Audits prted truthfully, accurately and completely; nd professional judgement in conducting the audit; n unbiased manner and did not allow undue influence to limit or
Signature	
	/1- Ktyron
Name of Lead/Principal Auditor	Tim Fitzroy
Address	61 Pine Ave East Ballina
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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:	June 2021
240.	



Executive Summary

An independent environmental audit of the Sly's Quarry Expansion was conducted in April 2021 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 April 2021 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

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

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

The Noise Management Plan prepared to satisfy Development Consent Schedule 3 condition 5 was approved by DPE on 9 May 2016. Quarterly attended noise monitoring surveys were carried out by GHD in August 2017, November 2017, February 2018 and May 2018 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.

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Status: Compliant

Status: Compliant

Status: Compliant Ongoing

As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.

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 and April 2021 indicated no exceedance of the blast overpressure or ground vibration criteria had occurred because of blasting at Sly's Quarry.

Air Quality

Status: Compliant Ongoing

Dust monitoring was undertaken from August 2017 for PM10, TSP and deposited dust. A Dust Impact Assessment (GHD 2018) report was prepared summarising the results of the monitoring, with the conclusion: The results indicate that the concentration levels of PM10, TSP and deposited dust were below the air quality criteria specified in the Development Consent for the Sly's Quarry Expansion Project.

Based on this conclusion it was requested the dust monitoring cease, unless there is a justifiable dust complaint or a change in operating conditions that are likely to increase dust emissions from the site, in which case air quality monitoring will recommence, as described in Section 5.2. This request was approved by DPE (now DPIE) on 10 October 2018.

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 August 2017 and April 2021 related to dust / air quality.

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.

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.

Following a review of monitoring results for baseline surface water quality and groundwater bore monitoring, DPIE have agreed to a reduced frequency of monitoring (letter from DPIE dated 04/02/2021) as follows:

- baseline surface water monitoring frequency can be reduced sampling after 10mm of rain at least once every quarter (as opposed to after every >10mm event); and
- groundwater monitoring frequency can be reduced from quarterly to annually, where adequate water is available for sampling. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be undertaken via dipping rather than loggers (email B. Luffman, GHD 21/04/21).

Non-compliance was only found in relation to the need to remove the build-up of sand/sediment in the small basin associated with the vehicle washdown area. A regular program for removal of built-up sand/sediment in this basin should also be implemented. This non-compliance is considered Low Risk.



The following measures, whilst not 'non-compliances', are also required to be implemented to provide a robust environmental management system and ensure environmental performance:

- Update the Soil and Water Management Plan (SWMP) prepared by GHD (2020) to include:
 - the new storage / sediment basin that has been constructed since 2017 and any other modifications to drainage lines or sediment and erosion control measures;
 - revised frequency of monitoring of baseline water quality of drainage lines at locations WQ1 and WQ2. Noted that the frequency of this monitoring was reduced to "at least once every quarter" as per letter from DPIE dated 04/02/2021;
 - revised frequency of monitoring of groundwater monitoring bores (GW1, GW2 and GW3). The frequency of this monitoring was reduced from quarterly to "annually, where adequate water is available for sampling" as per letter from DPIE dated 04/02/2021. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be reduced to annually and via dipping, rather than loggers. (email B. Luffman, 21/04/21).
- Install a new weather station as proposed to address past issues of battery failure or memory failure.
- Implement a regular program for removal of built-up sand/sediment in the small basin associated with the vehicle washdown area.
- In regard to the underground 5,000 litre waste oil storage tank: install some form of protection such as bollards or some robust form of fencing to prevent vehicles/machinery inadvertently damaging the pipe used for pouring waste oil into the tank.
- Ensure bunding is installed for the new above-ground 1,200 litre fuel tank to be commissioned near the white generator.

Traffic and Transport

Status: Non-Compliant Low Risk

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.

The only non-compliance for the TMP measures is in relation to T01 requirement for the maintenance of the site access road. The access road requires repair works to address potholing / cracked bitumen seal and slightly rutted underlying pavement at the entrance off Tullymorgan-Jackybulbin Road. The affected area extends from the turnoff into the access road to about the entrance gate – the damage is likely due to stress on pavement associated with turning motion of trucks entering and exiting the site. The remainder of the access road and Tullymorgan-Jackybulbin Road is generally in good condition.

The above non-compliances are rated Low Risk.

It is recommended the non-compliances regarding the repair works to the access road are addressed as soon as possible.

Waste Management

Status: Non-Compliant-Low Risk

Waste management on Sly's Quarry site generally 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.

On 23 February 2017 Newman's Quarry received an Approval to Operate the Onsite Sewage Management System (OSMS) 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 however the Land Application Area (LAA) was overgrown and therefore difficult to inspect. It is recommended that the LAA be mown and kept in a well maintained manner to allow future assessment.

Heritage Management

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 5 August 2017 and 24 April 2021.

Biodiversity, and Rehabilitation

Status: Compliant or Not Triggered

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 (December 2019). In general, the implementation of this plan does 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. The exception is the Nest Box Management Plan. This component of the BRMP was triggered due to clearing in Stage 1. The components of that Management Plan were implemented for the clearing undertaken.

The BOS was finalised in 2019 and implementation of this Strategy has commenced. While environmental conditions (drought and bushfire) has resulted in some variation in activities, these have been accepted by BCT and management activities are ongoing.

Bushfire Management

Status: Compliant

A Bushfire Management Plan was approved by DPE. There is 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.

Status: Compliant

TABLE OF CONTENTS

Section

Page

1.	. INTRODUCTION	1
1.1 1.2 1.3 1.4 1.5	 Scope of Work	1 2 2
2.	. SLY'S QUARRY EXPANSION	4
2.1 2.2 2.3 2.4 2.5	 2 Topography 3 Surrounding Land Use 4 Sly's Quarry Resource 	5 5 5
3.	. APPROVAL AND LICENCES	11
3.1 3.2		
4.	. AGENCY CONSULTATION	14
4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	 2 Environment Protection Authority	
5.	. REVIEW OF ENVIRONMENTAL MANAGEMEN	NT 21
5.1 5.2	5.1.1Environmental Management Strategy5.1.2Conclusion	21 22
J.Z	5.2.1 Environmental Management Plans	
	5.2.2 Management Plan Development5.2.3 Conclusion	
5.3		
	5.3.1 Environmental Assessment5.3.2 Noise Management – Control Measures	24
		2 0

5.	3.3	Noise Criteria	. 28
5.	3.4	Noise Monitoring Program	. 29
5.	3.5	Noise Monitoring Results	. 29
5.	3.6	Conclusions	. 29
5.4	Blasti	ng	. 30
5.4	4.1	Environmental Assessment	. 30
5.4	4.2	Blasting Management Plan	. 30
5.4	4.3	Blast Criteria and Monitoring Program	. 31
5.4	4.4	Blast Monitoring Results	. 31
5.	4.5	Conclusions	. 32
5.	4.6	Recommendations	. 32
5.5	Air qu	ality Management	
5.	5.1	Environmental Assessment	. 32
5.	5.2	Predicted Air Quality and Criteria	. 33
5.	5.3	Air Quality Management Plan	. 35
5.	5.4	Meteorological Measurements	
5.	5.5	Air Quality Criteria	
5.	5.6	Air Quality Monitoring Results	. 37
5.	5.7	Conclusions	. 37
5.6	Soil a	nd Water Management	. 38
5.7	Traffic	c Management	. 51
5.8	Bushf	ïre	. 58
5.9	Waste	e Management	. 59
5.10	Dar	ngerous Goods	. 60
5.11	Visu	ual	. 60
5.12		itage Management	
5.13		diversity and Rehabilitation	
5.14	Cor	nmunity Complaints	. 67
•	~~`		~~

Illustrations

Illustration 2.1 – Quarry Development Area	7
Illustration 2.2 – Outline of Quarry Expansion Area	8
Illustration 2.3 – Quarry Extraction Stages	9
Illustration 2.4 - Quarry Rehabilitation Plan	10

Tables

Table 5.1Environmental Management Strategy vs AS/NZS ISO14001Elements21

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

Table 5.3 Predicted PM10 24-hour average ground level concentration33(µg/m3)33Table 5.4 Predicted TSP annual average concentrations at peak productionrate34Table 5.5Predicted dust deposition rates at peak production rate34

Appendices

А	Development Approval
	Environment Protection Licence 11649
С	Site Photos
	Correspondence from Agencies
	Monitoring and Incidents/Complaints Register
F	Water Quality Monitoring Summary
	Truck Movement Summary

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 Lead Auditor and the aforementioned as Assistant Auditors by the Secretary of Department of Planning and Environment (DPE) on 23 February 2021 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 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
Section 1	Introduction
Section 2	Sly's Quarry Expansion - description of the development
Section 3	Approvals and Licences
Section 4	Agency Consultation
Section 5	Review of Environmental Management
Section 6	Conclusions and Recommendations
Appendix A	Development Consent Conditions
Appendix B	Environment Protection Licence Conditions
Appendix C	Site Photos
Appendix D	Correspondence from Agencies
Appendix E	Monitoring and Incidents/Complaints Register
Appendix F	Water Quality Monitoring Summary

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.	

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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 triggeredA regulatory approval requirement / condition has an activation or timing that has been triggered at the date of the audit, therefore a determination of compliance 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 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 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 (April 2021).

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):

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

(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 (Australian Height Datum) 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 2021

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;
- 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.

BUNDJALUNG StateConservationArea MICHICOMOSAGEM S BALLINA ASINO BUNDJALUNG NationalPark CORACI WARDELL DBURN EVANS HEAD 567 m ite location Coral Sea YANBA ANGOURE BROOMSHEAD ULMAR RAFUEN Regional Locality Map C B GIBBERAGEE STATE FOREST RI, 11517; -LEGEND Current Quarry Areas Road Waterbody Lot 2 DP 1055044 Lot Natural Parks Waterways State Forest Paper Size A3 0 100 200 400 600 Newman Quarrying Sly's Quarry Environmental Impact Statement mber 22-17528 vision A Date 11 Dec 201-P Horzonial Datum: G.D.I. 1994 Brid G.D.A. 1994 M.G.A. Zone 56 Figure 1-1 Site location

Illustration 2.1 – Quarry Development Area

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

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



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

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Illustration 2.4 - Quarry Rehabilitation Plan



Figure 5: Conceptual rehabilitation plan

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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 1599815 was issued on 14 September 2020.

EPL 11649 Fee Based Activities

Land-based extractive activity	> 100,000-500,000 T annual capacity to extract, process or store

The following Notices of Variation to EPL 11649 have occurred between June 2016 and August 2017.

Date Variation No	Variation to EPL 11649
2 October 2017/ 1557486	On 6 September 2017 the EPA inspected the premises. Issues requiring follow up action were outlined in the EPA's letter of 11 September 2017. The EPA letter proposed that the follow up actions be formalised in a Pollution Reduction Program (PRP) on the licence.

Date Variation No	Variation to EPL 11649
	On 27 September 2017 the licensee provided feedback via letter to the EPA on the proposed PRP. This feedback was confirmed via a phone conversation on 9 October 2017.
	 By this notice the EPA varies licence No. 11649. The attached licence document contains all variations that are made to the licence by this notice. The following variations have been made to the licence:
	New PRP - Truck Wash & Fuel Storage
14 October 2019/ 1583754	On 14 October 2019 the EPA issued a variation to the licence. This variation is issued for the purpose of removing a completed pollution reduction program from the licence. This variation is for internal administrative purposes and has not been issued to the licensee.
14 September 2020/ 1599815	
	for all blasts carried out in or on the premises; and b) Instrumentation used to measure the airblast overpressure level

Date Variation No	Variation to EPL 11649
	 and ground vibration peak particle velocity must meet the requirements of the current Australian Standard AS 2187.2-2006. L5.7 The licensee must report any exceedance of the licence blasting limits to the EPA within 24 hours of the exceedance becoming known to the licensee or to one of the licensee's employees or agents. L4.3 Note: Noise sensitive locations means buildings used as a residence, hospital, school, childcare centre, places of public worship and nursing homes. A noise sensitive location includes the land within 30m of the building. R1.9 The licensee must also include the following information with the Annual Return A statement detailing the total volume of material extracted from the quarry for the reporting period; and The total volume of extracted material transported from the premises for the reporting period.

4. Agency Consultation

4.1 Department of Planning, Industry and Environment

On 27 April 2021 Angie Hollister, Senior Compliance Officer, Far North Coast Region, Compliance, Department of Planning, Industry and Environment responded to the letter provided for consultation in accordance with Schedule 5 condition 11(b) with the following advice:

The Department has no particular concerns/issues that need to be addressed specifically within the upcoming 2021 Independent Audit. The audit should address the environmental performance and compliance status of the project in accordance with the requirements of Condition 11, Schedule 5 of Development Consent SSD 6624 and as per the Department's Independent Audit Guideline May 2020: https://www.planning.nsw.gov.au/-/media/Files/DPE/Other/Assess-and-regulate/About-Compliance/independent-audit-post-approval-requirements-2020-05-19.pdf

This email should be appended to the Independent Audit Report.

4.2 Environment Protection Authority

On 11 May 2021 Bryce Gorham, Unit Head, Regulatory Operations, NSW EPA. responded to the letter provided for consultation in accordance with Schedule 5 condition 11(b) with the following advice:

In light of your request, the EPA have reviewed records and approvals relating to the EPL for the premises, and can provide the following comments:

There is no record of regulatory or compliance actions brought by the EPA against the EPL or licensee. No non-compliances have been reported in required annual reporting for the licence. Scheduled licence inspections have been conducted regularly and have not identified any matters of concern in relation to non-compliance with environmental protection licence conditions, including those for noise, and the protection of air and water. A licence integrity review was conducted 15 May 2020, which identified no issues of non-compliance with EPL conditions. The licence was varied on two occasions within the audit period, on 14 October 2019 and 14 September 2020.

As required by development consent SDD_6624 for the expansion of the premises and EPL conditions E1 and E2, a Soil & Water Management Plan (SWMP) (SDD Condition 20, Schedule 3 and EPL condition E1) and Noise Management Plan (NMP) (SDD Condition 5, Schedule 3 and EPL condition E2) were required. The EPA has no concerns regarding the adequacy of these management plans which form the basis of the operational environmental protection measures for the development.

No measures or actions are recommended at this time by the EPA in relation to the environmental performance of the development.

4.3 Transport for NSW

On 12 May 2021 TFA received an email from Leisa Sedger, for Matt Adams, Team Leader Development Services, Community & Place, Region North, Region and Outer Metropolitan, Transport for NSW. Ms Sedger advised as follows:

I refer to your email of 21 April 2021, 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.

Our key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with Future Transport Strategy 2056.

It is requested the audit consider the following:

- Verify that the approved development is operating in accordance with Schedule 2, Condition 8 and 8A.
- Verify records of laden truck movements and the publication of such records in accordance with Schedule 3, Condition 22.
- Review procedures relating to the management of vehicles under Schedule 3, Condition 23 to confirm appropriate measures are in place to ensure vehicles comply with requirements.
- Review the Traffic Management Plan (TMP) required under Schedule 3, 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 Schedule 3, Condition 25.

If you should have any further questions, please contact our office using the details below.

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 January 2021.

• 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 (24 April 2021).
- 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 24 April 2021.
- 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 24/04/2021.

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, 24/04/2021)
- 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 one non-compliance as detailed in section 5.7.4 and 5.7.5.

4.4 Department of Primary Industries

As part of the previous audit (TFA, 2017), TFA received the following feedback and therefore additional advice was not sought from the Division of Resources and Geoscience or DPI Agriculture.

On 29 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

No response has been received from the Office of Water with respect to the current audit period 2017-2021. Correspondence received from Vicki Chatfield, Regional Manager, Water Regulatory Operations on 7 September 2017 with respect to the previous audit (TFA 2017) is provided below :

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 Biodiversity & Conservation Division (DPIE)

TFA received a letter dated 4 June 2021 from Dimitri Senior Team Leader Planning, North East Branch, Biodiversity and Conservation, Department of Planning, Industry and Environment.

The BCD recommends that the following measures contained in the various management plans and strategies are considered in the Environmental Auditing process.

BCD Issue	TFA Response
Timely provision of offsets	An updated BRMP including the Biodiversity
	Offset Strategy (BOS) matters was completed
	on December 2019 (i.e. accepted and
	approved by BCD and DPIE). A security bond
	has been paid and management tasks in the
	offset area has commenced.
Implementation of sediment and erosion	Erosion and sediment controls appropriately
issues identified in SWMP	installed and adequately maintained –
	observed during audit inspection on
	24/04/2021.
Effective Implementation of dust suppression	Dust suppression controls available and
	utilised – observed during audit inspection on
	24/04/2021.
Use of interim stabilisation measures to	Revegetation being progressively installed,
minimise dust	where appropriate- observed during audit
	inspection on 24/04/2021.
Stockpiling of removed soil for rehabilitation	Not Triggered
works	
Bunding of mulched stockpiles	Not Triggered
Completion of baseline monitoring for surface and groundwater	Compliant
Weekly completion of Environmental Checklist	Compliant, ongoing
Preparation of post clearing report by	Not Triggered
Ecologist	Clearing within Stage 2 of the quarry has not
	yet commenced. The exception is the Nest
	Box Management Plan which has been
	triggered by clearing within in Stage 1.
Ongoing evaluation of environmental	Not Triggered for rehabilitation works
performance	
Adequacy of site induction, toolbox, targeted	Not commenced; operator plans to commence
environmental training for protecting and	training closer to trigger for start of
managing biodiversity and environmentally	rehabilitation works
sensitive land	Not Triggorod
Compliance with Vegetation Clearing in	Not Triggered
accordance with detailed design and staging plans	
Avoidance of areas of high ecological	During site audit inspection (24.04.2021) there
constraints	was no evidence of disturbance of areas of
	high ecological significance
Locations of compounds, site facilities,	Compounds, site facilities, stockpiles and
stockpiles and machinery in existing cleared	machinery are in existing cleared areas
areas	
Evidence of BRMP review and updating in	The BRMP has been completed and approved
response to the results of pre-clearing surveys	(December 2019). However, in general, the
	BRMP will not be triggered until clearing is
	proposed within Stage 2 of the Quarry's
Weed control undertaken in accordance with	operation program. Not Triggered
BRMP	
Effective implementation of plant and frog	Not Triggered
Pathogen hygiene protocols	
Collection of seed prior to clearing for use in	Not Triggered
rehabilitation works	

BCD Issue	TFA Response
Preparation and/or revision of nest box management plan	The BRMP has been completed and approved (December 2019). However, in general, the BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program. While the Nest Box Management Plan has been triggered, other rehabilitation requirements have not. Rehabilitation will be ongoing throughout and beyond the life of the Quarry's operation
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, Air and Noise and water quality monitoring has been undertaken in accordance with monitoring schedule. The DPIE has agreed to: reduce the frequency of groundwater monitoring and; halt the routine air and noise monitoring

4.7 NSW Fisheries

On 30 April 2021 TFA received the following email advice from Jonathan Yantsch, Fisheries Manager, Aquatic Ecosystems (North Coast) Aquatic Environment, Primary Industries NSW:

As the quarry is located within the Tabbimoble Creek catchment, which incorporates known and *indicative habitat for the threatened fish species Oxleyan Pygmy Perch (Nannoperca oxleyana)* (Freshwater threatened species distribution maps (nsw.gov.au)), the Independent Environmental Audit of the development should include a review of the impacts of quarry operations, including those activities that impact and/or occur outside of the quarry footprint such as run-off, surface/ground water pumping and hauling activities, on adjacent key fish habitat (i.e. third order and greater waterways).

Where impacts are identified by the Independent Environmental Audit (e.g. sedimentation and other water quality impacts such as changes in pH and thermal pollution, increased/decreased flow regimes etc.), then the report must provide appropriate measures to avoid and/or mitigate these impacts from future quarry operations.

On 8 June 2021 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 the threatened fish species Oxleyan Pygmy Perch (Nannoperca oxleyana) 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 OEH 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).

4.8 Clarence Valley Council

In a telephone call with Tim Fitzroy on 1 June 2021 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.

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 **Appendix 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 5.1Environmental Management Strategy vs AS/NZS ISO14001Elements

ISO 14001 Element	Environmental Management Strategy Section
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

ISO 14001 Element	Environmental Management Strategy Section
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 addressingDevelopment 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	Administrative Non-Compliant



6624 Schedule 5 condition 3 components reference) 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. Compliant (b) a description of: i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); BRMP – Section 2 Env. Req. BMP – Section 2 Env. Req. SWMP – Section 2 Env. Req. BMP – Section 2 Env. Req. BMP – Section 2 Env. Req. SWMP – Section 2 Env. Req. Compliant ii) any relevant limits or performance measures/criteria; 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 Surface Water Quality
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. (b) a description of: BRMP - Section 2 Environmental Requirements NMP - Section 2 Env. Req. i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); BMP - Section 2 Env. Req. 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 12 SWMP section 4 Surface Water Quality
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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
iii) the specific performanceNMP – sec 1.2 TargetsCompliantindicators that are proposed to beAQMP – sec 1.2 TargetsCompliant
used to judge the performance SWMP sec 1.2 Targets
of, or guide the implementation TMP – sec 1.2 Targets
of, the development or any management measures; BRMP – sec 1.3 Targets WasteMP – sec 1.2 Tarrets
management measures; WasteMP – sec 1.2 Targets HMP – sec 1.2 Targets HMP – sec 1.2 Targets
NMP – sec 4 Environmental Control Measures Compliant
(c) a description of the measures AQMP – sec 4 Environmental Control Measures
that would be implemented to comply with the relevant statutorySWMP sec 4. Environmental Control MeasuresTMP - sec 4. Environmental Control Measures
requirements, limits, or BRMP – sec 4 Environmental Control Measures
performance measures/criteria; WasteMP – sec 4. Environmental Control
Measures HMP – sec 4. Environmental Control Measures
NMP - sec 4. Environmental Control Measures NMP - sec 5 Monitoring & Reporting Compliant
(d) a program to monitor and AQMP – sec 5 Monitoring & Reporting
report on the: SWMP sec 5 Monitoring & Reporting • impacts and environmental TMP - sec 5 Monitoring & Reporting
Impacts and environmental TMP – sec 5 Monitoring & Reporting BRMP – sec 5 Monitoring & Reporting
and WasteMP – sec 5 Monitoring & Reporting
• effectiveness of any management measures (see (c) HMP – sec 5 Monitoring & Reporting
above);
NMP – sec 5.2 Contingency Plan Compliant
(e) a contingency plan to manage AQMP – sec 5.2 Contingency Plan
any unpredicted impacts and SWMP sec 5.2 Contingency Plan
their consequences and to TMP – sec 5.2 Contingency Plan
reduce to levels below relevant WasteMP – sec 5.2 Contingency Plan
impact assessment criteria as HMP – sec 5.2 Contingency Plan

Development Consent 6624 Schedule 5 condition 3 components	Management Plans (section reference)	Status
quickly as possible;		
(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	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
- o 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.
- o 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 Nois Secretary. The plan must	e Management Plan for the development to the s	atisfaction of the
(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: compliance with the noise criteria in this consent; best practice management is being employed; and the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply; 	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 As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring	Compliant
Noise	following approval from DPIE. Management Plan Control Measures	
Hours of Operation 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 3 August 2017 and 24 April 2021	Compliant
Noise generated by the development must not exceed 35 dB(A) LAeq (15 minute) at any residence on privately-owned land.	Quarterly attended noise monitoring surveys were carried out by GHD in August 2017, November 2017, February 2018 and May 2018 indicate noise levels at the nearest affected levels at less than 35 dB(A) LAeq (15 minute). An exceedance of the road noise criteria was experienced in August 2017. Since this	Compliant

Development Consent Schedule 3 Condition 5 Requirement and Control Measure	Status	Compliance Status
	monitoring event, CadnaA noise modelling software has been used to predict noise levels which is more accurate as it takes into account terrain effects, atmospheric absorption and ground absorption. Based on the measured result in November 2017, the August 2017 monitoring result would have complied if CadnaA was used to predict the noise levels.	
	The predicted road traffic noise was between 49 and 52 dB(A) and previous year's results were between 51dB(A) and 54dB(A), so the average actual results are similar to the predicted and previous year's results.	
	As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.	
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.	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) (GHD August 2017, November 2017, February 2018 and May 2018)	Compliant
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), 29 May 2017 (3 months), August 2017 (3 months), November 2017 (3 months), February 2018 (3 months) and May 2018 (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
	As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.	
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	There had been no change or modification to require additional noise monitoring	Not Active/Not Triggered

Development Consent Schedule 3 Condition 5 Requirement and Control Measure	Status	Compliance Status
heavy vehicle movements) or move noise sources significantly closer to noise sensitive receivers.		
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 As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.	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 is in place	Compliant Ongoing

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. As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.

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

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 in November 2017, February 2018 and May 2018.

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 conducted in November 2017, February 2018 and May 2018 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.

An exceedance of the road noise criteria was experienced in August 2017. Since this monitoring event, CadnaA noise modelling software has been used to predict noise levels which is more accurate as it takes into account terrain effects, atmospheric absorption and ground absorption. Based on the measured result in November 2017, the August 2017 monitoring result would have complied if CadnaA was used to predict the noise levels.

The predicted road traffic noise was between 49 and 52 dB(A) and previous year's results were between 51dB(A) and 54dB(A), so the average actual results are similar to the predicted and previous year's results.

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. Quarterly attended noise monitoring surveys were carried out by GHD in August 2017, November 2017, February 2018 and May 2018 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.

As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.

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	Status	Compliance Status
Requirement and Control Measure		
The Applicant must prepare a Blast Secretary. The plan must	t Management Plan for the development to the sa	atisfaction of the
(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 th May 2017) confirming Blast Management Plan approval	Compliant
(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	Table 4 (Environmental Control Measures) of	Compliant

Development Consent Schedule 3 Condition 10 & 11 Requirement and Control Measure	Status	Compliance Status
procedures for the blasting schedule, in particular to nearby residences;	the Blast Management Plan specifies measures referenced as B10 and B11 with respect to community notification	
(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 with changes made 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.

Receiver	Airblast Overpressure (dB Lin Peak)	Ground Vibration (mm/sec)	Allowance exceedance
Any residence on	120	10	0%
privately owned land	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. All blast during the assessment period have been monitored at Location R3. The controlled blasting coupled with the distance between the quarry operating areas and the location of the monitor has meant that vibration and overpressure levels have attenuated to levels less than the pre-set trigger thresholds.

Blast Number Date Time Cubic Metres Tonnes Blast Result NEW26 23/08/2017 2.53pm 22,143.68 55359.2 not triggered NEW27 27/10/2017 2.30pm 11,163.52 27908.8 not triggered NEW28 9/11/2017 1.55pm 17,133.95 42834.875 not triggered NEW29 7/12/2017 1.56pm 10,423.68 26059.2 not triggered NEW30 16/01/2018 1.09pm 8,672.50 21681.25 not triggered NEW31 8/02/2018 10.19am 29547.425 not triggered 11,818.97 NEW32 2/03/2018 2.03pm 12,479.67 31199.175 not triggered

All blasting is compliant with Condition 7.

Blast Number	Date	Time	Cubic Metres	Tonnes	Blast Result
NEW33	22/03/2018	2.18pm	13,164.06	32910.15	not triggered
NEW34	12/04/2018	1.21pm	12,822.36	32055.9	not triggered
NEW35	14/05/2018	12.35pm	12,217.14	30542.85	not triggered
NEW36	20/06/2018	12.55pm	10,100.00	25250	not triggered
NEW37	2/07/2018	2.08pm	5,592	13,980.00	not triggered
NEW38	18/07/2018	12.07pm	16,376.96	40,942.40	not triggered
NEW39	8/08/2018	2.08pm	12,550.04	31,375.10	not triggered
NEW40	10/09/2018	1.36pm	10,738	26,845	not triggered
NEW41	24/09/2018	1.58pm	10,218	25,545	not triggered
NEW42	8/10/2018	2.36pm	12,352	30,880	not triggered
NEW43	30/11/2018	12.00pm	10,648.60	26,621.50	not triggered
NEW44	8/01/2019	1.55pm	13,937.80	34,844.50	not triggered
NEW45	11/03/2019	1.03pm	5,919	14,797.50	not triggered
NEW46	4/04/2019	1.03pm	16,950.50	42,376.25	not triggered
NEW47	4/06/2019	1.10pm	10,278.13	25,695.33	not triggered
NEW48	21/06/2019	1.45pm	11,328.75	28,321.88	not triggered
NEW49	17/07/2019	1.20pm	10,887.43	27,218.58	not triggered
					triggered below
NEW50	20/08/2019	1.10pm	10,074.37	25,185.93	threshold
NEW51	9/09/2019	1.20pm	13,426.25	33,565.63	not triggered
NEW52	8/10/2019	1.32pm	10,074.37	25,185.93	not triggered
NEW53	22/10/2019	1.10pm	9,711.25	24,278.13	not triggered
NEW54	21/05/2020	1.45pm	7,691.87	19,229.68	not triggered
NEW55	23/07/2020	12:53pm	2.249.53	5,623.83	not triggered

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. Modelling of vibration and airblast overpressure levels for the scale of blasting that has been undertaken at the quarry has confirmed that the levels would not have exceeded the pre-set trigger thresholds and the absence of any recordings is therefore expected.

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. There are no recommendations to improve how the plan is administered.

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]

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW fitzroy&associates ³

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.

			Adopted incremental Adopted impact background criterion		Peak production rate		Average production rate	
Receiver	Cumulative criterion	Adopted background		No controls	With controls	No controls	With controls	
R1				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	50	15	35	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	

Table 5.3 Predicted PM₁₀ 24-hour average ground level concentration (µg/m₃)

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 μ g/m³. It is also evident from the results that even with the addition of a typical TSP background concentration of 30 μ g/m³, the total (cumulative) impact would still be well below the assessment criterion.

Receptor	TSP concentration (µg/m3)
R1	3
R2	3
R3	2
R4	1
R5	<1
R6	<1
R7	<1
R8	<1
Receptor	TSP concentration (µg/m3)

Table 5.4 Predicted TSP annual average concentrations at peak production rate

Dust	deposition	
Duot	aopoontion	

R9

R10

R11

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/m²/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/m²/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/m²/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

<1

<1

<1

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 Q Secretary. The plan must	uality Management Plan for the development to	o the satisfaction of the
(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: • compliance with the relevant conditions of this consent; • best practice management is being employed; and • the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; 	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: is capable of evaluating the performance of the development; includes a protocol for determining any exceedances of the relevant conditions of consent; effectively supports the air quality management system; and evaluates and reports on the adequacy of the air quality management system. 	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.	Dust monitoring was undertaken from August 2017 for PM10, TSP and deposited dust. A Dust Impact Assessment (GHD 2018) report was prepared summarising the results of the monitoring, with the conclusion: <i>The results indicate that the concentration</i> <i>levels of PM10, TSP and deposited dust</i>	Compliant

Project Approval Schedule 3 Condition 14 and 15	Status	Compliance Status
Requirement and Control Measure		
	were below the air quality criteria specified in the Development Consent for the Sly's Quarry Expansion Project	
Air Quality	/ Management Plan Control Measures	
Dust Control 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. Identified sensitive receptors should be notified when blasting is planned to occur. 	Table 4 (Environmental Control Measures) of the Blast Management Plan specifies measures referenced as B10 and B11 with respect to community notification	Compliant
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.	Blasting does not occur during times when winds are in the direction of the nearest receptors	Compliant
Water sprays should be used as dust suppression just before and during the blast.	Water sprays are used as dust suppression just before and during the blast	Compliant
Measures to be taken to reduce blast impacts include reducing charge mass and increasing the distance to sensitive receivers	Adjustments to the Blast Management Plan have been considered and with changes made 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 August 2017 to April 2021 with the exception of a period where data was lost due to battery failure (pers.com Mark Newman 24 April 2021). Plans are in place to install a new weather station which will allow results to be monitored remotely.

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 µg/m3
	Annual	30 µg/m3
TSP	Annual	90 µg/m3
Dust Deposition (insoluble fraction)	Annual	2g/m ² /month*

*Maximum Increment. Maximum allowable cumulative impact of 4 g/m2/month

5.5.6 Air Quality Monitoring Results

Dust monitoring was undertaken from August 2017 for PM10, TSP and deposited dust. A Dust Impact Assessment (GHD 2018) report was prepared summarising the results of the monitoring, with the conclusion:

The results indicate that the concentration levels of PM10, TSP and deposited dust were below the air quality criteria specified in the Development Consent for the Sly's Quarry Expansion Project.

5.5.7 Conclusions

Dust monitoring was undertaken from August 2017 for PM10, TSP and deposited dust. A Dust Impact Assessment (GHD 2018) report was prepared summarising the results of the monitoring, with the conclusion:

The results indicate that the concentration levels of PM10, TSP and deposited dust were below the air quality criteria specified in the Development Consent for the Sly's Quarry Expansion Project.

Based on this it was requested the dust monitoring cease, unless there is a justifiable dust complaint or a change in operating conditions that are likely to increase dust emissions from the site, in which case air quality monitoring will recommence, as described in Section 5.2. This request was approved by DPE (now DPIE) on 10 October 2018.

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 August 2017 and April 2021 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.

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.

Following a review of monitoring results for baseline surface water quality and groundwater bore monitoring, DPIE (Department of Planning, Industry & Environment) have agreed to a reduced frequency of monitoring (letter from DPIE dated 04/02/2021) as follows:

- baseline surface water monitoring frequency can be reduced sampling after 10mm of rain at least once every quarter (as opposed to after every >10mm event); and
- groundwater monitoring frequency can be reduced from quarterly to annually, where adequate water is available for sampling. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be undertaken via dipping rather than loggers (email B. Luffman, 21/04/21).

Non-compliance was only found in relation to storage methods for waste oil. This noncompliance is rated Low Risk. This system requires monitoring for leakage and also protection of the funnel using bollards or similar to protect from inadvertent damage from vehicles / machinery.

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 water 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 was increased in size from about 12.6ML to 40ML capacity prior to the 2017 independent audit. Since the 2017 audit, an additional sediment pond



/ basin was constructed largely to provide additional security of water supply. This additional basin also has a capacity of about 40ML similar to the main sediment basin.

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:
 - o site water balance
 - o surface water management plan
 - o 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 at least once every quarter (test for oil and grease, pH, TSS). Note: the frequency of this monitoring was reduced to "at least once every quarter" in 2021 as per letter from DPIE dated 04/02/2021;
- 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;

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- inspect spill kits monthly and following use;
- annual monitoring of groundwater monitoring bores (GW1, GW2 and GW3) (log water levels and test for pH and electrical conductivity). Note: the frequency of this monitoring was reduced in 2021 from quarterly to "annually, where adequate water is available for sampling" as per letter from DPIE dated 04/02/2021. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be reduced to annually and via dipping, rather than loggers (email B. Luffman, 21/04/21).

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		
Condition 18 Water Supply 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
Condition 19 Water Discharges The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.	The quarry generally complies with the EPL discharge limits. A Water Quality Monitoring Summary is provided on the quarry's website - http://newmanquarrying.com.au/files/ The summary covers the period from July 2017 to February 2021. The monitoring indicates the quarry generally complies with the EPL discharge limits with only one minor exceedance of the 50mg/L TSS limit (67mg/L recorded in 2018). A copy of the summary is included in Appendix F . General requirements of EPL 11649 are summarised further in this section. A copy of the licence is included in Appendix B .	Compliant Ongoing
Condition 20 Soil and Water Management Plan The Applicant must prepare a Soil and Water Management Plan for the	The Soil and Water Management Plan (SWMP) was approved by the Department of Planning and Environment on 9 May 2017.	Compliant (recommendation to update)

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW

Condition	Status	Compliance Status
development to the satisfaction of the Secretary. This plan must:	Due to the construction of a new storage pond it is recommended that the SWMP is updated to show the current arrangement of ponds/basins and any other changes.	
 (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 the EPA and DPI Water;	EPA and DPI Water were consulted – correspondence included in Appendix A of SWMP	Compliant
 (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; (e) include a: 	Refer to notes further below	Compliant
 (i) Site Water Balance that includes: details of: sources and security of water supply; water use and management on site; any off-site water transfers; and reporting procedures; and measures that would be implemented to minimise clean water use on site; details of: ster ster ster water use on site; 	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: a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development; a detailed description of the surface water management system on site including the: clean water diversion system; erosion and sediment controls; dirty water management system; water storages; and mitigation measures outlined in the EIS; and a program to monitor and report on: any surface water discharges; the effectiveness of the water management system, the quality of water discharged from the site to the environment; surface water flows and quality in local watercourses; 	Detailed in Section 4 of the SWMP Note: the frequency of water quality monitoring of drainage lines in two locations (WQ1 and WQ2) was reduced to at least once every quarter when rain exceeds 10mm in a day (test for oil and grease, pH, TSS) as per letter from DPIE dated 04/02/2021	Compliant

Condition	Status	Compliance Status
 (iii) Groundwater Management Plan that includes: 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 a monitoring program to manage potential impacts, if any, on the alluvium and associated surface water source near the proposed extraction area that includes: a minimum of three monitoring bores with automatic water level recording instrumentation or other method agreed with DPI-Water; identification of a methodology for determining threshold water level criteria; contingency measures in the event of a breach of thresholds; and a program to regularly report on monitoring. 	Detailed in Section 4 of the SWMP Note: the frequency of monitoring of groundwater bores GW1, GW2 and GW3 (log water levels and test for pH and electrical conductivity) was reduced in 2021 from quarterly to "annually, where adequate water is available for sampling" as per letter from DPIE dated 04/02/2021. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be reduced to annually and via dipping, rather than loggers. (email B. Luffman, 21/04/21). It is noted there was some damage to the GW bores from bushfires in 2019 however this has been rectified.	Compliant
Condition 21 Soil and Water Management Plan The Applicant must implement the approved Soil and Water Management Plan as approved from time to time by the Secretary.	This audit indicates the SWMP is generally being implemented but with some non-compliances as detailed further below.	Compliant

Development Approval SSD 6624 – Appendix 5 -EPA'S REQUIREMENTS FOR THE SOIL AND WATER MANAGEMENT PLAN

1. The Soil and Water Management Plan required under condition 20 of Schedule 3 must:

1. The Soli and Water Management Fian	required under condition 20 of Schedule 5	muət.
a) describe stormwater management measures to control pollutants at the source and contain them within the site;	Detailed in Section 4 of the SWMP	Compliant
b) describe erosion and sediment control measures to minimise disturbance of land, minimise water flow through the site and filter, trap or detain sediment;	Detailed in Section 4 of the SWMP	Compliant
c) describe measures to maintain and monitor any stormwater controls;	Detailed in Section 5 of the SWMP	Compliant
d) describe methods of storage of topsoil and associated erosion and sediment control measures;	Detailed in Section 4 of the SWMP	Compliant
e) describe waste water treatment measures, including systems for the reuse and/or recycling of waste water and measures for treating the	Detailed in Section 3.2 and 4 of the SWMP	Compliant

Condition	Status	Compliance Status
unavoidable discharges from the site to meet specific water quality requirements;		
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</i> <i>Urban Stormwater Soils and</i> <i>Construction: Volume 1 and 2E</i> guidelines based on a minimum standard of 90th percentile five-day rainfall event (75 mm); and	Detailed in Appendix A of the SWMP	Compliant
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
Environmental Management Str (Section 8.2 in the EMS)	ategy - Environmental monitorin	Ig
Daily monitoring of weather Daily monitoring of rainfall	Daily monitoring is undertaken and recorded. The monitoring is used in the Water Quality Monitoring Summary provided on the quarry's website. It is noted that a new weather station is proposed to be installed which will have capacity for remote access to the data. The current station has lost some data due to battery failure or memory full. The new station should rectify these issues. A copy of the summary is included in Appendix F.	Compliant Ongoing
Weekly monitoring of erosion and sediment (and following rain)	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 22/04/2021). Examples of records have been provided.	Compliant Ongoing
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. This frequency was reduced to <u>at least once every quarter</u> when rain exceeds 10mm in a day as per letter from DPIE dated 04/02/2021. The samples are to be tested for oil and grease, pH and TSS. This has been undertaken.	Compliant Ongoing
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 - <u>http://newmanquarrying.com.au/files/</u> A copy of the summary is included in Appendix E .	Compliant Ongoing

Condition	Status	Compliance Status
Spill kit monitoring monthly and following use	The quarry manager indicated this is occurring (pers. comm. Mark Newman, 22/04/2021). Examples of records have been provided.	Compliant ongoing
Quarterly monitoring of groundwater	Three bores were installed on 02/08/2017 as per the SWMP. Groundwater level and water quality monitoring is being undertaken with results contained in Annual Review reports. There were some discrepancies and inconsistent datum in the GW levels monitoring, however the results from all three wells are relatively consistent, indicating the quarry is not impacting groundwater level. The frequency of monitoring of groundwater bores GW1, GW2 and GW3 (log water levels and test for pH and electrical conductivity) was reduced in 2021 from quarterly to "annually, where adequate water is available for sampling" as per letter from DPIE dated 04/02/2021. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be reduced to annually and via dipping, rather than loggers. (email B. Luffman, 21/04/21).	Compliant ongoing

Soil and Water Management Plan - Environmental control measures (Table 4.1 in the SWMP)

Coll.		
Soil		
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 22/04/2021. Note: material extracted from sediment basins is also stored in bunded area (observations – 22/04/2021)	Compliant Ongoing
SW03 - Implement erosion and sediment controls in accordance with <i>Managing Urban</i> <i>Stormwater Soils and Construction –</i> <i>Volume 2e Mines and quarries</i> (Landcom, 2004) (Appendix B)	Erosion and sediment controls appropriately installed and generally adequately maintained – observed during audit inspection on 22/04/2021. The only measure that requires attention to maintenance is the small basin associated with the vehicle washdown area which currently has a build-up of sand/sand that limits the capacity of the basin.	Non-Compliance – Low Risk
SW04 - Implement the rehabilitation plan.	The extent of works has not yet required commencement of	Not active / Not triggered

Condition	Status	Compliance Status
	rehabilitation works.	
Surface water		
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 Appendix B .	
	The quarry generally complies with the EPL discharge limits based on the Water Quality Monitoring Summary which is provided on the quarry's website - <u>http://newmanquarrying.com.au/files/</u> There was only one minor exceedance of the 50mg/L TSS limit (67mg/L recorded in 2018). The summary covers the period from July 2017 to February 2021. Other operating requirements of EPL	Compliant Ongoing
	 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 	
SW06 - Where available, and of appropriate quality, the quarry operation will use recycled runoff for quarry activities.	Captured runoff is used for sand processing, dust suppression and vehicle washing (pers. comm. Mark Newman, 22/04/2021).	Compliant Ongoing
SW07 - Erosion and sediment controls are to be implemented in accordance with <i>Managing Urban Stormwater Soils</i> <i>and Construction – Volume 2e Mines</i> <i>and quarries</i> (Landcom, 2004) (Appendix B)	Erosion and sediment controls appropriately installed and adequately maintained – observed during audit inspection on 22/04/2021.	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 – this was confirmed in 2017 audit. It is noted that an additional sediment basin of similar size has since been constructed to help ensure security of water supply.	Compliant
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.	A dedicated area has been provided for washdown of vehicles including a small basin with a flotation boom to capture grease and oils. The basin requires attention to remove the build- up of sand/sediment. A regular program for removal of built-up sand/sediment should also be implemented. It is noted that a concrete hardstand / vehicle inspection ramp has been constructed outside near the main shed for inspection / maintenance of vehicles. This should not be used for a formal washdown facility and care is to be taken to ensure no spills of fuels / oils from the vehicles being serviced.	Non-Compliance – Low Risk

Condition	Status	Compliance Status
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. Batteries are stored appropriately in the large shed. It is noted that a proposed new 1,200 litre fuel tank is to be installed and commissioned near the white generator. A new above-ground diesel fuel tank is currently on site for this purpose. This tank will need to be bunded prior to use. In regard to the underground tank for waste oil, additional measures are required to protect the above-ground pipe/funnel from inadvertent damage from vehicles or other machinery.	Compliant Ongoing
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 22/04/2021.	Compliant Ongoing
 SW12 - Where refuelling on site is required, the following management practices will be implemented: 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 Spill kits will be readily available and personnel trained in their use. Hand tools will be refuelled within lined trays of site vehicles wherever possible. Any contaminated material will be disposed at an appropriately licensed facility and used spill kit materials replaced. 	The main refuelling location near the weighbridge was observed to be adequate – audit inspection on 22/04/2021. As noted for SW10, a proposed new 1,200 litre fuel tank is to be installed and commissioned near the white generator. A new above-ground diesel fuel tank is currently on site for this purpose. This tank will need to be bunded prior to use. Refer to Waste section regarding contaminated material.	Compliant Ongoing
SW13 - Regular checks of vehicles working at the quarry will be conducted to ensure that no oils or fuels are leaking.	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 the repaired and recorded in vehicle maintenance book and reported to a manager. Refer to Traffic Management section for further details.	Compliant Ongoing
SW14 - A suitable meteorological station is to be installed in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	A suitable meteorological station is to be installed near the site – observed during audit inspection on 22/04/2021. It is noted that a new weather station is proposed to be installed which will	Compliant

Condition	Status	Compliance Status
	have capacity for remote access to the data. The current station has lost some data due to battery failure or memory full. The new station should rectify these issues.	
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. Groundwater	No mulch stockpiles were observed. Mulch stockpiles are more likely to occur to be required in final rehabilitation of quarry	Not active / Not triggered
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.	Not Applicable
SW17 Install the three wells, shown on Figure 5-1, in accordance with <i>Minimum</i> <i>Construction Requirements for Water</i> <i>Bores in Australia</i> (NUDLC, 2011).	Three bores were installed on 02/08/2017 as per Figure 5-1 in the SWMP. It is noted there was some damage to the GW bores from bushfires in 2019 however this has been rectified.	Compliant

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) in discharges
- 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;
- each sedimentation basin must have a marker that identifies the upper level of the sediment storage zone;
- Whenever the level of liquid and other material in any sedimentation basin exceeds the level indicated by the sedimentation basin marker, the licensee must take all practical measures as soon as possible to reduce the level of liquid and other material in the sedimentation basin;
- The licensee must endeavour to maximise the reuse of captured stormwater on the premises.

5.6.7 Storage of Chemicals, Fuels and Oils

The following notes are based on observations from the audit inspection on 22 April 2021.

Waste Oil

Waste oil is collected and stored in a below-ground 5,000 litre steel tank on the eastern side of the workshop/shed. The tank is installed / encased in clay.

Waste oil is poured into a 50mm diameter galvanised pipe standing 1m above the ground (see image below). Waste oil is collected by Southern Oil as required for recycling – generally three times per year.

The quarry conducts annual checks for leaks from the tank by digging a series of test holes around the tank to check for odours and visible signs of oil. Records have been provided for the annual checks for 2017 to 2020 inclusive. No odours or visible signs have been detected to date.

One rectification is required in regard to this system – some form of protection such as bollards or some robust form of fencing is installed to prevent vehicles/machinery inadvertently damaging the pipe.



Location of waste oil storage in below-ground 5,000 litre tank - showing pipe/spout for pouring in oil

Another mobile contractor collects smaller volumes of oils and radiator fluid – quantities are about 40 litres per month.

Batteries

Used batteries are stored in the main workshop / shed.

Diesel Fuel

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



A proposed new 1,200 litre fuel tank is to be installed and commissioned near the white generator. The new above-ground diesel fuel tank is currently on site for this purpose. This tank will need to be bunded prior to use.

A redundant above-ground fuel storage tanks in a concrete bunded area is also present on the site. It was noted in the 2017 audit that the redundant tank is owned by Caltex and the quarry operator was waiting for Caltex to remove the redundant tanks from the site (pers. comm. Mark Newman, 04/08/2017). This bunded tank is still located on site. Removal is desirable but not considered a priority.

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 Vehicle Inspection Area

A concrete hardstand / vehicle inspection ramp has been constructed outside near the main shed for inspection / maintenance of vehicles. It is noted this should not be used for a formal washdown facility and care is to be taken to ensure no spills of fuels / oils from the vehicles being serviced.

5.6.9 Vehicle/Truck Wash Bay

A vehicle wash-down area for trucks and other site vehicles was established in 2017/2018 with a small sediment basin. The purpose is to remove the risk of any grease and oil carry over into the environment or the main sediment basin. The small basin includes a flotation boom to capture grease and oils. The basin requires attention to remove the build-up of sand/sediment. A regular program for removal of built-up sand/sediment should also be implemented.

5.6.10 Non-Compliances

There is only one non-compliance for soil and water management which is considered Low Risk. This is in relation to the need to remove the build-up of sand/sediment in the small basin associated with the vehicle washdown area. A regular program for removal of built-up sand/sediment in this basin should also be implemented.

Whilst not considered a 'non-compliance', one other measure recommended to be implemented is protection of the pipe/funnel associated with the underground waste oil tank. This protection could be undertaken using bollards or similar to protect from inadvertent damage from vehicles / machinery.

5.6.11 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. There were no complaints relating to soil and water management over the period of July 2017 to 24 April 2021.





5.6.12 Environmental Performance

The environmental performance of the quarry with respect to soil and water management is considered satisfactory to date.

5.6.13 Recommendations

The recommended works to address the non-compliance involves removing the build-up of sand/sediment in the small basin associated with the vehicle washdown area.

The following measures, whilst not 'non-compliances', are also required to be implemented to provide a robust environmental management system and ensure environmental performance:

- Update the Soil and Water Management Plan (SWMP) prepared by GHD (2017) to include:
 - the new storage / sediment basin that has been constructed since 2017 and any other modifications to drainage lines or sediment and erosion control measures;
 - revised frequency of monitoring of baseline water quality of drainage lines at locations WQ1 and WQ2. Noted that the frequency of this monitoring was reduced to "at least once every quarter" as per letter from DPIE dated 04/02/2021;
 - revised frequency of monitoring of groundwater monitoring bores (GW1, GW2 and GW3). The frequency of this monitoring was reduced from quarterly to "annually, where adequate water is available for sampling" as per letter from DPIE dated 04/02/2021. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be reduced to annually and via dipping, rather than loggers (email B. Luffman, 21/04/21).
- Install a new weather station as proposed to address past issues of battery failure or memory failure.
- Implement a regular program for removal of built-up sand/sediment in the small basin associated with the vehicle washdown area.
- In regard to the underground 5,000 litre waste oil storage tank: install some form of protection such as bollards or some robust form of fencing to prevent vehicles/machinery inadvertently damaging the pipe used for pouring waste oil into the tank.
- Ensure that the proposed new above ground 1,200 litre fuel tank to be installed and commissioned near the white generator is bunded.

5.6.14 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
 - o no existing monitoring wells to be used
 - o water quality parameters
 - o frequency of sampling
 - o 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.

There has been subsequent consultation in late 2020 and early 2021 with DPIE (Department of Planning, Industry & Environment) in regard to the frequency of monitoring. The outcome of the consultation was direction from DPIE that:

- baseline surface water monitoring frequency can be reduced sampling after 10mm of rain at least once every quarter (as opposed to after every >10mm event); and
- groundwater monitoring frequency can be reduced from quarterly to annually, where
 adequate water is available for sampling. It has been noted by GHD that DPIE has
 agreed that monitoring of groundwater can be reduced to annually and via dipping,
 rather than loggers (email B. Luffman, 21/04/21).

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.

The number of daily truck movements have not exceeded agreed limits. It is noted that the following volumes of material have been extracted from the site (within the approved limit of 500,000 tonnes):

- 214,567.97 tonnes between July 2019 and June 2020;
- 364,307.98 tonnes between July 2018 and June 2019;
- 424,073.38 tonnes between July 2017 and June 2018.

The only non-compliance for the TMP measures is in relation to maintenance of the site access road. The access road requires repair works to address potholing / cracked bitumen seal and slightly rutted underlying pavement at the entrance off Tullymorgan-Jackybulbin Road. The affected area extends from the turnoff into the access road to about the entrance gate.

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
 - o 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.

A modification to the development consent was certified on 19 October 2017 which included amendments to the volume of products that can be exported from the site and the number of trucks that can be received and dispatched from the quarry as follows.

- no more than 500,000 tonnes of quarry products transported from the site in any financial year;
- no more than 10,000 tonnes of topsoil and 5,000m³ of mulch can be received at the site during any financial year;
- the site can receive or dispatch up to 150 laden trucks on any day until completion of the Pacific Highway upgrade in the vicinity of the site. It is noted the highway upgrade works are still active. When the works are completed the maximum number of trucks is to be reduced to no more than 125 on any day.

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 this has been modified to no more than 150 laden trucks while Pacific Highway upgrade works are being undertaken
- 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.
- T10 maintain plant and equipment in a proper and efficient manner.

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
Development Approval SSI	0 6624 - Schedule 3 - Condition 22 to	25
Condition 22 Monitoring of Product Transport 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. Condition 23	A daily record of truck movements has been recorded on the quarry's website. The website summary covers all days from May 2016 to January 2021. A copy is included in Appendix G .	Compliant Ongoing
Operating Conditions 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 (22/04/2021). 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 22/04/2021. 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 22/04/2021.	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 Traffic Management Plan 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	Exact dates unknown but it appears this timeframe was generally met	Compliant

Condition	Status	Compliance Status
months of the date of this consent, unless otherwise agreed by the Secretary;		
 (c) describe the processes in place for the control of truck movements entering and exiting the site; 	Refer to <i>Traffic Management Plan -</i> <i>Environmental controls and mitigation</i> <i>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</i> <i>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, 22/04/2021)	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, 22/04/2021) 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</i> <i>inspections and monitoring</i> further below	Compliant
(g) propose measures to minimise the transmission of	The TMP includes a range of measures such as rumble grid, cleaning vehicles, street	Compliant

Condition	Status	Compliance Status
dust and tracking of material onto the surface of the public road from vehicles leaving the quarry; and	sweeping. Refer to <i>Traffic Management Plan</i> - <i>Environmental controls and mitigation</i> <i>measures</i> further below	
(h) propose measures to accommodate the parking of early-arriving trucks within the site, rather than on the public road network.	The TMP includes a requirement for gates to open at 6:30am. Refer to <i>Traffic</i> <i>Management Plan - Environmental controls</i> <i>and mitigation measures</i> further below	Compliant
Condition 25 Traffic Management Plan 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 one non- compliance as detailed further below.	Compliant
Traffic Management Plan - address traffic impacts (Ta	Environmental controls and mitigation ble 4.1 in the TMP)	on measures to
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 need of repair to address potholing / cracked bitumen seal and slightly rutted underlying pavement at the entrance off Tullymorgan-Jackybulbin Road. The affected area extends from the turnoff into the access road to about the entrance gate – the damage is likely due to stress on pavement associated with turning motion of trucks entering and exiting the site. The remainder of the access road and Tullymorgan-Jackybulbin Road is generally in good condition beyond the area indicated above.	Non-Compliance – Low Risk
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 has not occurred to date due to no demand for materials to be exported back to the site. This is more likely to occur when rehabilitation works commence.	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 with the following works undertaken since previous audit: Give Way sign installed at exit from site Widened batter in accordance with request from Council's inspector Installation of the truck warning signs (W5-22A) on Tullymorgan-Jackybulbin Road as per the design drawing 	Compliant
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	The road was swept daily during highway	Compliant

Condition	Status	Compliance Status
clean Tullymorgan-Jackybulbin Road as required.	upgrade works due to associated dust etc. from construction works. Since the completion of the highway upgrade the road is swept as required by a contractor based on visual assessment (pers. comm. Mark Newman, 22/04/2021)	Ongoing
	The road surface appeared clean during the audit inspection on 22/04/2021.	
T07 - Install a rumble grid at the weighbridge	Installed Note: Trucks were observed to pass over the rumble grate prior to leaving the site during the audit site inspection (22/04/2021)	Compliant
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 prior to the Modification of Consent, nor has there been more than 150 laden trucks on any day since the Modification of Consent. 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 October 2017, and a total of three days when the number of laden truck movements has reached 150 in the period from October 2017 to January 2021.	Compliant Ongoing
T09 - The delivery of topsoil and mulch must be transported by backfilled quarry product trucks	This is not occurring presently as there is no current requirement for topsoil on the site. This is more likely to occur in final rehabilitation of quarry (pers. comm. Mark Newman, 22/04/2021)	Not Active/Triggered
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 the repaired and recorded in vehicle maintenance book and reported to a manager.	Compliant Ongoing
Traffic Management Plan - (Section 5.1 in the TMP)	Environmental inspections and moni	toring
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. Record sheets provided (pers. comm. Mark Newman, 22/04/2021). 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.	Compliant Ongoing
Truck movements to and from the site (including time of arrival and dispatch) will be monitored and	A daily record of the number of truck movements has been recorded on the quarry's website. Records of arrival and	Compliant Ongoing

Condition	Status	Compliance Status
recorded.	dispatch times are recorded via the weighbridge / dispatch records (evidence of dockets provided). The website summary covers all days from May 2016 to January 2021. A copy is included in Appendix G .	
Environmental Managemer (Section 8.2 in the EMS)	nt Strategy - Environmental monitorin	Ig
Routine weekly monitoring of the Traffic Management Plan	Routine weekly inspections are undertaken and recorded on 'Environmental Inspection Checklist' sheets (pers. comm. Mark Newman, 22/04/2021, evidence of checklists provided). 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.	Compliant Ongoing

5.7.5 Non-Compliances

The only non-compliance for the TMP measures is in relation to T01 requirement for the maintenance of the site access road. The access road requires repair works to address potholing / cracked bitumen seal and slightly rutted underlying pavement at the entrance off Tullymorgan-Jackybulbin Road. The affected area extends from the turnoff into the access road to about the entrance gate – the damage is likely due to stress on pavement associated with turning motion of trucks entering and exiting the site. The remainder of the access road and Tullymorgan-Jackybulbin Road is generally in good condition.

These repair works should be completed as soon as possible.

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. There were no complaints relating to traffic management over the period of July 2017 to January 2021.

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 repair works is addressed.

5.7.8 Recommendations

It is recommended the non-compliances regarding the intersection repair works are addressed as soon as possible. These works involve remediating the potholing / cracked bitumen seal and slightly rutted underlying pavement at the entrance off Tullymorgan-Jackybulbin Road. The affected area extends from the turnoff into the access road to about the entrance gate.

5.7.9 Consultation

Clarence Valley Council, the Department of Transport and Department of Planning, Industry and Environment were consulted in respect to transport matters. Copies of the correspondence are included in section 4 and **Appendix D**. Matters identified by the aforementioned agencies 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 Schedule 3 Condition 40 Requirement and Control Measure	Status	Compliance 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;	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. 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. An Asset Protection Zones (APZ) has been established around the administration buildings and infrastructure areas.	Compliant
	Mr Newman advised that he assisted NSW	Compliant

Development Consent Schedule 3 Condition 40 Requirement and Control Measure	Status	Compliance Status
(c) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	RFS during local bushfire in 2020	
41 The Applicant must implement the Bushfire Management Plan.	The Bushfire Management Plan has been implemented Induction of new staff members, contractors, visitors and site users to includes bushfire awareness, reporting and response actions to fire danger, and evacuation procedures	Compliant

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		

Development Consent Schedule 3 Condition 36 Requirement and Control Measure	Status	Compliance Status
(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 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 (22.04.2021), the OSMS appears to be operated satisfactorily however the Land Application Area was overgrown and therefore difficult to inspect. It is recommended that the LAA be mown and kept in a well maintained manner to allow future assessment	Non-Compliance – Low Risk
(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 recorded on the <i>Environmental Inspection Checklist.</i>	Compliant
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]

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW [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 h	eritage significance is identified on site, the Appli	cant 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 suspected item or object is cordoned off; and	Not triggered Detailed response is provided in Table 4.1 of Heritage Management Plan	Not triggered
(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</i> <i>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 5 August 2017 and 24 April 2021.

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 Needletail 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:



Credit type	Number of Credits
Ecosystem Credits	
NR 115 Blackbutt-bloodwood dry heathy open forest	567
NR123 Blackbutt-Turpentine dry heathy open forest	327
Total	894
Species Credits	
Bordered Guinea Flower (Hibbertia marginata)	15,820
Koala (Phascolarctos cinerus)	317
Common planigale (Planigale maculata)	317
Squirrel glider (Petaurus norfolcensis)	268
Brush-tailed phascogale (Phascogale tapoatafa)	244
Total	16,966

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]

Development Consent Schedule 3StatusCondition 27 to 34Requirement and Control Measure		Compliance Status
The Applicant must		
27 Biodiversity Offset Strategy 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 was completed on December 2019 (i.e. accepted and approved by BCD and DPIE)	Compliant
28 Security of Offsets 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 was completed on December 2019 (i.e. accepted and approved by BCD and DPIE). A security bond has been paid and management tasks in the offset area has commenced.	Compliant
29 Rehabilitation Objectives 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. Rehabilitation Objectives (see Appendix C)	The BRMP has been completed and approved (December 2019). In general, the BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program. However, the Nest Box Management Plan was triggered due to clearing that occurred in Stage 1. Pre-clearing surveys and Nest Box installation are considered compliant.	Compliant

Development Consent Schedule 3	Status	Compliance
Condition 27 to 34 Requirement and Control Measure		Status
	Rehabilitation will be ongoing throughout and beyond the life of the Quarry's operation	
30 Progressive Rehabilitation 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. <i>Note: It is accepted that parts of the site that are</i> <i>progressively rehabilitated may be subject to further</i> <i>disturbance in future.</i>	The BRMP has been completed and approved (December 2019). In general, the BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program. The exception is the Nest Box Management Plan (see above). The rehabilitation works are yet to be triggered.	Not Triggered
 31 Biodiversity and Rehabilitation Management Plan The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH and Council; (b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise; (c) be approved by the Secretary, prior to commencing quarrying operations in Stages 2 or 3 (refer Appendix 2), unless the Secretary agrees otherwise (d) provide details of the conceptual final landform and associated land uses for the site; (e) describe how the implementation of the Biodiversity Offset Strategy would be integrated with the overall rehabilitation of the site; (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: manage remnant vegetation and habitat on site, including within the Biodiversity Offset Strategy area; and ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent; (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: 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; 	The current BRMP was reviewed. This document was in development for several years in consultation with OEH. The BRMP is considered comprehensive and meets all the requirements of the condition. The BRMP includes the required Biodiversity Offset Strategy. The document was finalised (i.e. accepted) in December 2019). 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 management works (e.g. planting and/or weeding schedules)	Compliant
vegetation and fauna habitat in the biodiversity offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and		

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW 64 environmental health environmental education environmental auditing

Development Consent Schedule 3 Condition 27 to 34	Status	Compliance Status
Requirement and Control Measure		
 Requirement and Control Measure the introduction of fauna habitat features; protecting and conserving habitat for the Bordered Guinea Flower (<i>Hibbertia marginata</i>); protecting vegetation and fauna habitat outside the approved disturbance area on-site; minimising the impacts on native fauna, including undertaking pre-clearance surveys; establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers; ensuring minimal environmental consequences for threatened species, populations and habitats; 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; collecting and propagating seed; controlling weeds and feral pests; controlling erosion; 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</i> 1993; and 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 managing bushfire risk; (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</i> 13 (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 (k) include details of who would be responsible for monitoring, reviewing, and implementing the plan. 		
32 Biodiversity and Rehabilitation Management Plan The Applicant must implement the approved Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.	It is considered, in general the BRMP has not been triggered due to no clearing having occurred in Stage 2. However, the Nest Box Management Plan has been triggered by clearing in Stage 1 and the implementation of this component is considered compliant. The BOS has been developed (included in BRMP Dec 2019) and is considered to have been commenced.	Compliant
33Conservation and Rehabilitation Bond Within 6 months of the approval of the Biodiversity and	The Biobanking Agreement was	Compliant

Development Consent Schedule 3 Condition 27 to 34 Requirement and Control Measure	Status	Compliance Status
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: (a) calculating the cost of implementing the Biodiversity Offset Strategy over the next 3 years; (b) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and (c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary.	established on 7 th February 2019. The Biodiversity Conservation Trust confirmed in a letter dated 27 th August 2019 that the Total Fund Deposit had been paid.	
 34 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: (a) effects of inflation; (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 (c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date. 	An updated BRMP including the Biodiversity Offset Strategy was implemented in December 2019. While the establishment of the Bond occurred outside the 3-month period of the previous Independent Environmental Audit, this was due to ongoing negotiations with OEH.	Compliant

The Biodiversity and Rehabilitation Management Plan (BRMP) dated December 2019 was prepared to satisfy the requirements of Consent Condition No. 31. It is noted the plan, in general, has not been implemented as clearing within Stage 2 of the quarry has not yet commenced. The exception is the Nest Box Management Plan which has been triggered by clearing within in Stage 1. The Biodiversity Offset Strategy included in the plan has been commenced by way of payment of the bond and the commencement of management tasks.

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.

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5.13.2 Biodiversity Offset Strategy

The preparation and implementation for the long-term security of the biodiversity assets has occurred by the preparation of a Biodiversity Offset Strategy (BOS). The BOS was developed over several years and finalised in 2019. That is the Tabbimoble Biobank Site was recognised on 21st November 2018, the Biobank Agreement (ID number 402) was established on 7th February 2019 and acceptance (signed agreement) was completed on 24th August 2020. The required credits (except for the Common Planigale were transferred on 08 August 2019. Delays in the credits for the Common Planigale were due to a number of reasons including, the original proposed biobank site boundary was not able to yield sufficient species credits for the Brush-tailed Phascogale and the finding of a suitable Brush-tailed Phascogale expert and having them approved by OEH. Assessment for this species is ongoing.

The long-term security of the biodiversity asset was secured by payment of the Conservation and Rehabilitation Bond (Letter dated 27 August 2019 from Biodiversity Conservation Trust confirms the Total Fund Deposit has been paid). 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.

Management activities as per the Biobank Agreement have been implemented and include:

- Weed control
- Feral animal site checks
- Road improvements
- Boundary clearing
- Rubbish removal
- Purchase of fencing materials

Drought and a significant bushfire (November 2019) resulted in variations to works completed. These were detailed in the 2020 Annual Report for Year 1. The BCT reviewed this annual report and agreed to some variations. The BCT authorised the release of Year 1 funds from the Biodiversity Stewardship Payments Fund. The next annual report is due on 31 August 2021.

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 (December 2019). In general, the implementation of this plan does 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. The exception is the Nest Box Management Plan. This component of the BRMP was triggered due to clearing in Stage 1. The components of that Management Plan were implemented for the clearing undertaken.

The BOS was finalised in 2019 and implementation of this Strategy has commenced. While environmental conditions (drought and bushfire) has resulted in some variation in activities, these have been accepted by BCT and management activities are ongoing.

5.14 Community Complaints

Community complaints received by Newman Quarrying Pty Ltd related to Sly's Quarry operations are handled and actioned by the Quarry Manager in accordance with the complaints handling and response procedures outlined in each management plan. No community complaints were received during the audit period from August 2017 until 24 April 2021.

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6. Conclusions and Recommendations

The independent environmental audit of the Sly's Quarry expansion conducted in April 2021 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 April 2021. 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 (April 2021), 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 4 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
Soil and Water		
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.	A dedicated area has been provided for washdown of vehicles including a small basin with a flotation boom to capture grease and oils. The basin requires attention to remove the build-up of sand/sediment. A regular program for removal of built-up sand/sediment should also be implemented. It is noted that a concrete hardstand / vehicle inspection ramp has been constructed outside near the main shed for inspection / maintenance of vehicles. This should not be used for a formal washdown facility and care is to be taken to ensure no spills of fuels / oils from the vehicles being serviced.
Soil and Water Management Plan -	SW10 - All chemicals, fuels and oils stored at the premises must	The storage of chemicals, fuels and oils is detailed further in this section.

Schedule No and	Issue	Comments
Condition No		
Environmental control measures (Table 4.1 in the SWMP)	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 diesel fuels and chemicals on the site is considered adequate. Batteries are stored appropriately in the large shed. It is noted that a proposed new above ground 1,200 litre fuel tank is to be installed and commissioned near the white generator. The new above-ground diesel fuel tank is currently empty and stored on site for this purpose. This tank will need to be bunded prior to use. In regard to the underground tank for waste oil, additional measures are required to protect the above-ground pipe/funnel from inadvertent damage from vehicles or other machinery.
Traffic		
Traffic Management Plan - Environmental controls and mitigation measures to address traffic impacts (Table 4.1 in the TMP)	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 need of repair to address potholing / cracked bitumen seal and slightly rutted underlying pavement at the entrance off Tullymorgan- Jackybulbin Road. The affected area extends from the turnoff into the access road to about the entrance gate – the damage is likely due to stress on pavement associated with turning motion of trucks entering and exiting the site. The remainder of the access road and Tullymorgan-Jackybulbin Road is generally in good condition beyond the area indicated above.
Waste Management		
Schedule 3 Condition 36	(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 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 however the Land Application Area was overgrown and therefore difficult to inspect. It is recommended that the LAA be regularly mown and kept in a well maintained manner to allow future assessment

Recommendations

- 1. The Land Application Area for the onsite sewage management system be regularly mown and kept in a well-maintained manner to allow future assessment
- 2. The potholes and cracked bitumen seal on the access road is repaired and maintained in good order to service heavy vehicular movements from the subject development.
- 3. Additional measures are required to protect the above-ground pipe/funnel for the underground used oil storage tank from inadvertent damage from vehicles or other machinery. Install some form of protection such as bollards or some robust form of fencing to prevent vehicles/machinery inadvertently damaging the pipe used for pouring waste oil into the tank.

4. The dedicated basin installed to capture washdown of vehicles requires initial and thereafter regular removal of sand and sediment. A regular program for removal of built-up sand/sediment should also be implemented.

5. It is noted that a concrete hardstand / vehicle inspection ramp has been constructed

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outside near the main shed for inspection / maintenance of vehicles. This should not be used for a formal washdown facility and care is to be taken to ensure no spills of fuels / oils from the vehicles being serviced.

- 6. Update the Soil and Water Management Plan (SWMP) prepared by GHD (2017) to include:
 - the new storage / sediment basin that has been constructed since 2017 and any other modifications to drainage lines or sediment and erosion control measures;
 - revised frequency of monitoring of baseline water quality of drainage lines at locations WQ1 and WQ2. Noted that the frequency of this monitoring was reduced to "at least once every quarter" as per letter from DPIE dated 04/02/2021;
 - revised frequency of monitoring of groundwater monitoring bores (GW1, GW2 and GW3). The frequency of this monitoring was reduced from quarterly to "annually, where adequate water is available for sampling" as per letter from DPIE dated 04/02/2021. It has been noted by GHD that DPIE has agreed that monitoring of groundwater can be reduced to annually and via dipping, rather than loggers (email B. Luffman, GHD 21/04/21).
- 7. Install a new weather station as proposed to address past issues of battery failure or memory failure.
- 8. Implement a regular program for removal of built-up sand/sediment in the small basin associated with the vehicle washdown area.
- 9. Ensure that the proposed new above ground 1,200 litre fuel tank to be installed and commissioned near the white generator is bunded.





Condition No	Development Consent Condition	Verification	Comments	Compliance
	SCHEDULE 2 ADMINISTRATIVE CONDITIONS			
	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT			
1	In addition to meeting the specific performance measures and criteria established under this 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. TERMS OF APPROVAL			Noted
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	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); (b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with this consent; and (c) the implementation of any actions or measures contained in these documents.		Newman's Quarrying P/L have prepared and submitted the reports, strategies, plans, programs, reviews, audits required by the conditions of this Development Consent.	Compliant - Ongoing
	Quarrying Operations			
5	The Applicant may carry out quarrying operations on the site until 31 May 2041. 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.			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 per year for 2018, 2019,and 2020 was less than 500,000 tonnes	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	Quarry Product Transport			
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. * A modification to the development consent was certified on 19 October 2017 which included amendments to the volume of products that can be exported from the site and the number of trucks that can be received and dispatched from the quarry as follows. no more than 500,000 tonnes of topsoil and 5,000m³ of mulch can be received at the site during any financial year; no more than 10,000 tonnes of topsoil and 5,000m³ of mulch can be received at the site during any financial year; the site can receive or dispatch up to 150 laden trucks on any day until completion of the Pacific Highway upgrade in the vicinity of the site. It is noted the highway upgrade works are still active. When the works are completed the maximum number of trucks is to be reduced to no more than 125 on any day. 	Sly's Quarry Truck Movements, 2018, 2019, 2020	Transport of extracted materials for 2018, 2019, 2020 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 150 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 not accepted any backfilled material	Compliant not triggered
	SURRENDER OF EXISTING DEVELOPMENT CONSENTS			



Condition No	Development Consent Condition	Verification	Comments	Compliance
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. 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&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.	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
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
	STRUCTURAL ADEQUACY			
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. Notes: 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 August 2017 and 24 April 2021	Not Applicable
13			No demolition of buildings or	
15	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.		structures occurred between August 2017 and 22 April 2021	Not Applicable



Condition No	Development Consent Condition	Verification	Comments	Compliance
	PROTECTION OF PUBLIC INFRASTRUCTURE			
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 or otherwise addressed by contributions required by condition 19 of this consent.</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 August 2017 and 22 April 2021	Not Applicable
	OPERATION OF PLANT AND EQUIPMENT			
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
	PRODUCTION DATA			
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).	2018, 2019 & 2020 Annual Review	Annual production data has been reported to DRE and the data is included in the Annual Review	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	IDENTIFICATION OF APPROVED EXTRACTION LIMITS		•	
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
	CONTRIBUTIONS TO COUNCIL			
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		S 94 Contribution paid to CVC by Newman Quarrying on 29.06.2017	Compliant



Condition No	Development Cons	ent Condition	Verification	Comments	Compliance
	condition 9 of Schedule 5	5.			
	SCHEDULE 3				
	ENVIRONMENTAL PER	FORMANCE CONDITIONS			
	NOISE				
	Hours of Operation	 I			
1	The Applicant must comp	bly with the operating hours set out in Table 1.	Table 2.2 EMS	Hours of operation of Sly's Quarry activities are in accordance with the limits	
	Activity	Permissible Hours		in Development Consent Schedule 3 condition 1.	
	Employee Arrival	From 6:30am Monday To Saturday inclusive			
		From 7:30am on Sundays or public holidays if engaged in maintenance			Compliant Ongoing
	Quarrying operations including loading and	7am - 6pm Monday to Friday			
	dispatch of laden	7am to 1pm Saturdays			
	trucks	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			



Condition No	Development Consent Condition	Verification	Comments	Compliance
	Blasting 9 am to 3 pm Monday to Friday (except public holid	ays)		
	Maintenance May be conducted at any time, provided that these are not audible at any privately-owned residence *Note: Evidence of contracts that cover those periods during which extended Sa afternoon operating hours are undertaken must be reported in the Annual Revie required by condition 9 of Schedule 5.	turday		
2	The following activities may be carried out on the site outside the hours spect condition 1: (a) delivery or dispatch of materials as requested by Police or other authoritie (b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances, the Applicant must notify the Secretary and affected prior to undertaking the activities, or as soon as is practical thereafter.	April 2021 es; and	Work outside of standard operating hours has not occurred between 4 August 2017 and 22 April 2021	Not Triggered
	Noise Impact Assessment Criteria			
3	The Applicant must ensure that the noise generated by the development doe 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 t relevant requirements and exemptions (including certain meteorological condition the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conducter which these criteria apply and the requirements for evaluating complia these criteria. However, the noise criteria in Table 2 do not apply if the Applicant has an ag	ne litions) of ditions nce with	Quarterly attended noise monitoring surveys were carried out by GHD in August 2017, November 2017, February 2018 and May 2018 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
	with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.		An exceedance of the road noise criteria was experienced in August 2017. Since this monitoring event, CadnaA noise modelling software has been used to predict noise levels which is more accurate as it takes into account terrain effects, atmospheric absorption and ground absorption. Based on the measured result in November 2017, the August 2017 monitoring result would have complied if CadnaA was used to predict the noise levels. The predicted road traffic noise was between 49 and 52 dB(A) and previous year's results were between 51dB(A) and 54dB(A), so the average actual results are similar to the predicted and previous year's results. As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.	
	Operating Conditions			



Condition No	Development Consent Condition	Verification	Comments	Compliance
4	The Applicant must: (a) implement best practice management to minimise the operational and road transportation noise of the development; (b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 4); (c) carry out noise monitoring (at least every 3 months or as otherwise agreed with the Secretary) to determine whether the development is complying with the relevant conditions of this consent; and (d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary. <i>Note: Required frequency of noise monitoring may be reduced if approved by the Secretary</i> .	Noise Management Plan approved by DPE 9 May 2016	The initial noise monitoring event post Development Consent SSD 6624 occurred on 26 October 2016, (5 months) then 23 February 2017 (3 months), 29 May 2017 (3 months), August 2017 (3 months), November 2017 (3 months), February 2018 (3 months) and May 2018 (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. No noise complaints have been received As noted in the 2018/19 Annual Review, Newman Quarrying ceased noise monitoring following approval from DPIE.	
	Noise Management Plan			
5	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA;	Noise Management Plan approved by DPE 9 May 2016	The Noise Management Plan was submitted to DPE on 5 May 2017 and the revised plan was approved on 9 May 2017.	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 (b) be submitted to the Secretary within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (c) describe the measures that would be implemented to ensure: • compliance with the noise criteria in this consent; • best practice management is being employed; and • the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 4); (d) describe the proposed noise management system; and (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 section4 describes Control Measuresfor noise from the quarry andtransport operations, andmanagement under adverseweather conditions.Section 5 describes NoiseMonitoring Protocol andEvaluation of Compliance.The Noise Management Plandescribes the overall noisemanagement systemNoise Management Plan Section5 describes Noise MonitoringProtocol and Evaluation ofCompliance including ofregularly evaluating theperformance of the project,including road traffic noise andnoise Compliance monitoring atthe nearest affected residenceNoise Management Plan section5.2 includes a Contingency Planwhile section 5.3 addressesReporting. Section 6 provides amechanism for regular Reviewand Improvement	
6	The Applicant must implement the approved Noise Management Plan as approved from time to time by the Secretary			Noted



Condition No	Development Consent Condition				Verification	Comments	Compliance	
	BLASTING							
7	Blasting Assessment Criteria The Proponent shall ensure that the blasting on the site does not cause exceedances of the criteria in Table 3. Table 3: Blasting criteria				es of the	Blast Monitoring in accordance with Condition 7	Blasting activities have been monitored in accordance with the requirements of the Blast Management Plan. The maximum recorded vibration level and airblast	
	Location Any residence on privately owned land, or any public infrastructure	Airblast Overpressure (dB(Lin Peak) 120 115	Ground Vibration (mm/s) 10 5	Allowable exceedance 0% 5% of the total blasts over a 12 mth period			overpressure level at Location R3 are compliant with Condition 7.	Compliant
	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.							
8	Blasting Frequency The Applicant may carry of additional blast is required blasts required to ensure th	following a blast	misfire. This c		Blast Monitoring Sly's Quarry August 2017	A review of blast events confirms that Blast Frequency has not exceeded 2 blasts per calendar	Compliant	



Condition No	Development Consent Condition	Verification	Comments	Compliance
	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.	to April 2021	month	
9	 Operating Conditions During blasting operations, the Applicant must: (a) implement best practice management to: protect the safety of people and livestock in the areas surrounding blasting operations; protect public or private infrastructure/property in the surrounding area from damage from blasting operations and minimise the dust and fume emissions of blasting; (b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and (c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary. 	Blast Management Plan 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;	Co <mark>m</mark> pliant
	Blast Management Plan			
10	The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; (b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent; (c) include measures to manage flyrock; (d) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;	Blast Management Plan approved by DPE on 9 May 2016	The Blast Management Plan was submitted to DPE on 5 May 2017 and the revised plan was approved on 9 May 2017. Blast Management Plan section 4 describes Control Measures for blasts from the quarry and management under adverse weather conditions.	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	(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.		Section 5 describes Blast Monitoring Protocol and Evaluation of Compliance. The Blast Management Plan describes the overall blast management system 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	
11	The Applicant must implement the approved Blast Management Plan as approved from time to time by the Secretary.	BMP updated as required		Observation



Condition No	Development Consent Condition			Verification	Comments	Compliance	
	AIR QUALITY						
	Air Quality Impact Assessment (Criteria					
12	The Applicant must ensure that measures are employed 12.so the development do not cause exce privately-owned land.	hat particulate edances of the	matter emissions ge criteria in Table 4 a	Air Quality Management Plan approved by DPE (May 2016)	Dust monitoring was undertaken from August 2017 for PM10, TSP and deposited dust. A Dust Impact Assessment (GHD 2018) report was prepared		
	Pollutant	Averaging Period	Criterion			summarising the results of the monitoring, with the conclusion: The results indicate that the concentration levels of PM10, TSP and deposited dust were below the air quality criteria specified in the Development	
	Particulate matter < 10 μm (PM10)	Annual	^{a,d} 30 µg/m3				
	Particulate matter < 10 µm (PM10)	24 Hour	^ь 50 µg/m3				
	Total suspended particulates (TSP)	Annual	^{a,d} 90 µg/m3				
	c Deposited dust	Annual	^b 2 g/m2/month	^{a,d} 4 g/m2/month		Consent for the Sly's Quarry Expansion Project.	Compliant
	Notes to Table 4: a Cumulative impact (i.e. increas background concentrations due				Based on this it was requested the dust monitoring cease,		
	^b Incremental impact (i.e. increa with zero allowable exceedance				unless there is a justifiable dust complaint or a change in		
	^C Deposited dust is to be assess Australia, AS/NZS 3580.10.1:200				operating conditions that are likely to increase dust emissions from the site, in which areas air		
	- Determination of Particulate M Excludes extraordinary events s sea fog, fire incidents or any oth e "Reasonable and feasible avoil operational requirements in con- 13, 14 and 15 to develop and im	latter - Deposit such as bushfi her activity agr idance measur ditions	ed Matter - Gravime res, prescribed burn eed by the Secretar es" includes, but is n		from the site, in which case air quality monitoring will recommence, as described in Section 5.2. This request was approved by DPE (now DPIE) on 10 October 2018.		
	ensures operational responses t					Dust issues occurring from high	



Condition No	Development Consent Condition	Verification	Comments	Compliance
			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 August 2017 and April 2021 related to dust / air quality.	
	Operating Conditions			
13	The Applicant must: (a) implement best practice management to minimise the dust emissions of the development; (b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent; (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 4); (d) monitor and report on compliance with the relevant air quality conditions in this consent; and (e) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.	Air Quality Management Plan approved by DPE May 2016	BMP has been employed by Newman Quarrying in accordance with the AQMP 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.	Compliant
	Air Quality Management Plan			



Condition No	Development Consent Condition	Verification	Comments	Compliance
14	The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agree by the Secretary; (b) describe the measures that would be implemented to ensure: • compliance with the relevant conditions of this consent; • best practice management is being employed; and • the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events; (c) describe the proposed air quality management system; (d) include an air quality monitoring program that: • is capable of evaluating the performance of the development; • includes a protocol for determining any exceedances of the relevant conditions of consent; • effectively supports the air quality management system; and • evaluates and reports on the adequacy of the air quality management system.	AQMP was prepared by GHD and approved by DPE on 9 May 2016	 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 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. 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 	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
			management system for Sly's Quarry; d) section 5 addresses air quality monitoring and compliance	
15	Air Quality Monitoring was undertaken from 2017		Dust monitoring was undertaken from August 2017 for PM10, TSP and deposited dust. A Dust Impact Assessment (GHD 2018) report was prepared summarising the results of the monitoring, with the conclusion: The results indicate that the concentration levels of PM10, TSP and deposited dust were below the air quality criteria specified in the Development Consent for the Sly's Quarry Expansion Project.	Compliant
			Based on this it was requested the dust monitoring cease, unless there is a justifiable dust complaint or a change in operating conditions that are likely to increase dust emissions from the site, in which case air quality monitoring will recommence, as described in Section 5.2. This request was	



Condition No	Development Consent Condition	Verification	Comments	Compliance
			approved by DPE (now DPIE) on 10 October 2018. 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 August 2017 and April 2021 related to dust / air quality.	
	Meteorological Monitoring			
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



Condition No	Development Consent Condition	Verification	Comments	Compliance
			The meteorological station operated continuously and provided weather data from August 2017 to April 2021 with the exception of a period where data was lost due to battery failure (pers.com Mark Newman 24 April 2021). Plans are in place to install a new weather station which will allow results to be monitored remotely.	
	Greenhouse Gas Emissions			
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: Opportunities for the use of biodiesel will be investigated and used where possible. Efficient plant and vehicles will be used where reasonable and feasible to do so. Turn off engines when not in use. All machinery and vehicles will be maintained in good working order and made to 	



Condition No	Development Consent Condition	Verification	Comments	Compliance
			comply with relevant exhaust standards	
	SOIL AND WATER			
	Water Supply			
18	The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary	Section 3.2 of the Soil and Water Management Plan (GHD, 2017) details a site water balance for the operations.	The water supply for current operations is adequately provided by water stored in the settling basins on the site. 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 - Ongoing
	Water Discharges			
19	The Applicant must comply with the discharge limits in any EPL, or with section 120 of the POEO Act.	A Water Quality Monitoring Summary is provided on the quarry's website - <u>http://newman</u> <u>quarrying.com.</u> <u>au/files/</u>	The summary covers the period from to July 2017 to February 2021. The monitoring indicates the quarry generally complies with the EPL discharge limits. There was only one minor exceedance of the 50mg/L TSS limit (67mg/L recorded in 2018)	Compliant - Ongoing
		A copy of the		



Condition No	Development Consent Condition	Verification	Comments	Compliance
		summary is included in Appendix E .		
	Soil and Water Management Plan			
20	The Applicant must prepare a Soil and Water Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared by suitably qualified and experienced person/s approved by the Secretary; (b) be prepared in consultation with the EPA and DPI Water; (c) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary; and (d) include the EPA's requirements as set out in Appendix 5; (e) include a: (i) Site Water Balance that includes: • details of: • sources and security of water supply; • water use and management on site; • any off-site water transfers; and • reporting procedures; and • measures that would be implemented to minimise clean water use on site; (ii) Surface Water Management Plan, that includes: • a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development;	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
	 a detailed description of the surface water management system on site including the: clean water diversion system; erosion and sediment controls; dirty water management system; water storages; and mitigation measures outlined in the EIS; and a program to monitor and report any surface water discharges; the effectiveness of the water management system, the effectiveness of the water management system, the quality of water discharged from the site to the environment; surface water flows and quality in local watercourses; (iii) Groundwater Management Plan that includes: a provision that requires the 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 a monitoring program to manage potential impacts, if any, on the alluvium and associated surface water source near the proposed extraction area that includes: a minimum of three monitoring bores with automatic water level criteria; contingency measures in the event of a breach of thresholds; and a program to regularly report on monitoring. 			



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
	TRANSPORT			
	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: http://newman quarrying.com. au/files/ A copy is included in Appendix G.	The daily record of truck movements summary on the website covers all days from August 2017 to April 2021.	Compliant
	Operating Conditions			
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 (22/ 04/2021).	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

95

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 22/04/2021	Trucks pass over a rumble grate to dislodge material prior to existing 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 22/04/2021	Business name is adequately signed on doors of trucks – observed during the audit site inspection on 22/04/2021	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, 22/04/2021).	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

96

Condition No	Development Consent Condition	Verification	Comments	Compliance
	Traffic Management Plan			
24	The Applicant must prepare a Traffic Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the RMS and Council;	Corresponden ce in Appendix A of TMP	RMS and Council were consulted – refer to	Compliant
	(b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	Corresponden ce 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</i> <i>Plan - Environmental controls</i> <i>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</i> <i>Plan - Environmental controls</i> <i>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, 22/04/2021)	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, 22/04/2021)	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</i> <i>Management Plan</i> - <i>Environmental inspections and</i> <i>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 22/04/2021	The TMP includes a range of measures such as rumble grid, cleaning vehicles, street sweeping. Refer to <i>Traffic</i> <i>Management Plan -</i> <i>Environmental controls and</i> <i>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, 22/04/2021)		
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
	ABORIGINAL HERITAGE			
26	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; (b) a 10 m buffer area around the suspected item or object is cordoned off; and (c) the OEH is contacted immediately. Work in the 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</i> <i>Act 1974.</i> provisions of Part 6 of the <i>National Parks and Wildlife Act 1974.</i> BIODIVERSITY AND REHABILITATION			Noted
	Biodiversity Offset Strategy			
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</i> <i>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 was completed in December 2019.	Compliant

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



Condition No	Development Consent Condition		Verification	Comments	Compliance
	Secretary.				
	Table 5: Biodiversity credits to be retired				
	Credit Type	Number of Credits			
	Ecosystem Credits				
	NR 115 Blackbutt-bloodwood dry heathy open forest	567			
	NR123 Blackbutt-Turpentine dry heathy open forest	327			
	Species Credits				
	Bordered Guinea Flower (Hibbertia marginata)	15,820			
	Koala (Phascolarctos cinerus)	317			
	Common planigale (Planigale maculata)	317			
	Squirrel glider (Petaurus norfolcensis)	268			
	Brush-tailed phascogale (Phascogale tapoatafa)	244			
	Security of Offsets				
28	Within 18 months of this consent, unless otherwise agre Applicant must make suitable arrangements to provide a for the Biodiversity Offset Strategy, to the satisfaction of t	opropriate long-term security		An updated BRMP including the Biodiversity Offset Strategy matters was completed in 2019. A security bond has been paid and management tasks in the offset area has commenced.	Compliant
	Rehabilitation Objectives				
29	The Applicant must rehabilitate the site to the satisfacti rehabilitation must be generally consistent with the reha and the conceptual rehabilitation plan in Appendix 3 and must comply with the objectives in Table	abilitation strategy in the EIS		The BRMP has been completed and approved (December 2019). However, in general, the BRMP will not be triggered until clearing is proposed within Stage 2 of the	Compliant



Condition No	Development Conser	nt Condition	Verification	Comments	Compliance
	Table 6: Rehabilitation Obje	ectives		Quarry's operation program. While the Nest Box Management Plan has been triggered, other rehabilitation requirements have	
	Feature	Objective		rehabilitation requirements have not. Rehabilitation will be	
	Site (as a whole)	Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land		ot. Renabilitation will be ngoing throughout and beyond ne life of the Quarry's operation.	
	Surface Infrastructure	Decommissioned and removed, unless otherwise agreed by the Secretary			
	Quarry benches and pit floor (Site A)	Landscaped and vegetated using native tree and understorey species			
	Past sand mining sites (Sites B and C)	Returned to the pre-development ground level Landscaped and revegetated using native tree and understorey species			
	Final Void	Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void			
	Progressive Rehabilitatio	n			
30	practicable following disturb to minimise the total area ex measures must be implemen in disturbed areas that are r	tate the site progressively, that is, as soon as reasonably pance. All reasonable and feasible measures must be taken posed for dust generation at any time. Interim stabilisation ned where reasonable and feasible to control dust emissions not active and which are not ready for final rehabilitation.		The BRMP has been completed and approved (December 2019). In general, the BRMP will not be triggered until clearing is proposed within Stage 2 of the Quarry's operation program. The exception is the Nest Box	Compliant
	Note: It is accepted that parts of further disturbance in future.	of the site that are progressively rehabilitated may be subject to		Management Plan (see above). The rehabilitation works are yet	



Condition No	Development Consent Condition	Verification	Comments	Compliance
			to be triggered.	
	Biodiversity and Rehabilitation Management Plan			
31	 The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH and Council; (b) be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise; (c) be approved by the Secretary, prior to commencing quarrying operations in Stages 2 or 3 (refer Appendix 2), unless the Secretary agrees otherwise (d) provide details of the conceptual final landform and associated land uses for the site; (e) describe how the implementation of the Biodiversity Offset Strategy would be integrated with the overall rehabilitation of the site; (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: manage remnant vegetation and habitat on site, including within the Biodiversity Offset Strategy area; and ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent; (h) include a detailed description of the measures that would be implemented for each 3-year period following initial approval of the plan) including the procedures to be implemented for: maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation 		The current BRMP was reviewed. This document was in development for several years in consultation with OEH. The BRMP is considered comprehensive and meets all the requirements of the condition. The BRMP includes the required Biodiversity Offset Strategy. The document was finalised (i.e. accepted) in December 2019). 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.	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 restoring and enhancing the quality of native vegetation and fauna habitat in the biodiversity offset and rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features; protecting and conserving habitat for the Bordered Guinea Flower (<i>Hibbertia marginata</i>); protecting vegetation and fauna habitat outside the approved disturbance area on-site; minimising the impacts on native fauna, including undertaking preclearance surveys; establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers; ensuring minimal environmental consequences for threatened species, populations and habitats; 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; collecting and propagating seed; controlling weeds and feral pests; controlling no obstruction of legal public access along the Crown public road referred to as 'Sly's Road, including managing public safety risks associated with rights of access over Sly's Road by installing appropriate fencing and signage; and managing bushfire risk; include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; 			
	(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			



Condition No	Development Consent Condition	Verification	Comments	Compliance
	(k) include details of who would be responsible for monitoring, reviewing, and implementing the plan.			
32	The Applicant must implement the approved Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.		It is considered, in general the BRMP has not been triggered due to no clearing having occurred in Stage 2. However, the Nest Box Management Plan has been triggered by clearing in Stage 1 and the implementation of this component is considered compliant. The BOS has been developed (included in BRMP Dec 2019) and is considered to have been commenced.	Compliant
	Conservation and Rehabilitation Bond			
33	 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: (a) calculating the cost of implementing the Biodiversity Offset Strategy over the next 3 years; (b) calculating the cost of rehabilitating the site, taking into account the likely surface disturbance over the next 3 years of quarrying operations; and (c) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary. <i>Notes:</i> <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</i> 		The Biobanking Agreement was established on 7th February 2019. The Biodiversity Conservation Trust confirmed in a letter dated 27th August 2019	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 Agreement, or transfer to conservation reserve estate can be used to reduce the liability of the Conservation and Rehabilitation Bond. If capital and other expenditure required by the Biodiversity and Rehabilitation Management Plan is largely complete, the Secretary may waive the requirement for lodgement of a bond in respect of the remaining expenditure. If the Biodiversity Offset Strategy and/or rehabilitation of the site area are completed (or partially completed) to the satisfaction of the Secretary, then the Secretary will release the bond (or relevant part of the bond). If the Biodiversity Offset Strategy and rehabilitation of the site are not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works. 			
34	 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: (a) effects of inflation; (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 (c) performance of the implementation of the Biodiversity Offset Strategy and rehabilitation of the site to date. 		An updated BRMP including the Biodiversity Offset Strategy was implemented in December 2019. While the establishment of the Bond occurred outside the 3- month period of the previous Independent Environmental Audit, this was due to ongoing negotiations with OEH.	Compliant
	VISUAL			
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.	Development Consent Schedule 3 Condition 35	The quarry is visually obscured from the majority of the surrounding area by the topography, viewing distance and	Compliant
		Visual		



Condition No	Development Consent Condition	Verification	Comments	Compliance
		assessment EIS (GHD March 2015)	surrounding vegetation.	
	WASTE			
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	At the time of audit inspection (22.04.2021), the OSMS appears to be operated satisfactorily however the Land Application Area was overgrown and therefore difficult to inspect. It is recommended that the LAA be mown and kept in a well maintained manner to allow future assessment	Non- Compliant Low Risk
	(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	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	(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	Compliant
	d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Waste Management Plan May 2016	Annual reviews indicate compliance with WMP	Compliant
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
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 chemicals, fuels and oils is detailed further in this section. The storage of diesel fuels and chemicals on the site is considered adequate. Batteries are stored appropriately in the large shed. It is noted that a proposed new above ground 1,200 litre fuel tank is to be installed and commissioned near the white generator. The new above- ground diesel fuel tank is currently empty and stored on site for this purpose. This tank will need to be bunded prior to use.	Compliant Ongoing



Condition No	Development Consent Condition	Verification	Comments	Compliance
	DANGEROUS GOODS		In regard to the underground tank for waste oil, additional measures are required to protect the above-ground pipe/funnel from inadvertent damage from vehicles or other machinery.	
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
	BUSHFIRE			
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	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
		2016	has been implemented	
	SCHEDULE 4			
	ADDITIONAL PROCEDURES			
	NOTIFICATION OF LANDOWNERS			
1	 As soon as practicable after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and (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). 			Not Activated
2	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the Secretary is satisfied that an independent review is warranted, then within 2 menths of the Secretary's designs the Applicant must			Not Activated
	 within 2 months of the Secretary's decision, the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: 			



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 consult with the landowner to determine his/her concerns; conduct monitoring to determine whether the development is complying with the retraint criteria in Schedule 3; and if the development is not complying with these criteria, then identify measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review. 			
	SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING			
	ENVIRONMENTAL MANAGEMENT Environmental Management Strategy			
1	 If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant; (b) be prepared in consultation with Council; (c) provide the strategic framework for environmental management of the development; (d) identify the statutory approvals that apply to the development; (e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; (f) describe the procedures that would be implemented to: keep the local community and relevant agencies informed about the operation and environmental performance of the development; receive, record, handle and respond to complaints; resolve any disputes that may arise during the course of the development; 	Environmental Management Strategy, May 2016 Letter from DPE re Approval of Environmental Management Strategy, 9 May 2016	An Environmental Management Strategy was prepared to satisfy Project Approval Schedule 5 condition 1 and approved by DPE on 19 May 2016 section 1 addresses the Strategic Framework for environmental management;	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 respond to emergencies; and include: copies of any strategies, plans and programs approved under the conditions of this consent; and a clear plan depicting all the monitoring to be carried out under the conditions of this consent. 			
2	The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.		section 3 identifies Legal and Other Requirements for Sly's Quarry section 4.3 addresses Roles and Responsibilities of all key personnel involved in the environmental management of Sly's Quarry; The EMS describes processes in Section 5: training and awareness; Section 6 incidents and emergencies Section 7 Communication And complaints handling	Compliant
	Management Plan Requirements			
3	 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; (b) a description of: the relevant statutory requirements (including any relevant approval, licence or lease conditions); 	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

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 any relevant limits or performance measures/criteria; and the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	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 24Traffic Management Plan (TMP) Schedule 3, condition 31Biodiversity and Rehabilitation Management Plan (BRMP) Schedule 3, condition	are addressed under the following section headings in each Plan: baseline data - Existing Environment and Potential Impacts and Environmental Assessment March 2015) Specialist Consultant relevant statutory requirements - Legal and Other Requirements description of the management measures to be implemented – Control Measures program to monitor and report on impacts and environmental performance contingency plan incidents – Incident Reporting Complaints Handling and Response; Evaluation of Compliance Plan Review	



Condition No	Development Consent Condition	Verification	Comments	Compliance
	Revision of Strategies, Plans & Programs			
4	 Within 3 months of the submission of an: (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. 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. 		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 No incident reports were triggered	Not Triggered
	Updating and Staging of Strategies, Plans or Programs			
5	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.			Noted
	 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. Notes: While any strategy, plan or program may be submitted on a staged basis, the 			



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the 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. 			
	Adaptive Management			
6	 The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures as directed by the Secretary to the satisfaction of the Secretary. 			Noted
	Community Consultative Committee			
7	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</i> <i>Mining Developments</i> (Department of Planning, 2007, or its latest version). <i>Notes:</i>			Noted



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community. 			
	REPORTING			
	Incident Reporting			
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 September 2017 and 22 April 2021.	Not triggered
	Regular Reporting			
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.newmans quarrying.com. au	Monitoring results, complaints and are available on the on Newman Quarrying website with the website being updated at least each quarter.	Compliant
	Annual Review			
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: (a) describe the development (including any rehabilitation) that was carried out in the previous financial year,		The annual reviews were undertaken each year	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 and the development that is proposed to be carried out over the current financial year; (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: relevant statutory requirements, limits or performance measures/criteria; requirements of any plan or program required under this consent; monitoring results of previous years; and relevant predictions in the EIS; (c) identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the development; (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development. 			
11	 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 and (if established) the CCC; (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 f or 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; 	Letter from DPE re Approval of Independent Auditor,23 February 2021	Consultation occurred with relevant agencies (DPE, RMS, CVC, OEH, EPA and DPI- Water); Section 4 of this audit report assesses 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;	Compliant



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 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. 		section 4 of this audit report reviews the adequacy of the approved Environmental Management Strategy, Environmental Management Plans and programs 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.	
12	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.	Development Consent SSD 6624	Audit is currently underwa y	Noted
	ACCESS TO INFORMATION			
13	 Within 6 months of the date of this consent, the Applicant must: make the following information publicly available on its website: the documents listed in condition 2(a) of Schedule 2; current statutory approvals for the development; all approved strategies, plans and programs required under the conditions of this consent; a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; a complaints register, updated monthly; the annual reviews of the development; any independent environmental audit, and the Applicant's response to 	Development Consent SSD 6624	The following information publicly available on its website: 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	



Condition No	Development Consent Condition	Verification	Comments	Compliance
	 the recommendations in any audit; and any other matter required by the Secretary; and (b) keep this information up-to-date, to the satisfaction of the Secretary. 		 Heritage Management Plan Noise Management Transport Waste Management Water Management Community Complaints 	



Attachment B Environment Protection Licence 11649

Condition No	EPL Condition			Verification	Comment	Compliance
1	Administrat	ive Conditi	ons			
A1.1	listed below at the prer according to their sche classification and the s	nises specified in A2 duled activity classifi cale of the operation er restricted by a con vity is carried out mus	dition of this licence, the		Sly's Quarry activities have been conducted between 4 August 2017 and 22 April 2021 in compliance with their scheduled activity classification, fee-based activity classification and the scale of the operation.	Compliant



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</i> <i>Planning and Assessment Act 1979</i> for the premises specified in A2.		Sly's Quarry activities have not exceeded 500,000 tonnes per anum the scale of the operation.	Compliant
A2	Premises or plant to which this licence applies			
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: Sly's Quarry Proposed Quarry Expansion Stages of extraction Drawing No 22-175-001 GHD	Compliant
A3	Other Activities			
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	Information Supplied to the EPA			
A4.1	 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition, the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence. 			Noted
2	Discharges to Air and Water and Applications to Land			
P1	Location of monitoring/discharge points and areas			
P1.1	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.			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		Not Triggered



Condition No	EPL Condition				Verification	Comment	Compliance
	Water and Land						
	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	Limit Conditions						
L1	Pollution of Waters						
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.			condition of this) of the Protection			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	Concentratio	on Limits					



Condition No	n EPL Condition			Verification	Comment	Compliance
L2.1	the table\s below (by pollutant discharged	/ a point number), the c	d to that area, must not			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	Water and/or La Pollutant Oil and Grease pH Total Suspended Solids	nd Concentration L Units of Measure Visible pH milligrams per litre	imits 100 percentile concentration limit Nil Visible 6.5-8.5 50		The Water Quality summary covers the period from to July 2017 to February 2021. The monitoring indicates the quarry generally complies with the EPL discharge limits. There was only one minor exceedance of the 50mg/L TSS limit (67mg/L recorded in 2018)	Not Triggered
L2.5	discharge from the f	mits in the above table inal sediment basin aris total falling over any co				Noted



Condition No	EPL Condition	Verification	Comment	Compliance
L3	Waste			
L3.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal 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 4 August 2017 and 22 April 2021	Compliant
L4	Noise Limits			
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



Condition No	EPL Condition	Verification	Comment	Compliance
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 3o C/100m and wind speeds greater than 2 metres/second at 10 metres above ground level; or c) Temperature inversion conditions greater than 3oC/100m. 		Noise monitoring was conducted in consideration of metrological constraints identified in EPL condition L4.3 (a, b and c)	Compliant
L5	Blasting			
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 4 August 2017 and 22 April 2021 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 4 August 2017 and 22 April 2021 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	Hours of Operation			
L6.1	 L6.1 Noise generating activities at the premises must be conducted during the following hours: 7:00 am and 6:00 pm Monday to Friday; 8:00 am and 1:00 pm Saturday; at no time on Sundays and Public Holidays. 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
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			Noted



Condition No	EPL Condition	Verification	Comment	Compliance
	affected residents as soon as possible or within a reasonable period in the case of emergency.			
4	Operating Conditions			
01	Activities must be carried out in a competent manner			
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
02	Maintenance of plant and equipment			
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.		All equipment and vehicles operated at Sly's Quarry by Newmans Quarrying P/L are maintained in accordance with the manufacturer's specifications at the on- site workshops.	Compliant



Condition No	EPL Condition	Verification	Comment	Compliance
O3	Dust			
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, updated 2020	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	Emergency Response			
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 http://www.epa.nsw.gov.au/legislation/poefaqspirmps.htm	Pollution Incident Response Management Plan (PIRMP) is loacted on www.newmansquarrying.com.au	A current Pollution Incident Response Management Plan (PIRMP) for Sly's Quarry is loacted on the Newmans Quarying Website	Compliant
O5	Process and Management			



Condition No	EPL Condition	Verification	Comment	Compliance
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 - http://newmanquarrying.com.au/files/ A copy of the summary is included in Appendix E .	The Water Quality summary covers the period from to July 2017 to February 2021. The monitoring indicates the quarry generally complies with the EPL discharge limits. There was only one minor exceedance of the 50mg/L TSS limit (67mg/L recorded in 2018)	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 Appendix E .	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 22/04/2021		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 22/04/2021		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 22/04/2021		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 22/04/2021		Compliant
	Fuel and Chemical Storage			
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 22/04/2021	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.	Compliant Ongoing



Condition No	EPL Condition	Verification	Comment	Compliance
	container stored within the bund. 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"		Batteries are stored appropriately in the large shed. It is noted that a proposed new 1,200 litre fuel tank is to be installed and commissioned near the white generator. A new above-ground diesel fuel tank is currently on site for this purpose. This tank will need to be bunded prior to use. In regard to the underground tank for waste oil, additional measures are required to protect the above-ground pipe/funnel from inadvertent damage from vehicles or other machinery.	
5	Monitoring and Recording Conditions			
M1	Monitoring Records			



Condition No	EPL Condition	Verification	Comment	Compliance
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: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.		Records 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 Quarrying website.	Compliant ongoing
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	Requirement to monitor concentration of pollutants discharged			
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee 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			Noted



Condition No	EPL Condition				Verification	Comment	Compliance
	the other colum	ns:					
M2.2	Water and/ or L Point 1	and Monitoring R	Requirements		Soil and Water Management Plan	Water monitoring conducted for Sly's Quarry site currently	
	Pollutant	Units of Measure	Frequency	Sampling Method		includes: □ EPA Identification No. 1 overflow form	
	Oil and Grease	Visible	Special Frequency 1	Visual Inspection		sediment basin in accordance with EPL	
	рН	рН	Special Frequency 1	Grab Sample		condition M2.2.	
	Total Suspended Solids	milligrams per litre	Special Frequency 1	Grab Sample			
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.			arge event arising			Noted
М3		ethods - con	centration lir	nits			
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.			pplied to a utilisation nods Publication			Noted
M4	Environme	ental monito	ring				
Condition No	EPL Condition	Verification	Comment	Compliance			
-----------------	---	--	---	----------------------			
M4.1	The licensee is required to install and maintain a rainfall depth measuring device.	Rainfall depth Measuring depth was observed during site audit inspection on 22/04/2021		Compliant			
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 upload to website.	Compliant ongoing			
M5	Recording of pollution complaints						
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.		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: 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	Complaints Register on Newman Quarrying website	The Community Complaints Register records: □ date of the	Compliant			



Condition No	EPL Condition	Verification	Comment	Compliance
	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.		 complaint; method by which the complaint was made; any personal details of the complainant where provided; nature of the complaint; action taken and any follow-up contact with the complaint. 	
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	Telephone complaints line			
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.		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



Condition No	EPL Condition	Verification	Comment	Compliance
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
6	Reporting Conditions			
R1	Annual return documents			
R1.1	 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data, 7. a Statement of Compliance - Environmental Management Systems and Practices; and 8. a Statement of Compliance - Environmental Improvement Works. 	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
	At the end of each reporting period, the EPA will provide to the			



Condition No	EPL Condition	Verification	Comment	Compliance
	licensee a copy of the form that must be completed and returned to the EPA.			
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 the new licensee is granted; and			Not 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 12 June 2017 to 31 December 2017 Annual Return 1 January 2018 to 31 December 2018 Annual Return 1 January 2019 to 30 June 2019 Annual Return 1 July 2019 to 30 June 2020	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

Condition No	EPL Condition	Verification	Comment	Compliance
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 12 June 2017 to 31 December 2017 Annual Return 1 January 2018 to 31 December 2018 Annual Return 1 January 2019 to 30 June 2019 Annual Return 1 July 2019 to 30 June 2020	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 12 June 2017 to 31 December 2017 Annual Return 1 January 2018 to 31 December 2018 Annual Return 1 January 2019 to 30 June 2019 Annual Return 1 July 2019 to 30 June 2020	The Annual Returns for EPL 11649 have been submitted to the EPA on the approved forms signed/certified by Company Directors.	
R1.8	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. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose		No blast limit exceedance occurred between 4 August 2017 and 22 April 2021	Not Triggered
R2	Notification of environmental harm			



Condition No	EPL Condition	Verification	Comment	Compliance
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.			Noted
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred. Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.			Noted
R3	Written report			
R3.1	 Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event. 			Noted
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.			Noted
R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event;			Noted



Condition No	EPL Condition	Verification	Comment	Compliance
	 c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters. 			
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.			
7	General Conditions			
G1	Copy of licence kept at the premises or plant			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.			Compliant
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.			Noted



Condition No	EPL Condition	Verification	Comment	Compliance
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.			Noted
8	Special Conditions			
E1	Soil and Water Management			
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 outline of stormwater management measures to control pollutants at the source and contain them within the site. outline of erosion and sediment control measures to minimise disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. describe measures for maintaining and monitoring any stormwater controls. provide details of method of storage of topsoil and associated erosion and sediment control 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. describe the size and location of the sediment basins for each stage of the development of the quarry. 	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
	 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. If sediment basins are proposed to be used as water storage for reuse 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. Detail a progressive rehabilitation plan for the quarry, including the exhausted quarry areas "B" and "C". 			
E2	Noise Compliance Assessment		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







Entrance road to quarry



Truck washdown sediment basin

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW





















Our Ref: DOC21/327087 Your Ref: SSD 527139

> Mr Tim Fitzroy Tim Fitzroy and Associates 61 Pine Avenue East Ballina NSW 2478

Dear Mr Fitzroy

RE: Sly's Quarry Environmental Audit (SSD 527139)

Thank you for your e-mail dated 21 April 2021 seeking comments on the environmental audit of the implementation of the Sly's Quarry development consent from the Biodiversity and Conservation Division (BCD) of the Biodiversity, Conservation and Science Directorate in the Environment, Energy and Science Group of the Department of Planning, Industry and Environment. I appreciate the opportunity to provide input and apologise for the delay in responding.

The BCD was formerly part of the Office of Environment and Heritage, but now forms part of a Group that has responsibilities relating to biodiversity (including threatened species and ecological communities, or their habitats), National Parks and Wildlife Service estate, climate change, sustainability, flooding, coastal and estuary matters.

On 1 July 2020 Aboriginal cultural heritage (ACH) functions were transferred from the BCD to Heritage NSW in the Department of Premier and Cabinet. For ACH advice, please contact Heritage NSW at heritagemailbox@environment.nsw.gov.au.

In terms of the scope of the environmental audit, to ensure the interests of the BCD are appropriately addressed, the audit should focus on those measures proposed for the avoidance, minimisation, and offsetting of biodiversity impacts.

Measures relevant to biodiversity protection and management are primarily contained within the Biodiversity Offset Strategy (BOS) and the Biodiversity and Rehabilitation and Management Plan (BRMP). However, other measures relevant to the protection and management of biodiversity are also provided in the:

- a) Environmental Impact Statement (EIS), including information relevant to the modification of the quarry footprint to allow for its expansion.
- b) Soil and Water Management Plan (SWMP)
- c) Air Quality Management Plan (AQMP)
- d) Water Quality Management Plan (WQMP)
- e) Environmental Management Strategy (EMS)

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

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

If you have any questions about this advice, please do not hesitate to contact Ms Nicky Owner, Senior Conservation Planning Officer, at nicky.owner@environment.nsw.gov.au or 6659 8254.

Yours sincerely

Dimitri Young

4 June 2021

DIMITRI YOUNG Senior Team Leader Planning, North East Branch Biodiversity and Conservation



Our Reference:	
Contact:	
Date:	

DOC17/462740 Scott Ensbey 11 September 2017

Mr Mark Newman Newman Quarrying Pty Ltd PO Box 292 YAMBA NSW 2464

Via email to: newmanquarrying@gmail.com

Dear Mr Newman

Environment Protection Licence 11649: Newman's Quarry, Mororo

I refer to my inspection of your quarry conducted on Wednesday 6th September 2017. The inspection was conducted as part of the Environment Protection Authority's (EPA) routine licence inspection program.

The following issues were observed during the inspection for follow up:

1. Truck / Vehicle Wash Bay

At present, all untreated wash-down from trucks and other site vehicles enters the sediment basin system. The EPA concurs with the concerns raised by your independent site auditor that a stand-alone wash bay with grease/oil removal is needed to remove the risk of any grease and oil carry over into the environment.

You advised that you had discussed potential options with your consultant to address this issue.

Action: Advise of a proposal to address this issue.

2. Liquid & Chemical Storage

EPA notes that there are various oils, chemicals, fuels and other liquids stored on site in several nonbunded areas. The EPA encourages best management practices to be implemented to minimise the risk of any spillages of such liquids on the environment. In modifying your storage arrangements on site, the EPA suggests that you refer to the EPA document:

http://www.epa.nsw.gov.au/resources/licensing/2007210liquidsManual.pdf

Action: Advise of actions that will be implemented to improve storage arrangements on site.

3. Underground Waste Oil Storage Tank

You advised that the 5000L underground storage tank located on the eastern side of your maintenance shed was provided to you approximately 5 years ago second hand, but in good condition. At present, you have no way of checking and ensuring that the underground storage tank is leak free and poses no ongoing risk to the environment.

Action: Advise of a methodology that will be implemented to verify that there are no leaks from this tank.

4. Follow Up

The EPA requests that you provide a written update (e.g. email) detailing how you plan to address each of the issues identified in points 1, 2 & 3 above, including a proposed implementation timeframe.

I ask that you provide this update by **29 September 2017.**

The EPA proposes that follow up work will be incorporated into Pollution Reduction Programs on your licence shortly after this date.

If you have any questions relating to this matter, please contact me on 66402522.

Yours sincerely

SEden

Scott Ensbey Regional Operations Officer – North Coast <u>Environment Protection Authority</u>

Hi Tim

As the quarry is located within the Tabbimoble Creek catchment, which incorporates known and indicative habitat for the threatened fish species Oxleyan Pygmy Perch (*Nannoperca oxleyana*) (Freshwater threatened species distribution maps (nsw.gov.au)), the Independent Environmental Audit of the development should include a review of the impacts of quarry operations, including those activities that impact and/or occur outside of the quarry footprint such as run-off, surface/ground water pumping and hauling activities, on adjacent key fish habitat (i.e. third order and greater waterways).

Where impacts are identified by the Independent Environmental Audit (e.g. sedimentation and other water quality impacts such as changes in pH and thermal pollution, increased/decreased flow regimes etc.), then the report must provide appropriate measures to avoid and/or mitigate these impacts from future quarry operations.

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

Regards

Jonathan

Jonathan Yantsch | Senior Fisheries Manager - Coastal Systems (North Coast)

Aboriginal Fishing & Marine and Coastal Environments

NSW Department of Primary Industries | Fisheries

1243 Bruxner Hwy | Wollongbar | NSW 2477

T: 02 6626 1375 | M: 0447 537 168 | E: jonathan.yantsch@dpi.nsw.gov.au

PERMIT APPLICATION FORMS & FISH HABITAT POLICIES:

www.dpi.nsw.gov.au/fishing/habitat/protecting-habitats/toolkit

Submit permit applications via email to ahp.central@dpi.nsw.gov.au

NB: From date of receipt of application, please allow: - 21 days for s199 Consultations

- 28 days for Permits, Consultations and Land Owner's Consent responses - 40 days for Integrated Development Applications

KNOWN & EXPECTED DISTRIBUTION OF THREATENED FISH SPECIES:

www.dpi.nsw.gov.au/fishing/threatened-species/threatened-species-distributions-in-nsw

DPI Fisheries acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work. Dear Tim

The Department has no particular concerns/issues that need to be addressed specifically within the upcoming 2021 Independent Audit. The audit should address the environmental performance and compliance status of the project in accordance with the requirements of Condition 11, Schedule 5 of Development Consent SSD 6624 and as per the Department's Independent Audit Guideline May 2020: <u>https://www.planning.nsw.gov.au/-/media/Files/DPE/Other/Assess-and-regulate/About-Compliance/independent-audit-post-approval-requirements-2020-05-19.pdf</u>

This email should be appended to the Independent Audit Report.

Thank you for getting in touch.

Regards

Angie Hollister Senior Compliance Officer – Far North Region

Compliance | Department of Planning, Industry and Environment **T** 02 6670 8654 | **M** 0427 237 154 | **E** angie.hollister@planning.nsw.gov.au PO Box 72, Murwillumbah NSW 2484 | 135 Murwillumbah Street, Murwillumbah NSW 2484

Please direct all email correspondence to <u>compliance@planning.nsw.gov.au</u>

www.dpie.nsw.gov.au



The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

If you are submitting a compliance document or request as required under the conditions of consent or approval, please note that the Department is no longer accepting lodgement via <u>compliance@planning.nsw.gov.au</u>.

The Department has recently upgraded the Major Projects Website to improve the timeliness and transparency of its post approval and compliance functions. As part of this upgrade, proponents are now requested to submit all post approval and compliance documents online, via the Major Projects Website. To do this, please refer to the instructions available <u>here</u>. Hi Tim

I refer to your email of 21 April 2021, 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.

Our key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with *Future Transport Strategy 2056*.

It is requested the audit consider the following;

- Verify that the approved development is operating in accordance with Schedule 2, Condition 8 and 8A.
- Verify records of laden truck movements and the publication of such records in accordance with Schedule 3, Condition 22.
- Review procedures relating to the management of vehicles under Schedule 3, Condition 23 to confirm appropriate measures are in place to ensure vehicles comply with requirements.
- Review the Traffic Management Plan (TMP) required under Schedule 3, 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 Schedule 3, Condition 25.

If you should have any further questions, please contact our office using the details below.

Kind regards

Leisa Sedger

for Matt Adams Team Leader, Development Services

Community & Place | Region North

Regional & Outer Metropolitan Transport for NSW I work flexibly. Unless it suits you, I don't expect you to read or respond to my emails outside of your normal works hours.

P 02 6640 1362

E <u>development.northern@transport.nsw.gov.au</u>A Level 1, 76 Victoria Street, Grafton NSW 2460



RE: Environmental Audit Sly's Quarry Expansion Lot 2 DP 105504...

Hi Tim,

I have notified the relevant Council officers in regard to your request.

No concerns regarding the current operation of the extractive industry have been raised.

Regards,

Patrick Ridgway Senior Development Planner (02) 6645 0288 0400 343 193 www.clarence.nsw.gov.au

E Monitoring, Incidents and Complaints Register



Complaints / Incident Register for Sly's Quarry

Date 26.5.16	who complained public / truck operator	nature of complaint tailgate popped on truck spilling rocks on to road when the truck hit a large pothole.	response cleaned up by quarry staff ASAP notified state planning of incident notified cvc of holes but no action yet.	sign off 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	mark n



workcover

informed of contractor incident on council road reserve 100m west of quarry gate

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 mark n council inspector overseering works to planning inspector. Contractor installed sediment fence as requested photo's taken

30.6.18	nothing new to report
31.7.18	nothing new to report
31.8.18	nothing new to report
30.9.18	nothing new to report
31.10.18	nothing new to report
30.11.18	nothing new to report
31.12.18	nothing new to report
31.1.19	nothing new to report
28.2.19	nothing new to report
31.3.19	nothing new to report
30.4.19	nothing new to report
31.5.19	nothing new to report
30.6.19	nothing new to report
31.7.19	nothing new to report
31.8.19	nothing new to report
30.9.19	nothing new to report
31.10.19	nothing new to report
30.11.19	nothing new to report
31.12.19	nothing new to report



31.1.20	nothing new to report
28.2.20	nothing new to report
31.3.20	nothing new to report
30.4.20	nothing new to report
31.5.20	nothing new to report
30.6.20	nothing new to report
31.7.20	nothing new to report
31.8.20	nothing new to report
30.9.20	nothing new to report
31.10.20	nothing new to report
31.11.20	nothing new to report
31.12.20	nothing new to report
31.1.20	nothing new to report

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



F Water Quality Monitoring Summary



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY

JACKYBULBIN RD , MORORO

pond E is EPL point 1

DATE	WHO	WEATHER RAIN PA 24 HRS	ST RAIN	PAST POINT	DISCHARGING?	TSS(mg/L) pH	cond	uct OIL	TREATE	D? DISCHARGED?		
3.7.17	mark n	fine	0	28 pond e	no	13	7.2 n/a	no	no	ves		
20.7.17	markn	fine	0	5 pond e	no	24	7.9 n/a	no	no	yes		
1.9.17	mark n	fine	0	0 gw1	n/a	n/a	5.8	153 n/a	n/a	n/a	quarterly test	
1.9.17	mark n	fine	0	0 gw2	n/a	n/a	5.7	256 n/a	n/a	n/a	quarterly test	
1.9.17	mark n	fine	0	0 gw3	n/a	n/a	6.1	165 n/a	n/a	n/a	quarterly test	
3/10/20	17 mark n	raining	18	18 wq1	n/a	3	6.5 n/a	no	n/a	n/a	surface water >10mm	stagnant
3/10/20	17 mark n	raining	18	18 wq2	n/a	18	6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
16/10/20	17 mark n	raining	87	87 wq1	n/a	5	6.2 n/a	no	n/a	n/a	surface water >10mm	running
16/10/20	17 mark n	raining	87	87 wq2	n/a	5	6.2 n/a	no	n/a	n/a	surface water >10mm	running
17/10/20	17 mark n	raining	24	111 wq1	n/a	5	6.2 n/a	no	n/a	n/a	surface water >10mm	running
17/10/20	17 mark n	raining	24	111 wq2	n/a	6	5.9 n/a	no	n/a	n/a	surface water >10mm	running
23/10/20	17 mark n	dry	24	53 wq1	n/a	3	6.4 n/a	no	n/a	n/a	surface water >10mm	running
23/10/20	17 mark n	dry	24	53 wq2	n/a	4	6.2 n/a	no	n/a	n/a	surface water >10mm	running
1/11/20	17 mark n	dry	0	0 pond e	no	9	7.8 n/a	no	n/a	yes		
6/11/20	17 mark n	raining	39	39 wq1	n/a	10	6.1 n/a	no	n/a	n/a	surface water >10mm	running
6/11/20	17 mark n	raining	39	39 wq2	n/a	5	6.1 n/a	no	n/a	n/a	surface water >10mm	running
7/11/20	17 mark n	raining	19	58 wq1	n/a	10	6.6 n/a	no	n/a	n/a	surface water >10mm	running
7/11/20	17 mark n	raining	19	58 wq2	n/a	17	6.5 n/a	no	n/a	n/a	surface water >10mm	running
21/11/20	17 markn	raining	10.5	25.5 pond e	no	20	7.7 n/a	no	no	yes		
21/11/20	17 markn	raining	10.5	25.5 wq1	n/a	5	6.3 n/a	no	n/a	n/a	surface water >10mm	running
21/11/20	17 markn	raining	10.5	25.5 wq2	n/a	5	6.2 n/a	no	n/a	n/a	surface water >10mm	running
30/11/20	17 markn	raining	18	18 wq1	n/a	7	6.2 n/a	no	n/a	n/a	surface water >10mm	running
30/11/20	17 markn	raining	18	18 wq2	n/a	6	6.1 n/a	no	n/a	n/a	surface water >10mm	running
30.11.17	mark n	raining	18	18 gw1	n/a	n/a	5.7	209 n/a	n/a	n/a	quarterly test	
30.11.17	mark n	raining	18	18 gw2	n/a	n/a	5.8	298 n/a	n/a	n/a	quarterly test	

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond

pond E is EPL point 1

DATE	WHO	WEATHER RAIN P 24 HRS		N PAST POINT	DISCHARGING?	TSS(mg/L) pH	condu	ict O	NL	TREATED?	DISCHARGED?		
30.11.17	mark n	raining	18	18 gw3	n/a	n/a	5.1	250 n	/a	n/a	n/a	quarterly test	
1.12.17	mark n	raining	10	10 wq1	n/a	12	6.1 n/a	n	0	n/a	n/a	surface water >10mm	running
1.12.17	mark n	raining	10	10 wq2	n/a	9	6.2 n/a	n	0	n/a	n/a	surface water >10mm	running
2.12.17	mark n	raining	26	36 wq1	n/a	7	6.2 n/a	n	0	n/a	n/a	surface water >10mm	running
2.12.17	mark n	raining	26	36 wq2	n/a	7	6.2 n/a	n	0	n/a	n/a	surface water >10mm	running
6.12.17	mark n	raining	37	45.5 pond e	n/a	24	6.5 n/a	n	0	n/a	yes		
6.12.17	mark n	raining	37	45.5 wq1	n/a	3	6.8 n/a	n	0	n/a	n/a	surface water >10mm	running
6.12.17	mark n	raining	37	45.5 wq2	n/a	13	6.3 n/a	n	0	n/a	n/a	surface water >10mm	running
21.12.17	mark n	raining	18.6	20.4 wq1	n/a	9	6.13 n/a	n	0	n/a	n/a	surface water >10mm	running
21.12.17	mark n	raining	18.6	20.4 wq2	n/a	6	6.14 n/a	n	0	n/a	n/a	surface water >10mm	running
25.12.17	mark n	raining	35.4	54.6 wq1	n/a	11	6.09 n/a	n	0	n/a	n/a	surface water >10mm	running
25.12.17	mark n	raining	35.4	54.6 wq2	n/a	15	6.04 n/a	n	0	n/a	n/a	surface water >10mm	running
26.12.17	mark n	raining	13.8	49.8 wa1	n/a	9	6.22 n/a	n		n/a	n/a	surface water >10mm	running
26.12.17	mark n	raining	13.8	49.8 wg2	n/a	10	6.07 n/a			n/a	n/a	surface water >10mm	running
20.12.17	Indix II	i annig	13.0	45.0 WQ2	iya	10	0.07 104			iya	iya	Surface water >10mm	Tonining.
3.1.18	mark n	raining	19.5	27 pond e	no	9	6.23 n/a	n	0	no	no		
3.1.18	mark n	raining	19.5	27 wq1	n/a	4	6.15 n/a	n	0	n/a	n/a	surface water >10mm	running
3.1.18	mark n	raining	19.5	27 wq2	n/a	3	6.43 n/a	n	0	n/a	n/a	surface water >10mm	running
12.1.18	mark n	fine	0	2 pond e	no	47	7.53 n/a	n	0	no	yes		
22.1.18	mark n	raining	20.1	26.5 wq1	n/a	8	6.13 n/a	n	0	n/a	n/a	surface water >10mm	running
22.1.18	mark n	raining	20.1	26.5 wq2	n/a	11	6.25 n/a	n	0	n/a	n/a	surface water >10mm	running
23.1.18	mark n	raining	27.6	51.3 wq1	n/a	17	6.19 n/a	n	0	n/a	n/a	surface water >10mm	running
23.1.18	mark n	raining	27.6	51.3 wq2	n/a	22	6.29 n/a	n	0	n/a	n/a	surface water >10mm	running
29.1.18	mark n	raining	14.7	60.9 pond e	no	7	8.12 n/a	n	0	no	yes		
29.1.18	mark n	raining	14.7	60.9 wq1	n/a	2	6.47 n/a	n	ю	n/a	n/a	surface water >10mm	running

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



154

WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY **pond E is EPL point 1** JACKYBULBIN RD , MORORO

DATE	WHO	Contract of the second	RAIN PAST 24 HRS	RAIN PAST POINT	DISCHARGING?	TSS(mg/L) pH	cond	uct OIL	TREAT	ED? DISCHARGED?		
29.1.18	mark n	raining	14.7	60.9 wq2	n/a	26	6.14 n/a	no	n/a	n/a	surface water >10mm	running
3.2.18	mark n	raining	21	56 wq1	n/a	4	6.59 n/a	no	n/a	n/a	surface water >10mm	running
3.2.18	mark n	raining	21	56 wq2	n/a	8	6.49 n/a	no	n/a	n/a	surface water >10mm	running
12.2.18	mark n	raining	18.6	5 20.4 wq1	n/a	2	6.52 n/a	no	n/a	n/a	surface water >10mm	running
12.2.18	mark n	raining	18.6	5 20.4 wq2	n/a	24	6.18 n/a	no	n/a	n/a	surface water >10mm	running
19.2.18	mark n	fine	c	0 gw1	n/a	n/a	5.61	136 no	n/a	n/a	quarterly test	
19.2.18	mark n	fine	0	0 0 gw2	n/a	n/a	5.36	235 no	n/a	n/a	quarterly test	
19.2.18	mark n	fine	c	0 gw3	n/a	n/a	4.8	615 no	n/a	n/a	quarterly test	
21.2.18	mark n	raining	22.9	25 wq1	n/a	6	6.38 n/a	no	n/a	n/a	surface water >10mm	running
21.2.18	mark n	raining	22.9	25 wq2	n/a	12	6.04 n/a	no	n/a	n/a	surface water >10mm	running
24.2.18	mark n	raining	12.9	46.5 wq1	n/a	7	6.29 n/a	no	n/a	n/a	surface water >10mm	running
24.2.18	mark n	raining	12.9	46.5 wg2	n/a	9	6.25 n/a	no	n/a	n/a	surface water >10mm	running
27.2.18	markn	raining	26	5 39 wq1	n/a	7	6.39 n/a	no	n/a	n/a	surface water >10mm	running
27.2.18	mark n	raining	26	5 39 wq2	n/a	8	6.3 n/a	no	n/a	n/a	surface water >10mm	running
6.3.18	mark n	raining	38.7	47.7 wq1	n/a	13	6.09 n/a	no	n/a	n/a	surface water >10mm	running
6.3.18	mark n	raining	38.7	47.7 wq2	n/a	7	6.25 n/a	no	n/a	n/a	surface water >10mm	running
6.3.18	mark n	raining	38.7	47.7 pond e	no	67	7.53 n/a	no	ves	no	to be retested before relea	se
15.3.18	mark n	raining	28.5		no	12	7.53 n/a	no	no	yes	retest tss passed prior to re	elease
7.3.18	mark n	raining	10	51 wq1	n/a	4	6.33 n/a	no	n/a	n/a	surface water >10mm	running
7.3.18	mark n	raining	10		n/a	5	6.27 n/a	no	n/a	n/a	surface water >10mm	running
10.3.18	mark n	raining	10	60 wq1	n/a	<1	6.16 n/a	no	n/a	n/a	surface water >10mm	running
10.3.18	mark n	raining	10		n/a	<1	6.24 n/a	no	n/a	n/a	surface water >10mm	running
15.3.18	mark n	raining	28.5	5 37.5 wa1	n/a	3	6.5 n/a	no	n/a	n/a	surface water >10mm	running
15.3.18	mark n	raining	28.5		n/a	6	6.54 n/a	no	n/a	n/a	surface water >10mm	running
24.3.18	mark n	raining	44	48.5 wq1	n/a	3	6.23 n/a	no	n/a	n/a	surface water >10mm	running

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond

pond E is EPL point 1

DATE	WHO	WEATHER RAIN 24 H		RAIN PAST 5 DAYS	POINT	DISCHARGING?	TSS(mg	/L) рН	cond	uct Ol	L	TREATED?	DISCHARGED?		
24.3.18	mark n	raining	44	48.5	5 wq2	n/a		4	6.3 n/a	no	0	n/a	n/a	surface water >10mm	running
9.4.18	mark n	raining	10	15	5 wq1	n/a		7	6.17 n/a	no		n/a	n/a	surface water >10mm	running
9.4.18	mark n	raining	10	15	5 wq2	n/a		7	6.68 n/a	no	0	n/a	n/a	surface water >10mm	running
18.4.18	mark n	raining	10) wq1	n/a		10	6.27 n/a	no		n/a	n/a	surface water >10mm	running
18.4.18	mark n	raining	10	10	0 wq2	n/a		4	6.29 n/a	no	•	n/a	n/a	surface water >10mm	running
23.4.18	mark n	dry	29.1	36.9	9 wq1	n/a		4	6.33 n/a	no)	n/a	n/a	surface water >10mm	running
23.4.18	mark n	dry	29.1	36.9	9 wq2	n/a		4	6.38 n/a	no	0	n/a	n/a	surface water >10mm	running
23.4.18	mark n	dry	29.1	36.9	9 pond e	no		18	7.89 n/a	no	0	no	yes		
8.5.18	mark n	raining	10	10) wq1	n/a		5	6.4 n/a	no		n/a	n/a	surface water >10mm	running
8.5.18	mark n	raining	10	10) wq2	n/a		16	6.21 n/a	no	,	n/a	n/a	surface water >10mm	running
8.5.18	mark n	raining	10	10) pond e	no		23	7.7 n/a	nc	,	no	yes		
21.5.18	mark n	dry	0	10	0 gw1	n/a	n/a		5.48	113 no	,	n/a	n/a	quarterly test	
21.5.18	mark n	dry	0	10) gw2	n/a	n/a		5.2	222 no	0	n/a	n/a	quarterly test	
21.5.18	mark n	dry	0	10) gw3			well d	iry not obta	inable				quarterly test	
30.5.18	mark n	raining	52.8	52.8	8 wq1	n/a		4	6.56 n/a	no	,	n/a	n/a	surface water >10mm	running
30.5.18	mark n	raining	52.8	52.8	8 wq2	n/a		6	6.48 n/a	no)	n/a	n/a	surface water >10mm	running
15.6.18	mark n	dry	0	6	5 pond e	no		7	7.37 n/a	no	0	no	yes		
6.7.18	mark n	dry	11.5	24	4 wq1	n/a	<1		6.4 n/a	no		n/a	n/a	surface water >10mm	running
6.7.18	mark n	dry	11.5	24	4 wq2	n/a		4	6.3 n/a	no		n/a	n/a	surface water >10mm	running
8.8.18	mark n	dry	0	0) gw1	n/a	n/a		5.4	106 no	,	n/a	n/a	quarterly test	
8.8.18	mark n	dry	0) gw2	n/a	n/a		5.3	236 no		n/a	n/a	quarterly test	
8.8.18	mark n	dry	0) gw3		-	well n	ot obtainab	ble		-	-	quarterly test	
27.8.18	mark n	dry	19	22	2 wq1	n/a		23	6.4 n/a	no		n/a	n/a	surface water >10mm	running
27.8.18	mark n	dry	19		2 wa2	n/a		30	6.4 n/a	no		n/a	n/a	surface water >10mm	running
				_											

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond

pond E is EPL point 1

DATE	wно	WEATHER	RAIN PAST 24 HRS	RAIN PA 5 DAYS	ST POINT	DISCHARGING?	TSS(mg/L) pH	H cond	uct OII	L TREATE	D? DISCHARGED?	l	
4.9.18	mark n	raining	24 1163		15 wa1	n/a	2	6.7 n/a	no	n/a	n/a	surface water >10mm	running
4.9.18	mark n	raining	1		15 wq2	n/a	6	6.4 n/a	no		n/a	surface water >10mm	running
5.9.18	mark n	raining	2	-	41 wq1	n/a	2	7 n/a	no	n/a	n/a	surface water >10mm	running
5.9.18	mark n	raining	2	-		n/a	11	6.4 n/a			n/a	surface water >10mm	
5.9.18	mark n	raining	2	•	41 wq2	nya	11	0.4 N/a	no	n/a	nya	Surface water >10mm	running
14.9.18	mark n	dry		0	0 pond e	no	21	7.7 n/a	no	no	yes		
21.9.18	mark n	dry	1	3	13 wq1	n/a	15	6.4 n/a	no	n/a	n/a	surface water >10mm	running
21.9.18	mark n	dry	1	3	13 wg2	n/a	11	5.8 n/a	no	n/a	n/a	surface water >10mm	running
		1 A.									-		-
11.10.18	mark n	raining	1	1	11 wq1	n/a	10	6.4 n/a	no	n/a	n/a	surface water >10mm	runnning
11.10.18	mark n	raining	1	1	11 wq2	n/a	31	6.2 n/a	no	n/a	n/a	surface water >10mm	runnning
12.10.18	mark n	raining	34.	8 4	15.8 wq1	n/a	9	6.3 n/a	no	n/a	n/a	surface water >10mm	running
12.10.18	mark n	raining	34.	8 4	5.8 wq2	n/a	30	6.1 n/a	no	n/a	n/a	surface water >10mm	running
13.10.18	mark n	raining	2	4 6	9.8 wq1	n/a	8	6.2 n/a	no	n/a	n/a	surface water >10mm	running
13.10.18	mark n	raining	2	4 6	9.8 wq2	n/a	35	6.2 n/a	no	n/a	n/a	surface water >10mm	running
15.10.18	mark n	raining	5		116 wq1	n/a	9	6.3 n/a	no	n/a	n/a	surface water >10mm	running
15.10.18	mark n	raining	5	7 :	116 wq2	n/a	35	6.2 n/a	no	n/a	n/a	surface water >10mm	running
16.10.18	mark n	raining	18.		4.9 wq1	n/a	4	7.1 n/a	no		n/a	surface water >10mm	running
16.10.18	mark n	raining	18.	9 13	4.9 wq2	n/a	10	6.9 n/a	no	n/a	n/a	surface water >10mm	running
17.10.18	mark n	dry	2	-	7.9 wq1	n/a	3	7 n/a	no		n/a	surface water >10mm	running
17.10.18	mark n	dry	2	4 14	7.9 wq2	n/a	8	6.9 n/a	no	n/a	n/a	surface water >10mm	running
21.10.18	mark n	drv	38	5 3	8.5 wg1	n/a	15	6.4 n/a	no	n/a	n/a	surface water >10mm	running
21.10.18	mark n	dry	38.		8.5 wq2	n/a	11	5.8 n/a	no		n/a	surface water >10mm	running
								5.0 100					
31.10.18	mark n	dry	0.	6	0.6 pond e	no	8	7.4 n/a	no	no	yes		
5.11.18	mark n	dry		5	5 gw1	n/a	n/a	5.9	147 no	n/a	n/a	quarterly test	
5.11.18	mark n	dry		5	5 gw2	n/a	n/a	5.4	492 no	n/a	n/a	quarterly test	
5.11.18	mark n	dry		5	5								

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond E is EPL point 1**

DATE	WHO	WEATHER	RAIN PAST 24 HRS	RAIN PAST 5 DAYS	POINT	DISCHARGING?	TSS(mg/	ц) рн	condu	ict OIL	TREATE	D? DISCHARGED	t.	
19.11.18	mark n	drv	1	7 19	9 wa1	n/a		5	6.2 n/a	no	n/a	n/a	surface water >10mm	stagnant
19.11.18	mark n	dry	1	7 19	9 wq2	n/a		9	6 n/a	no	n/a	n/a	surface water >10mm	stagnant
22.11.18	mark n	dry	1	8 37	7 wq1	n/a		3	6.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
22.11.18	mark n	dry	1	8 37	7 wq2	n/a		2	6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
28.11.18	mark n	dry	12.	3 12.3	5 wq1	n/a	<1		6.4 n/a	no	n/a	n/a	surface water >10mm	stagnant
28.11.18	mark n	dry	12.3	3 12.3	3 wq2	n/a		13	6 n/a	no	n/a	n/a	surface water >10mm	stagnant
17.12.18	mark n	dry	2		5 wq1	n/a		12	6.5 n/a	no	n/a	n/a	surface water >10mm	stagnant
17.12.18	mark n	dry	. 2	1 31.5	5 wq2	n/a		13	6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
21.12.18	mark n	dry	3	1 41	1 wq1	n/a		21	6.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
21.12.18	mark n	dry	3	1 41	1 wq2	n/a	<1		6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
7.1.19	mark n	dry		0 0) pond e	no		17	8.1 n/a	no	no	yes		
4.2.19	mark n	dry	16.	8 16.8	8 wq1	n/a		25	6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
4.2.19	mark n	dry	16.	8 16.8	8 wq2	n/a		52	6.1 n/a	00	n/a	n/a	surface water >10mm	stagnant
8.2.19	mark n	dry	10.	2 13.6	5 wq1	n/a		30	6.4 n/a	no	n/a	n/a	surface water >10mm	stagnant
8.2.19	mark n	dry	10.3	2 13.6	5 wq2	n/a		39	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
8.2.19	mark n	dry	10.	2 13.6	5 gw1	n/a	n/a	well	dry not obtai	nable			quarterly test	
8.2.19	mark n	dry	10.	2 13.6	5 gw2	n/a	n/a		5.3	186 no	n/a	n/a		
8.2.19	mark n	dry	10.	2 13.6	5 gw3	n/a	n/a	well	dry not obtai	nable			quarterly test	
22.2.19	mark n	rain	48.	9 49.8	8 wq1	n/a		15	6.4 n/a	no	n/a	n/a	surface water >10mm	stagnant
22.2.19	mark n	rain	48.9	9 49.8	s wq2	n/a		29	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
4.3.19	mark n	dry	1	0 22	2 wq1	n/a		32	6.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
4.3.19	mark n	dry	1	0 22	2 wq2	n/a		6	5.9 n/a	no	n/a	n/a	surface water >10mm	stagnant
8.3.19	mark n	dry	27.	3 27.3	3 wq1	n/a		9	6.2 n/a	no	n/a	n/a	surface water >10mm	stagnant
8.3.19	mark n	dry	27.	3 27.3	3 wq2	n/a		9	5.3 n/a	no	n/a	n/a	surface water >10mm	stagnant

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY **pond E is EPL point 1** JACKYBULBIN RD , MORORO

DATE	WHO	WEATHER	RAIN PAST	RAIN PAST POINT 5 DAYS	DISCHARGING?	TSS(mg/L) pH	conduct	OIL	TREATE	D? DISCHARGED?		
15.3.19	mark n	dry		0 0 pond e	no	9	7.3 n/a	no	no	yes		
16.3.19	mark n	rain	70.:	1 70.1 wq1	n/a	13	6.2 n/a	no	n/a	n/a	surface water >10mm	stagnant
16.3.19	mark n	rain	70.:	1 70.1 wq2	n/a	8	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
27.03.19	mark n	rain	14.	4 14.4 wq1	n/a	19	6.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
27.03.19	mark n	rain	14.4	4 14.4 wq2	n/a	38	57 n/a	no	n/a	n/a	surface water >10mm	stagnant
01.04.19	mark n	dry	17.	4 35.9 wq1	n/a	10	6.4 n/a	no	n/a	n/a	surface water >10mm	stagnant
01.04.19	mark n	dry	17.	4 35.9 wq2	n/a	7	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
03.04.19	mark n	dry	38.4	4 55.8 wq1	n/a	3	5.9 n/a	no	n/a	n/a	surface water >10mm	stagnant
03.04.19	mark n	dry	38.4	4 55.8 wq2	n/a	22	5.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
03.04.19	mark n	dry	38.4	4 55.8 pond e	no	32	6.9 n/a	no	no	yes		
06.04.19	mark n	dry	1	0 48.4 wq1	n/a	3	6.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
06.04.19	mark n	dry	1	0 48.4 wq2	n/a	11	5.6 n/a	no	n/a	n/a	surface water >10mm	stagnant
13.04.19	mark n	dry	1	3 14.2 wq1	n/a	17	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
13.04.19	mark n	dry	1	3 14.2 wq2	n/a	10	6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
20.04.19	mark n	rain	25.	2 26.7 wq1	n/a	7	6.2 n/a	no	n/a	n/a	surface water >10mm	stagnant
20.04.19	mark n	rain	25.3	2 26.7 wq2	n/a	8	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
21.04.19	mark n	rain	26.	52.8 wq1	n/a	13	5.9 n/a	no	n/a	n/a	surface water >10mm	stagnant
21.04.19	mark n	rain	26.	1 52.8 wq2	n/a	9	6.1 n/a	no	n/a	n/a	surface water >10mm	stagnant
17.05.19	mark n	dry	2	5 28.9 wq1	n/a	18	6 n/a	no	n/a	n/a	surface water >10mm	stagnant
17.05.19	mark n	dry	25	5 28.9 wq2	n/a	4	5.7 n/a	no	n/a	n/a	surface water >10mm	stagnant
21.05.19	mark n	dry		1.8 gw1	n/a	n/a wel	dry not obtainal	ble			quarterly test	
21.05.19	mark n	dry		1.8 gw2	n/a	n/a	5.4 23	31 no	n/a	n/a	quarterly test	
21.05.19	mark n	dry	1.9	0 1.8 gw3	n/a		dry not obtainal	ble			quarterly test	
25.06.19	mark n	rain	15.3	17.4 wg1	n/a	5	6.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
25.06.19	mark n	rain	15.	3 17.4 wq2	n/a	11	5.3 n/a	no	n/a	n/a	surface water >10mm	stagnant

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond E is EPL point 1**

DATE	WHO	WEATHER	RAIN PAST	RAIN PAST POINT	DISCHARGING?	TSS(mg/L) pH	condu	ct OIL	TREATED	DISCHARGED?		
			24 HRS	5 DAYS								
27.06.19	mark n	rain	10.2	2 27.6 wq1	n/a	3	5.5 n/a	no	n/a	n/a	surface water >10mm	stagnant
27.06.19	mark n	rain	10.2	2 27.6 wq2	n/a	14	6.5 n/a	no	n/a	n/a	surface water >10mm	stagnant
28.06.19	markn	rain	10.2	2 37.8 wq1	n/a	4	6.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
28.06.19	markn	rain	10.2	2 37.8 wq2	n/a	19	5.3 n/a	no	n/a	n/a	surface water >10mm	stagnant
05.07.19	mark n	rain	19.2	2 27.6 wq1	n/a	1	6.54 n/a	no	n/a	n/a	surface water >10mm	stagnant
05.07.19	mark n	rain	19.2	2 27.6 wq2	n/a	17	5.6 n/a	no	n/a	n/a	surface water >10mm	stagnant
08.07.19	mark n	rain	22	41.2 wq1	n/a	3	6.08 n/a	no	n/a	n/a	surface water >10mm	stagnant
08.07.19	mark n	rain	22	2 41.2 wq2	n/a	6	5.53 n/a	no	n/a	n/a	surface water >10mm	stagnant
08.07.19	mark n	rain	22	2 41.2 pond e	e no	32	7.46 n/a	no	no	yes		
01.08.19	mark n	rain	16.8	26.4 wq1	n/a	40	6.38 n/a	no	n/a	n/a	surface water >10mm	stagnant
01.08.19	mark n	rain	16.8	8 26.4 wq2	n/a	42	5.62 n/a	no	n/a	n/a	surface water >10mm	stagnant
08.10.19	mark n	fine		0 0 gw1	n/a	well dry not obt	ainable				quarterly test	
08.10.19	mark n	fine	0	0 0 gw2	n/a	n/a	5.32 2	10.5 no	n/a	n/a	quarterly test	
08.10.19	mark n	fine	0	0 0 gw3	n/a	well dry not obt	ainable				quarterly test	
11.1.20	mark n	fine	16	5 16 wq1	n/a	6	6.12 n/a	no	n/a	n/a	surface water >10mm	stagnant
11.1.20	mark n	fine	16	5 16 wq2	n/a	8	5.88 n/a	no	n/a	n/a	surface water >10mm	stagnant
16.1.20	mark n	rain	15	5 19.2 wq1	n/a	11	6.22 n/a	no	n/a	n/a	surface water >10mm	stagnant
16.1.20	mark n	rain	15	5 19.2 wq2	n/a	16	5.96 n/a	no	n/a	n/a	surface water >10mm	stagnant
17.1.20	mark n	rain	33		n/a	8	6.42 n/a	no	n/a	n/a	surface water >10mm	running
17.1.20	mark n	rain	33	52.5 wq2	n/a	14	6.02 n/a	no	n/a	n/a	surface water >10mm	running
18.01.20	mark n	rain	77	7 129.5 wq1	n/a	1	6.05 n/a	no	n/a	n/a	surface water >10mm	running
18.01.20	mark n	rain	77	7 129.5 wq2	n/a	2	6.14 n/a	no	n/a	n/a	surface water >10mm	running
19.01.20	mark n	rain	87	7 216.5 wq1	n/a	1	6.17 n/a	no	n/a	n/a	surface water >10mm	running
19.01.20	mark n	rain	87	7 216.5 wq2	n/a	2	6.13 n/a	no	n/a	n/a	surface water >10mm	running
25.1.20	mark n	fine	23	3 23 wq1	n/a	6	5.98 n/a	no	n/a	n/a	surface water >10mm	running

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY

JACKYBULBIN RD , MORORO

pond E is EPL point 1

DATE	who	WEATHER	RAIN PAST 24 HRS	RAIN PA 5 DAYS	ST POINT	DISCHARGING?	TSS(mg/L) pH	conduct	OIL	TREATED?	DISCHARGED?		
25.1.20	mark n	fine	23		23 wq2	n/a	6	5.98 n/a	no	n/a	n/a	surface water >10mm	running
4.2.20	mark n	fine	11.5	1	11.5 gw1	wells affected by	bushfire waiting or	n advice				quarterly test	
4.2.20	mark n	fine	11.5	1	11.5 gw2	wells affected by	bushfire waiting or	n advice				quarterly test	
4.2.20	mark n	fine	11.5	1	11.5 gw3	wells affected by	bushfire waiting or	n advice				quarterly test	
4.2.20	mark n	fine	11.5	1	11.5 wq1	n/a	8	6.05 n/a	no	n/a	n/a	surface water >10mm	running
4.2.20	mark n	fine	11.5	1	11.5 wq2	n/a	25	6.02 n/a	no	n/a	n/a	surface water >10mm	running
4.2.20	mark n	fine	11.5	1	11.5 pond e	no	19	7.5 n/a	no	no	yes		
7.2.20	mark n	rain	93	10	07.5 wq1	n/a	34	5.83 n/a	no	n/a	n/a	surface water >10mm	running
7.2.20	mark n	rain	93	10	07.5 wq2	n/a	67	6.04 n/a	no	n/a	n/a	surface water >10mm	running
8.2.20	mark n	rain	17	12	24.5 wa1	n/a	2	5.94 n/a	no	n/a	n/a	surface water >10mm	running
8.2.20	mark n	rain	17		24.5 wq2	n/a	12	6.04 n/a	no	n/a	n/a	surface water >10mm	running
9.2.20	mark n	rain	200) :	313 wq1	n/a	2	5.99 n/a	no	n/a	n/a	surface water >10mm	running
9.2.20	mark n	rain	200) :	313 wq2	n/a	12	6.07 n/a	no	n/a	n/a	surface water >10mm	running
11.2.20	mark n	rain	14	. :	129 wq1	n/a	2	6.01 n/a	no	n/a	n/a	surface water >10mm	running
11.2.20	mark n	rain	14	:	129 wq2	n/a	8	6.13 n/a	no	n/a	n/a	surface water >10mm	running
13.2.20	mark n	rain	55		279 wq1	n/a	24	5.92 n/a	no	n/a	n/a	surface water >10mm	running
13.2.20	mark n	rain	55	: :	279 wq2	n/a	55	6.08 n/a	no	n/a	n/a	surface water >10mm	running
14.2.20	mark n	rain	34		133 wq1	n/a	3	6.06 n/a	no	n/a	n/a	surface water >10mm	running
14.2.20	mark n	rain	34	. :	133 wq2	n/a	11	5.96 n/a	no	n/a	n/a	surface water >10mm	running
18.2.20	mark n	rain	64	ļ.	99 wq1	n/a	12	5.92 n/a	no	n/a	n/a	surface water >10mm	running
18.2.20	mark n	rain	64	Ļ	99 wq2	n/a	27	6 n/a	no	n/a	n/a	surface water >10mm	running
22.2.20	mark n	fine	14.5	7	78.5 wq1	n/a	4	6.13 n/a	no	n/a	n/a	surface water >10mm	running
22.2.20	mark n	fine	14.5		78.5 wq2	n/a	9	6.27 n/a	no	n/a	n/a	surface water >10mm	running
						-		-		-	-		
24.2.20	mark n	fine	19) з	33.5 wq1	n/a	1	6.21 n/a	no	n/a	n/a	surface water >10mm	running
24.2.20	mark n	fine	19) з	33.5 wq2	n/a	8	6.28 n/a	no	n/a	n/a	surface water >10mm	running

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond

pond E is EPL point 1

DATE	wно	WEATHER RAIN PA 24 HRS	ST RAIN 5 DAY	PAST POINT YS	DISCHARGING?	TSS(mg/L) pH	condu	ct OIL	TREATED?	DISCHARGED?		
25.2.20	mark n	rain	19	52.5 wq1	n/a	7	6.14 n/a	no	n/a	n/a	surface water >10mm	running
25.2.20	mark n	rain	19	52.5 wq2	n/a	15	6.2 n/a	no	n/a	n/a	surface water >10mm	running
27.2.20	mark n	rain	21	41.5 wg1	n/a	2	6.1 n/a	no	n/a	n/a	surface water >10mm	running
27.2.20	mark n	rain	21	41.5 wq2	n/a	7	6.22 n/a	no	n/a	n/a	surface water >10mm	running
27.2.20				42.5 1142			0.22 100		1,0		Surface mater sizemin	
28.2.20	mark n	fine	38	79.5 wq1	n/a	3	6.1 n/a	no	n/a	n/a	surface water >10mm	running
28.2.20	mark n	fine	38	79.5 wq2	n/a	6	6.19 n/a	no	n/a	n/a	surface water >10mm	running
8.3.20	mark n	rain	36	44.5 wq1	n/a	5	6.06 n/a	no	n/a	n/a	surface water >10mm	running
8.3.20	mark n	rain	36	44.5 wq2	n/a	7	6.22 n/a	no	n/a	n/a	surface water >10mm	running
16.3.20	mark n	fine	20	36 wq1	n/a	12	6.08 n/a	no	n/a	n/a	surface water >10mm	running
16.3.20	mark n	fine	20	36 wq2	n/a	9	6.23 n/a	no	n/a	n/a	surface water >10mm	running
						-						
31.3.20	mark n	fine	17	22.5 wq1	n/a	6	6.22 n/a	no	n/a	n/a	surface water >10mm	running
31.3.20	mark n	fine	17	22.5 wq2	n/a	11	6.4 n/a	no	n/a	n/a	surface water >10mm	running
31.3.20	mark n	fine	17	22.5 pond e	no	22	8.03 n/a	no	no	yes		
8.4.20	mark n	fine	3	5 gw1	n/a	n/a	5.8	170 no	n/a	n/a	quarterly test	
8.4.20	mark n	fine	3	5 gw2	n/a	n/a	4.65	454 no	n/a	n/a	quarterly test	
8.4.20	mark n	fine	3	5 gw3	n/a	n/a	5.46	101 no	n/a	n/a	quarterly test	
9.4.20	mark n	rain	18	21 wq1	n/a	4	6.06 n/a	no	n/a	n/a	surface water >10mm	running
9.4.20	mark n	rain	18	21 wq2	n/a	4	6.22 n/a	no	n/a	n/a	surface water >10mm	running
10.4.20	mark n	fine	24	45 wq1	n/a	4	6.02 n/a	no	n/a	n/a	surface water >10mm	running
10.4.20	mark n	fine	24	45 wq2	n/a	3	6.22 n/a	no	n/a	n/a	surface water >10mm	running
						-						
11.6.20	mark n	fine	38	47 wq1	n/a	1	6.23 n/a	no	n/a	n/a	surface water >10mm	running
11.6.20	mark n	fine	38	47 wq2	n/a	10	6.19 n/a	no	n/a	n/a	surface water >10mm	running
19.6.20	mark n	fine	18	20 wq1	n/a	1	6.03 n/a	no	n/a	n/a	surface water >10mm	running
19.6.20	mark n	fine	18	20 wq2	n/a	5	6.27 n/a	no	n/a	n/a	surface water >10mm	running
				-								-

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021 SLY'S QUARRY JACKYBULBIN RD , MORORO **pond

pond E is EPL point 1

DATE	wно	WEATHER RAIN PA 24 HRS	ST RAIN 5 DAY	PAST POINT	DISCHARGING?	TSS(mg/L) pH	condu	ict OIL	TREATED?	DISCHARGED?		
24.6.20	mark n	fine	0	5 gw1	n/a	n/a	5.92	426 no	n/a	n/a	quarterly test	
24.6.20	mark n	fine	0	5 gw2	n/a	n/a	4.51	366 no	n/a	n/a	quarterly test	
24.6.20	mark n	fine	0	5 gw3	n/a	n/a	4.98	141 no	n/a	n/a	quarterly test	
				-								
25.7.20	mark n	rain	25	32.5 wq1	n/a	7	5.9 n/a	no	n/a	n/a	surface water >10mm	running
25.7.20	mark n	rain	25	32.5 wq2	n/a	13	6.3 n/a	no	n/a	n/a	surface water >10mm	running
				-								-
26.7.20	mark n	rain	50	82.5 wq1	n/a	7	5.9 n/a	no	n/a	n/a	surface water >10mm	running
26.7.20	mark n	rain	50	82.5 wq2	n/a	13	6.2 n/a	no	n/a	n/a	surface water >10mm	running
				-								-
27.7.20	mark n	rain	18	100.5 wq1	n/a	6	6 n/a	no	n/a	n/a	surface water >10mm	running
27.7.20	mark n	rain	18	100.5 wq2	n/a	11	6.2 n/a	no	n/a	n/a	surface water >10mm	running
7.8.20	mark n	rain	15	15 wq1	n/a	3	6.2 n/a	no	n/a	n/a	surface water >10mm	running
7.8.20	mark n	rain	15	15 wq2	n/a	3	6.2 n/a	no	n/a	n/a	surface water >10mm	running
				-								-
15.8.20	mark n	rain	16	16 wq1	n/a	2	6.1 n/a	no	n/a	n/a	surface water >10mm	running
15.8.20	mark n	rain	16	16 wq2	n/a	3	6.2 n/a	no	n/a	n/a	surface water >10mm	running
												-
26.8.20	mark n	fine	0	0 pond e	no	4	7.8 n/a	no	no	yes		
15.10.20	mark n	fine	0	0 gw1	n/a	n/a	5.8	465 no	n/a	n/a	quarterly test	
15.10.20	mark n	fine	0	0 gw2	n/a	n/a	6	302 no	n/a	n/a	quarterly test	
15.10.20	mark n	fine	0	0 gw3	n/a	n/a	5	188 no	n/a	n/a	quarterly test	
				-								
19.10.20	mark n	fine	10.5	10.5 wq1	n/a	9	6.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
19.10.20	mark n	fine	10.5	10.5 wq2	n/a	11	5.8 n/a	no	n/a	n/a	surface water >10mm	stagnant
26.10.20	mark n	fine	15	17 wq1	n/a	4	6.5 n/a	no	n/a	n/a	surface water >10mm	stagnant
26.10.20	mark n	fine	15	17 wq2	n/a	15	5.9 n/a	no	n/a	n/a	surface water >10mm	stagnant
28.10.20	mark n	fine	11	28 wq1	n/a	3	6.5 n/a	no	n/a	n/a	surface water >10mm	stagnant
28.10.20	mark n	fine	11	28 wq2	n/a	5	6 n/a	no	n/a	n/a	surface water >10mm	stagnant
				-	-				-	-		•
1.11.20	mark n	fine	19	40 wq1	n/a	22	6.4 n/a	no	n/a	n/a	surface water >10mm	running
1.11.20	mark n	fine	19	40 wq2	n/a	32	6.5 n/a	no	n/a	n/a	surface water >10mm	running
				-			-					-

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



SLY'S QUA	RRY BIN RD , MO	RORO		**pond	E is EPL point 1**									
Action	birt no , me	nono		pond	c is crepoliter									
DATE	WHO	WEATHER RAIN	PAST RAIN	PAST POINT	DISCHARGING?	TSS(mg/	'L) рН	cond	luct	OIL	TREATED?	DISCHARGED?		
		24 HF	S 5 DAY	s										
1.12.20	mark n	fine	0	0 gw1	n/a	n/a		5.9	288	no	n/a	n/a	quarterly test	
1.12.20	mark n	fine	0	0 gw2	n/a	n/a		5.7	287	no	n/a	n/a	quarterly test	
1.12.20	mark n	fine	0	0 gw3	n/a	n/a		4.8	340	no	n/a	n/a	quarterly test	
8.12.20	mark n	fine	14	17 wq1	n/a		13	6.53 n/a		no	n/a	n/a	surface water >10mm	running
8.12.20	mark n	fine	14	17 wq2	n/a		12	6.18 n/a		no	n/a	n/a	surface water >10mm	running
7th Decen	nber 2020 De	epartment agreed t	o reduce wate	er monitoring to	o ground water ann	ually and s	urface v	vater once p	per qua	arter aft	ter 10mm of rai	in		
1.2.21	mark n	rain	8	11 gw1	n/a	n/a		5.7	176	no	n/a	n/a	quarterly test	
1.2.21	mark n	rain	8	11 gw2	n/a	n/a		5.42	262	no	n/a	n/a	quarterly test	
1.2.21	mark n	rain	8	11 gw3	n/a	n/a		4.93	216	no	n/a	n/a	quarterly test	
1.2.21	mark n	fine	8	11 pond e	no		9	7.88 n/a		no	no	yes		
2.2.21	mark n	rain	30	38 wq1	n/a		5	6.2 n/a		no	n/a	n/a	surface water >10mm	running
2.2.21	mark n	rain	30	38 wq2	n/a		6	6.18 n/a		no	n/a	n/a	surface water >10mm	running
														-

WATER QUALITY MONITORING RESULTS JUNE 2017 - FEBRUARY 2021



G Truck Movement Summary



NEWMAN QUARRYING PTY LTD - SLYS QUARRY LOADED TRUCK MOVEMENT SUMMARY MAY 2016 onwards

	2016	_				-			2017						-					
1	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1ST	0	53	22	124	108	0	125	24	0	21	8	0	114	95	0	77	74	0	8	3 11
2ND	3	38	3	124	104	0	75	11	0	80	12	0	113	100	0	89	17	0	17	30
3RD	105	39	0	16	63	0	32	34	0	5	68	97	94	54	84	92	0	0	52	2 0
4TH	24	0	12	0	0	49	97	0	114	44	38	106	93	0	94	64	88	29	51	73
5TH	47	0	5	10	106	82	11	22	116	0	0	61	99	93	115	20	78	61	0	118
6TH	61	31	45	3	111	124	0	35	101	84	103	35	48	107	114	0	90	59	2	95
7TH	0	28	25	0	116	58	106	62	0	79	117	112	0	110	102	82	100	0	88	121
8TH	0	39	25	68	50	38	125	107	0	. 9	107	39	90	33	92	94	14	0	107	98
9TH	23	29	0	59	17	0	68	14	123	74	123	0	117	54	0	89	0	27	144	1 70
10TH	54	12	0	14	54	101	61	8	115	110	124	73	113	0	109	92	0	115	128	8 0
11TH	67	0	12	113	.0	79	109	0	51	53	113	111	67	0	88	93	90	116	37	90
12TH	40	0	29	100	17	92	41	88	12	0	0	98	78	0	90	58	117	13	0	150
13TH	31	0	23	68	61	93	0	104	108	37	40	50	69	0	106	0	104	111	127	129
14TH	9	6	124	0	67	108	125	111	72	58	4	0	0	22	94	117	71	16	137	75
15TH	0	23	21	93	17	52	122	109	0	33	3	0	55	79	91	120	84	0	68	3 76
16TH	45	30	2	112	11	0	71	71	105	28	8	0	88	58	0	90	11	32	51	0
17TH	35	27	0	110	34	99	103	0	87	24	15	0	110	0	94	115	0	18	26	6 0
18TH	47	2	20	125	0	115	83	0	124	3	0	87	120	0	94	19	58	106	0	8
19TH	100	0	13	107	6	125	11	0	121	0	0	83	28	2	112	0	102	107	0) 1
20TH	100	17	119	36	70	32	0	0	106	8	3	118	0	31	86	0	101	126	64	0
21ST	28	10	14	0	28	124	4	0	12	21	7	94	0	16	115	36	71	0	75	6 0
22ND	0	.5	101	76	53	78	12	0	0	17	92	77	100	104	37	16	30	0	63	3 0
23RD	53	20	96	86	49	0	25	0	89	74	112	0	79	112	0	37	18	40	91	0
24TH	72	33	0	9	0	125	40	0	73	53	113	99	58	80	64	13	0	12	93	8 0
25TH	79	17	122	88	0	111	48	0	104	70	88	0	77	0	100	41	70	79	37	0
26TH	89	0	116	85	84	118	0	0	0	0	0	26	92	100	110	23	58	110	0	0 0
27TH	40	32	115	47	121	87	0	0	44	10	110	111	77	102	88	0	52	148	102	0
28TH	20	57	106	0	110	106	14	0	0	0	119	95	0	76	93	69	63	42	76	5 0
29TH	0	24	124	82	68	3	44	0	0	0	120	65	99	102	0	39	0	0	72	0
30TH	53	17	111	97	12	0	20	0	33	0	0	0	105	57	0	25	0	142	59	0
31ST	33	1	0	107	-	84		0	20				97		89	52		91		0

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



NEWMAN QUARRYING PTY LTD - SLYS QUARRY LOADED TRUCK MOVEMENT SUMMARY

	2018												2019											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
1ST		42	75		66	22		63	2	0	150	1	0	61	90	10	89	12	58	7	0	88	16	0
2ND		18	108		55	30	69	68	0	97	140	0	0	3	13	10	144	0	70	21	89	127	0	18
3RD		0	30	147	70	0	40	52	5	95	14	31	0	0	0	4	112	11	127	0	25	87	0	16
4TH	2	0	0	125	47	25	12	0	0	75	0	26	0	51	86	71	21	29	63	0	31	47	18	8
5TH		54	43	61	15	24	13	0	3	4	42	56	0	72	51	12	0	139	0	37	36	0	13	21
6TH		90	46	115	0	23	15	34	6	0	149	26	0	89	50	5	9	81	0	24	50	0	12	14
7TH		102	73	27	46	1	0	37	19	0	130	14	18	11	28	0	13	15	0	49	28	0	10	9
8TH	15	42	134		7	1	0	73	0	62	56	3	35	40	2	9		0	0	49	0	63	4	0
9TH	12	68	86	67	36	0	72	77	0	22	19		56	14	1	43		0	48	38	79	64	0	12
10TH	80	17	50	102	65	0	51	61	34	38	0	17	60	0	0	69	74	0	66	28	24	63	0	20
11TH	135	0		97	90		40	46	73	3	112	10	107	57	38	42		67	93	0	69	78	4	14
12TH	89			100	36	40	75	0	143	6	118	22	33		23	32		90	110	62	48	0	8	9
13TH	12	141	60	34	0	13	62	30	35	0	114	36	0	65	9	5	32	56	36	60	65	0	6	10
14TH	0	121	38	2	84	84	64	37	32	0	127	27	71	48	72	0	24	68	0	102	23	36	23	3
15TH	73	135	57		55	99	0	103	16	1	66	0	27	54	35	15	21	1	65	116	0	66	12	0
16TH	53	87	81	76		47	118	101	0	0	29	0	93	27	0	12	59	0	47	142	38	45	0	42
17TH	28	18	49	43	59		117	74	17	0	0	-	58	0	0	92	21	34	50	91	34	13	0	23
18TH	60	0		19		147	150	7	12	3	0	18	34			68	15	114	41		64	41	6	26
19TH	84	59	120	39	1	103	145	0	37	2	45	12	0	49	39	0	0	119	60	84	85	0	9	13
20TH	20	115	131	24	0	84	134	83	32	0	34	7	0	76	19	0	18	122	77	28	81	0	9	4
21ST	0	79		22	14		76	72	70	0	83	0	72			0		104	0		15	12	7	0
22ND	100	77	141	0	68	107	0	119	20	31	7	-	93	15		0		6	95		0	49	0	0
23RD	39	28	111	39			124	125	0	45	59	0		0	18	6		0	126	25	27	24	0	0
24TH	68	0	31	6	45	0	72	31	80	58	10	0	75	0	0	31	28	3	138	9	24	16	0	0
25TH	58	0	0	0	47	122	95	0	84	39	0	0	44	14	24	0	26	2	105	0	21	14	13	0
26TH	0	148	98	14	0		80	0	28	36	35	0	0	44	35	18	-	3			41	6	16	0
27TH	0	117	146	18			105	6	42	74	41	0	0	90	7	31		9		16	63	0	11	0
28TH	0	84	144	23			2	15	19	0	25		0	90	19	0		16			28	26	19	0
29TH	105		36	0	75	67	0	27	0	64	12	0	67		35	13	109	0	6	122	0	12	3	0
30TH	70		0	30	120		118	47	0	46	14	0	99		2	133	76	0	66	100	85	3	0	0
31ST	62				98		137	23		92		0	69		0		32		22	25		7		0

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW



NEWMAN QUARRYING PTY LTD - SLYS QUARRY LOADED TRUCK MOVEMENT SUMMARY

	2020	-											2021	
-	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
1ST	0	5	0	15	47	63	66	0		20	0	15	0	
2ND	0	0	10	16	27	62	66	0	23	8	13	9	0	1
3RD	0	26	25	29	0	86	68	13	18	0	10	10	0	
4TH	0	13	20	0	12	89	4	32	12	0	23	10	0	1
5TH	0	24	13	0	32	107	0	72	4	0	9	0	0	F
6TH	14	3	13	10	37	5	71	44	0	36	9	0	0	1
7TH	22	0	0	17	24	0	68	19	35	18	0	11	0	
8TH	9	0	0	5	5	0	37	0	12	19	0	21	0	1
9TH	7	0	5	17	0	39	7	0	9	11	3	22	0	1.
10TH	10	0	4	0	0	0	26	6	12	0	40	30	0	-
11TH	0	20	9	0	34	0	0	19	6	.0	23	7	7	
12TH	0	10	18	0	20	10	0	10	0	10	11	0	14	
13TH	15	4	14	0	19	0	14	29	0	12	27	0	6	
14TH	10	0	3	12	23	0	68	8	13	4	0	0	7	
15TH	9	0	0	31	24	4	36	0	3	14	0	0	14	1.
16TH	13	0	7	52	0	8	24	0	21	7	17	0	0	1. *
17TH	4	15	20	60	0	6	42	27	11	0	13	3	0	1.1
18TH	0	12	33	- 21	9	16	0	9	4	0	29	3	22	1 -
19TH	0	20	31	0	25	3	0	14	0	17	13	0	24	
20TH	2	9	8	24	10	0	20	30	0	32	12	0	34	
21ST	25	27	0	39	14	0	24	11	22	10	0	0	28	
22ND	21	0	0	5	11	9	21	0		20	0	0	10	
23RD	16	0	24	10	0	9	13	0	17	8	22	0	0	
24TH	23	3	19	22	0	21	5	22	27	0	19	0	0	
25TH	0	8	20	0	21	31	0		14	0	11	0	21	
26TH	0	15	8	0	35	23	0		0	9	-	0	0	
27TH	0	6	28	11	11	5	10	42	0	15	10		5	
28TH	15	15	0	11	63		7	50	14	10	0	0	29	
29TH	46	.0	0	16	34	14	7	0	18	6	0	0	14	
30TH	12	0	23	14	0	13	8		12	4	5	0	0	1
31ST	14	1	22	0	0		26	43	0	0	0	0	0	1.

Independent Environmental Audit Sly's Quarry Expansion Lot 2 DP 1055044 Mororo NSW

