



Karuah Hard Rock Quarry

Community Consultation Report 2022/1



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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 January 2021 to 30 June 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. 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 January 2022 to 30 June 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 <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
04/01/2022	1.3	0.3	0.2	1.0
03/02/2022	0.9	0.7	0.3	0.4
07/03/2022	1.4	0.8	1.2	0.1
05/04/2022	0.8	3.6	0.8	0.4
05/05/2022	0.1	0.3	0.1	0.2
03/06/2022	0.4	0.6	0.4	0.3
Rolling Annual Average	0.8	1.1	0.5	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
04/01/2022	14	7	
10/01/2022	33	18	
16/01/2022	30	21	
22/01/2022	12	10	
28/01/2022	27	12	
03/02/2022	24	14	
09/02/2022	21	12	
15/02/2022	32	20	
21/02/2022	20	13	
27/02/2022	11	10	
05/03/2022	17	12	
11/03/2022	16	12	
17/03/2022	23	15	
23/03/2022	4	12	
29/03/2022	15	11	
04/04/2022	13	10	
10/04/2022	12	9	
16/04/2022	12	8	
22/04/2022	13	9	
28/04/2022	26	9	
04/05/2022	16	11	
10/05/2022	5	3	
16/05/2022	23	13	
22/05/2022	5	2	
28/05/2022	6	3	
03/06/2022	10	6	
09/06/2022	10	3	
15/06/2022	13	7	
21/06/2022	26	12	
27/06/2022	14	6	
¹ 24hr Max Criteria	N/A	50	
Year-to-date Average	17	10	
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**. There were no blasts conducted during the reporting period.

Table 3 Blast monitoring results

Date & Time	Overpressure (dB(L))	Vibration (mm/s)
-	-	-

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 June, 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 - June 2022

Location	Date	Start time (Period)	Total noise levels, dB							Site contribution, 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}					
NM1	16/6	08:16	47	51	54	56	58	69	67	Nil	IA	48	0.3 m/s @ 297° A stability class Y	Nil Karuah Quarry inaudible. Traffic on the Pacific Highway, consistently audible. Bird noise and a dog barking occasionally audible.
NM2	16/6	08:38	52	59	63	66	69	71	71	Nil	IA	48	0.3 m/s @ 307° A stability class Y	Nil Karuah Quarry inaudible. Traffic on the Pacific Highway, consistently audible. Bird noise and resident noise occasionally 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 June 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 - June 2022

Location	Period	Measured noise levels, dB	
		L _{A90}	L _{Aeq,period}
NM1 16-28 June 2022	Day	51	69
	Evening	49	55
	Night	-	-
NM2 16-28 June 2022	Day	Results were not available due to vandalism of the unattended noise monitor located at NM2	
	Evening		
	Night		

5 WATER MONITORING

Water monitoring is undertaken in accordance with the approved *SiteWater 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 12 May 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)
Thursday, 12 May 2022	19.8	7.4	271	220	180	<5	0.4	0.1

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 1296 truck movements taking 21,077 tonnes of material from the Quarry to various customers across New South Wales.

Table 8 Monthly production data

Date	Truck Movements	Material (tonnes)
January 2022	47	0
February 2022	353	4294
March 2022	132	0
April 2022	416	0
May 2022	125	0
June 2022	223	16,783
Total	1296	21,077

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 received one complaint.

Karuah Quarry received a complaint by email from the DPIE, who was notified by a community member on 14 January 2022 regarding air quality and water pollution. An investigation was undertaken immediately after the complaint was received; however, site personnel could not find evidence of air quality and water pollution exceedances leaving site. Karuah East Quarry provided monitoring data to DPIE. There were no further actions required.

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, four key environmental factors were revised with all site workers:

- Vertebrate Pest Management.
- Dust Management.
- Pollution Incidence Response Management; and
- Waste Management.

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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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

Source: Nearmap (June 2020)

Sheet Size : A4