



Karuah Hard Rock Quarry

Community Consultation Report 2022/2



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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 2022 to 31 December 2022

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. Rehabilitation is required to be undertaken in accordance with the approved Rehabilitation and Closure Plan (SLR 2021). The Karuah Quarry has entered a closure phase for Lot 11 and some rehabilitation works have commenced on the eastern highwall. In 2020, Karuah Quarry began transporting overburden and soil material from Karuah East Quarry and side casting off the highwall. Biodiversity management measures such as weed control and monitoring continued in 2021, however there were no additional side-casting or medium to long-term measures from the Rehabilitation and Closure Plan completed in the reporting period.

A summary of the environmental monitoring data for the reporting period 1 July 2022 to 31 December 2022 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 0426 990 750.

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
05/07/2022	0.3	0.3	0.4	0.7
03/08/2022	0.9	0.9	0.6	1.0
02/09/2022	0.5	0.2	0.6	0.3
04/10/2022	0.2	0.5	0.5	0.3
03/11/2022	0.8	0.8	0.7	1.2
05/12/2022	0.7	0.7	0.3	0.6
Rolling Annual Average	0.6	0.6	0.5	0.7
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
03/07/2022	8	6	
09/07/2022	23	12	
15/07/2022	5	4	
21/07/2022	6	3	
27/07/2022	11	5	
02/08/2022	16	7	
08/08/2022	10	4	
14/08/2022	3	1	
20/08/2022	12	6	
26/08/2022	8	4	
01/09/2022	18	9	
07/09/2022	11	5	
13/09/2022	11	7	
19/09/2022	22	12	
25/09/2022	14	6	
01/10/2022	16	9	
07/10/2022	15	9	
13/10/2022	44	18	
19/10/2022	16	7	
25/10/2022	27	12	
31/10/2022	16	9	
06/11/2022	10	7	
12/11/2022	42	18	
18/11/2022	16	7	
24/11/2022	21	12	
30/11/2022	25	13	
06/12/2022	20	11	
12/12/2022	50	16	
18/12/2022	14	9	
24/12/2022	14	10	
30/12/2022	21	13	
¹ 24hr Max Criteria	N/A	50	
Year-to-date Average	18	9	
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)
Tuesday, 23 August 2022 12:31 PM	113.1	1.12
Tuesday, 13 September 2022 11:27 AM	105.70	1.72
Monday, 28 November 2022 11:27 AM	108.5	1.68

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 2022

Location	Date	Start time (Period)	Total noise levels, dB							Site noise level, dB		EPL/PA Limits, dB	Meteorological conditions ² EPL limits apply (Y/N)	Exceedance, dB	Comments
			L _{Amin}	L _{A90}	L _{Aeq}	L _{A10}	L _{A1}	L _{Amax}	L _{Ceq}	LFN mod. Factor ¹	L _{Aeq}				
A	23/11	07:07	43	50	54	57	59	62	65	Nil	IA	48	0.9 m/s @ 301° A stability class Y	N/A	Karuah Quarry inaudible. Traffic on the Pacific Highway, insects and birds consistently audible. A dog barking occasionally audible.
B	23/11	07:50	50	57	64	67	72	78	73	Nil	IA	48	1.9 m/s @ 284° A stability class Y	N/A	Karuah Quarry inaudible. Traffic on the Pacific Highway, insects and birds consistently audible.

Notes: 1. Modifying factor correction for LFN in accordance with Fact sheet C of the NPfI.
2. Meteorological data were taken as an average over 15 minutes from the Karuah Quarry on-site weather station (Refer to Section 5.1).
3. IA = inaudible.
4. N/A = not applicable.

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**. The unattended noise monitoring results are compliant with the criteria of the Consent and the EPL.

Table 5 Unattended noise monitoring results - November 2022

Location	Period	Measured noise levels, dB	
		L _{A90}	L _{Aeq,period}
NM1 23 November- 1 December 2022	Day	45	52
	Evening	46	55
	Night	43	51
NM2 23 November- 1 December 2022	Day	56	64
	Evening	49	63
	Night	39	62

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 26 October 2022, see **Table 6** for monitoring results.

Table 6 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)
Wednesday, 26 October 2022	20.1	7.4	297	680	450	<5	0.2	0.2

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 zero discharges from Sediment Dam 2, see **Table 7** for monitoring results.

Table 7 Discharge monitoring results – Sediment Dam 2

Date	Temp	pH	EC	Turbidity	TSS	Oil and Grease
-	-	-	-	-	-	-

6 PRODUCTION

Monthly monitoring of sales across the reporting period is detailed in **Table 8**, showing that there were a total of 4,918 truck movements taking 116,306 tonnes of material from the Quarry to various customers across New South Wales.

Table 8 Monthly production data

Date	Truck Movements	Material (tonnes)
July 2022	453	14,091
August 2022	1,421	25,840
September 2022	845	13,114
October 2022	910	20,197
November 2022	752	24,794
December 2022	537	18,270
Total	4,918	116,306

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 did not have any reportable non-compliances.

7.3 COMPLAINTS

During the reporting period, HQPL did not receive any complaints.

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.

During the reporting period, two key environmental factors were revised with all site workers:

- Dust management; and
- Blast monitoring.

7.5 MANAGEMENT PLANS

During the reporting period, no management plans were updated.

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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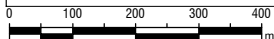
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LEGEND

-  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)