



Karuah Hard Rock Quarry

Community Consultation Report 2021/2



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Appendix 1 EPL11569 Monitoring Locations	

the Consent	DA 265-10-2004
the Department	Department of Planning, Industry and Environment
EPA	NSW Environmental Protection Authority
EPL	Environmental Protection Licence 11569
HQPL	Hunter Quarries Proprietary Limited
MCC	MidCoast Council
the Quarry	Karuah Hard Rock Quarry
the reporting period	1 July 2021 to 31 December 2021

1 INTRODUCTION

1.1 BACKGROUND

The MidCoast Council (MCC) granted conditional Development Consent (*DA 265-10-2004*) for a hard rock quarry and crushing plant at Karuah on 3 December 1997. Hunter Quarries Pty Limited (HQPL) purchased the site from Mountain Industries in 2002 and has since operated a hard rock quarry at the site, known as Karuah Hard Rock Quarry (the Quarry). The material extracted at the Quarry is andesite, which is a hard, blue rock used for various purposes such as road base material, construction aggregate, aggregate used for concrete batching, drainage works, fill, landscaping and other uses.

Development Consent was granted by the Minister for Infrastructure, Planning and Natural Resources on the 3 June 2005 (ref. DA 265-10-2004), with the approved development including:

- Implementing the remainder of the approved Stage 1 quarry operation;
- Extending the quarry operations into the Stage 2 area;
- Upgrading and using existing infrastructure on site;
- Rehabilitating the site by re-contouring and revegetating exposed surfaces; and
- Producing up to 500,000 tonnes of product a year over the next 22 years.

The Consent approval permits operation until 3 June 2027. It should be noted that the current lease agreement between HQPL and the owner of Lot 11 expires on 6 May 2024. Extraction of material from Lot 11 will cease and rehabilitation commence in early 2021 and scheduled to be completed by 6 May 2021. This will allow three years of rehabilitation monitoring prior to the Lot 11 lease agreement ceasing on 6 May 2024. Lot 21 will continue to be operational until the end of the Consent. A rehabilitation program for Lot 21 will be implemented after this date. For more information regarding rehabilitation schedules refer to the Rehabilitation and Closure Plan and subsequent Annual Environmental Management Review (AEMRs).

A summary of the environmental monitoring data for the reporting period 1 July 2021 to 31 December 2021 is covered in this report.

A summary of the licence information is provided in the tables in the report.

1.2 COMMUNITY CONSULTATION REPORT

In accordance with *Schedule 4, condition 8* of the Consent, HQPL sought expressions of interest from the community to serve as members of a Community Consultative Committee (CCC) in 2007 and again in 2011. The minimum of two expressions of interest were not received, therefore a CCC was not able to be established. This *Community Consultation Report* has therefore been prepared in accordance with the *Communication Strategy* (outlined in the *Karuah Hard Rock Quarry, Environmental Management Strategy – August 2020*).

The *Community Consultation Report* summarises HQPL environmental and community management plans, monitoring results, audit reports and any environmental incidents or complaints that have occurred during the reporting period. Once prepared, the Community Consultation Report is made available to MCC and nearby residents at HQPL's website <<http://hunterquarries.com.au>>. Upon request, a hard copy can be mailed to community members, simply call HQPL Environmental Officer on 0447 044 646.

2 AIR QUALITY MONITORING

HQPL ensure that all practical mitigation measures are used to prevent and minimise particulate matter emissions generated by the Quarry operation, so emissions do not exceed the criteria in Tables 7 to 9 of the Consent at any residence on any privately-owned land.

Air quality monitoring is undertaken in accordance with the approved *Environmental Monitoring Program (2014)*.

2.1 DEPOSITED DUST MONITORING

Deposited dust monitoring results for the reporting period are displayed in **Table 1**. The results are compliant with the criteria of the Consent.

Table 1 Deposited dust monitoring results

Date	DDG1	DDG2	DDG3	DDG4
05/07/2021	0.2	0.4	0.2	0.2
05/08/2021	0.5	0.4	0.5	1.0
06/09/2021	2.3	0.8	1.4	0.6
06/10/2021	0.7	0.4	0.5	0.4
03/11/2021	3.6	0.1	0.5	0.1
03/12/2021	0.5	0.2	0.4	0.2
Rolling Annual Average	1.3	0.4	0.6	0.4
Annual Average Criteria	4.0	4.0	4.0	4.0

2.2 HIGH VOLUME AIR SAMPLING

High volume air sampling monitoring results for the reporting period are displayed in **Table 2**. The results are compliant with the criteria of the Consent.

Table 2 High volume air sampling results

Date	TSP ($\mu\text{g}/\text{m}^3$)	PM10 ($\mu\text{g}/\text{m}^3$)	Comment
02/07/2021	24	15	
08/07/2021	26	13	
14/07/2021	10	6	
20/07/2021	11	5	
26/07/2021	15	8	
01/08/2021	15	8	
07/08/2021	9	4	
13/08/2021	15	9	
19/08/2021	25	12	
25/08/2021	6	2	
31/08/2021	40	24	
06/09/2021	25	13	
12/09/2021	30	17	
18/09/2021	14	9	
24/09/2021	17	8	
30/09/2021	10	5	
06/10/2021	23	14	
12/10/2021	13	5	
18/10/2021	18	9	
24/10/2021	20	12	
30/10/2021	37	19	
05/11/2021	25	9	
11/11/2021	13	8	
17/11/2021	15	9	
23/11/2021	12	6	
29/11/2021	24	15	
05/12/2021	25	14	
11/12/2021	18	11	
17/12/2021	24	14	
23/12/2021	19	11	
29/12/2021	12	8	
04/01/2022	14	7	
10/01/2022	33	18	
¹ 24hr Max Criteria	N/A	50	
Year-to-date Average	19	11	
¹ Annual Average Criteria	90	30	

3 BLAST MONITORING

HQPL conducts blasts in accordance with the approved *Blast Management Plan* and conditions stipulated in the Consent and the EPL to avoid harm and minimise nuisance to environment and the surrounding community.

Blast monitoring results for the reporting period are displayed in **Table 3**. The results are compliant with the criteria of the Consent and the EPL.

Table 3 Blast monitoring results

Date & Time	Overpressure (dB(L))	Vibration (mm/s)
Friday, 9 July 2021 12:52 PM	107.3	3.28
Friday, 27 August 2021 12:59 PM	n/t	n/t
Friday, 10 September 2021 12:28 PM	n/t	n/t

Not triggered = n/t

4 NOISE MONITORING

HQPL uses all practical mitigation measures to ensure that the operational noise generated by the Quarry does not exceed the criteria stipulated in the Consent and the EPL.

Noise monitoring is undertaken in accordance with the approved *Environmental Monitoring Program*.

4.1 ATTENDED MONITORING

Attended noise monitoring was undertaken during November, the results are displayed in **Table 4**.

The results detail all noise sources, such as traffic, insects, birds, Karuah East Quarry operation, and the Quarry operation. The results are compliant with the criteria of the Consent and the EPL.

Table 4 Attended noise monitoring results - November 2021

Location	Date Start Time Weather	LAMAX	LA1	LA10	LA90	LAEQ	Description of noise and typical maximum noise levels (dBA)
NM1	19/11/2021 10:44 AM	96	81	53	48	66	Traffic on the Pacific Highway, insects, frogs and bird noise consistently audible. Resident noise and a dog barking frequently audible. Karuah Quarry inaudible
NM2	19/11/2021 11:19 AM	69	68	65	59	63	Traffic on the Pacific Highway and bird noise consistently audible. Karuah Quarry inaudible

4.2 UNATTENDED NOISE MONITORING

Unattended noise monitoring was undertaken during November at monitoring locations NM1 and NM2, the results are displayed in **Table 5** and **Table 6** respectively. The unattended noise monitoring results are compliant with the criteria of the Consent and the EPL.

Table 5 Unattended noise monitoring results – NM1

INP Period	LA90	LAEQ
Day	44	50
Evening	45	53
Night	39	50

Table 6 Unattended noise monitoring results – NM2

INP Period	LA90	LAEQ
Day	55	63
Evening	50	62
Night	41	60

5 WATER MONITORING

Water monitoring is undertaken in accordance with the approved *Site Water Management Plan (2016)*. This includes biannual monitoring of surface water and daily monitoring of water during discharge events from licenced the discharge point.

5.1 SURFACE WATER

Surface water monitoring is to be undertaken biannually and compared against baseline data to ensure that ecological health downstream of the discharge location are not compromised due to the Quarry operation.

During the reporting period, surface water monitoring was undertaken on 29 November 2021, see **Table 7** for monitoring results.

Table 7 Surface water monitoring results - Sediment Dam 2

Date	Temp (°C)	pH (pH Units)	EC (µS/cm)	Turbidity (NTU)	TSS (mg/L)	Oil & Grease (mg/L)	Total N (mg/L)	Total P (mg/L)
Monday, 29 November 2021	20.1	7.9	439	94	63	<5	0.4	<0.05

5.2 DISCHARGE COMPLIANCE

Water quality monitoring is undertaken daily during discharge to demonstrate compliance with pollutants specified in the EPL.

5.2.1 Sediment Dam 2

During the reporting period, there were no discharges from Sediment Dam 2.

6 PRODUCTION

Monthly monitoring of sales across the reporting period is detailed in **Table 8**, showing that there were a total of 1,065 truck movements taking 52,271 tonnes of material from the Quarry to various customers across New South Wales.

Table 8 Monthly production data

Date	Truck Movements	Material (tonnes)
July 2021	372	17,445
August 2021	380	21,104
September 2021	313	13,722
October 2021	-	0
November 2021	-	0
December 2021	-	0
Total	1,065	52,271

7 REPORTING

7.1 INCIDENTS

During the reporting period, HQPL did not have any environmental incidents.

7.2 NON-COMPLIANCE

During the reporting period, HQPL had no reportable non-compliances.

7.3 COMPLAINTS

During the reporting period, HQPL received two complaints by Karuah Quarry.

The first complaint was received the morning of 8 September 2021 regarding noise and vibration from the site. The complainant stated noise had increased from the crusher plant. A Karuah Quarry representative received the complaint over the phone and proceeded to investigate the source. Results of the investigation were provided to the complainant, including the method of the investigation which included interviews of site personnel at the time, a review of meteorological results at the time, review of previous noise results, and other on-site observations. This complaint was closed out on 10 September, with no additional actions required from the site.

The second complaint was on 10 September 2021 was in regard to a dust plume resulting from a blast. The complainant emailed Karuah Quarry complaining a blast had caused a dust plume. The complainant attached photos of the dust to the email. Hunter Quarry commenced an investigation into the cause of the dust as well as the meteorological conditions at the site at the time of the alleged dust plume. No further action was taken, with the complainant satisfied with this, and the complaint was closed out.

7.4 TRAINING

HQPL conducts a monthly meeting for all employees to be updated on:

- operational performance.
- company planning and strategy.
- environmental and safety training.

Due to physical distancing protocol in place for infection control and COVID precaution, scheduling of the monthly meetings was hindered.

7.5 AUDIT REPORTS

An independent environmental audit (IEA) was undertaken and submitted to the Department on 31 October 2019. The *IEA Report* (prepared by EMM Consulting Pty Limited) and the *Response to Auditors Recommendations* (prepared by HQPL) can be found on HQPL's website.

7.6 MANAGEMENT PLANS

During the reporting period, no management plans were revised.

8 FEEDBACK

HQPL seeks and appreciates any feedback from community regarding the operation of the Quarry and reporting of environmental and community matters.

HQPL did not receive any comment or feedback for the previous reporting period *Community Consultation Report*.

Date	Feedback/Comment	HQPL Response
-	-	-

If you have any questions or would like to provide comment or feedback on information provided in this *Community Consultation Report*, please call HQPL Environmental Officer on 0447 044 646.

Appendix 1 – EPL 11569 Monitoring Locations

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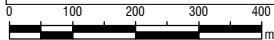
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LEGEND

-  Blast Monitoring Site
-  Air Quality Monitoring Site
-  Noise Monitoring Site
-  Water Monitoring Site
-  Watercourse
-  Lot Boundary



Scale: 1:12,000
GDA 1994 MGA Zone 56

05-Aug-2020
630.30036

Source: Nearmap (June 2020)