



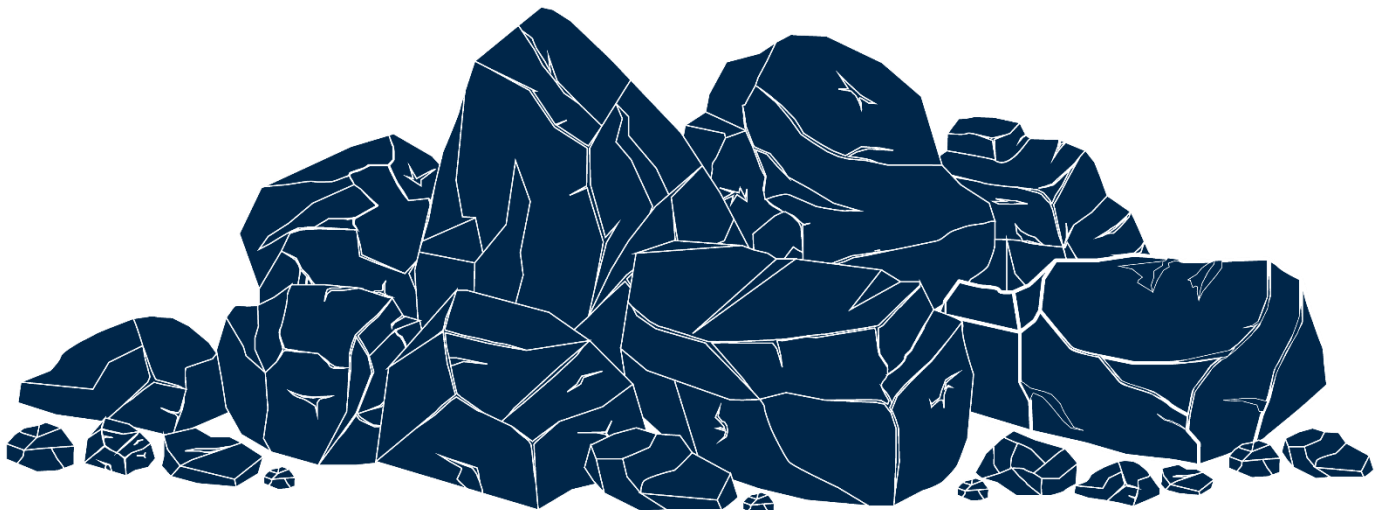
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Karuah Hard Rock Quarry

Community Consultation Report

H2 2023



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Definitions

Definition	Meaning
the Consent	DA 265-10-2004
the Department	Department of Planning and Environment
EPA	NSW Environmental Protection Authority
EPL	Environmental Protection Licence 11569
GLC	Great Lakes Council (former)
HQPL	Hunter Quarries Pty Ltd
MCC	MidCoast Council
the Quarry	Karuah Hard Rock Quarry
the reporting period	1 January 2023 to 30 June 2023

1.0 Introduction

1.1 Background

The former Great Lakes Council (GLC) granted conditional Development Consent (DA 302/1997) for a hard rock quarry, crushing plant and intersection upgrade of the Pacific Highway at Karuah on the 03 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 (DA 265-10-2004) was granted by the Minister for Infrastructure, Planning and Natural Resources on the 3 June 2005, 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.

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. On both occasions, 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 developed to satisfy Schedule 4, Condition 10 of the Consent and outlined in the Quarry's Environmental Management Strategy.

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 MidCoast Council, nearby residents and to the public at HQPL's website.

2.0 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 Schedule 3, Condition 13 of the Consent at any residence on any privately-owned land.

Air quality monitoring is undertaken in accordance with the approved Environmental Monitoring Program; with the results of the deposited dust monitoring completed for the reporting period summarised in **Table 1**.

Monitoring results indicate that for the period from 04 July 2023 to 28 December 2023 the insoluble solid levels recorded at DDG 1 to DDG 4 monitoring locations were below the project criterion of 4 g/m²/month over an annual averaging period.

The results for DDG 2 returned a high value for insoluble solids during the November 2023 reporting period. Based on laboratory analysis this was determined to be due to high combustible matter being present in the sample, which is generated from sources external to the Quarry, such as vegetation. The inorganic matter component, of which quarry-related dust contributes to, was found to be in line with the results from the other depositional dust gauges and relatively low.

Table 1 *Deposited Dust Monitoring Results.*

Month	Start Date	End Date	DDG1	DDG2	DDG3	DDG4
July 2023	04/07/2023	03/08/2023	0.4	0.9	1.2	1.1
August 2023	03/08/2023	04/09/2023	0.7	0.3	0.5	0.5
September 2023	04/09/2023	04/10/2023	1.5	2.6	1.4	1.4
October 2023	04/10/2023	02/11/2023	1.4	2.4	2.2	1.6
November 2023	02/11/2023	30/11/2023	1.6	8.1*	1.4	1.0
December 2023	30/11/2023	28/12/2023	1.1	1.0	1.3	1.3
Reporting Period Average			1.1	1.4	1.3	1.3
Annual Average Criteria			4.0	4.0	4.0	4.0

*contaminated sample

3.0 Blast Monitoring

HQPL conducts blasts in accordance with 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 summarised in **Table 2**.

Table 2 *Blasting Monitoring Results*

Date	Time	Airblast Overpressure (dB(L))	Ground Vibration (mm/s)
14/07/2023	11:52	110.7	1.6
15/09/2023	12:21	112.5	2.2
21/12/2023	15:24	n/t	n/t

*Not triggered = n/t

Ground Vibration < 0.5 mm/s

Overpressure < 108 dB(L)

4.0 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 Quarry's Environmental Monitoring Program.

4.1 Attended Noise Monitoring

Attended noise monitoring was undertaken during November, the results are summarised in **Table 3**. The results detail all noise sources, including quarry operations, road traffic and/or animals (such as cattle, inspectors or birds). The attended noise monitoring results are assessed as compliant with the criteria of the Consent and the EPL.

Table 3 *Attended Noise Monitoring Results – November 2023*

Location	Start Date and Time	Wind		Stability Class	Limits apply? ¹	Limits, dB	Site levels, dB	Exceedances, dB ¹
		Speed m/s	Direction ³			L _{Aeq,15minute}	L _{Aeq,15minute} ²	L _{Aeq,15minute}
NM1	24/11/2023 8:33	0.9	208	A	Y	48	IA	Nil
NM2	24/11/2023 8:14	0.5	283	A	Y	48	IA	Nil

Notes: 1. Noise emission limits are applicable if weather conditions were within parameters specified in Section 2.5. NA in exceedance column indicates that limits were not applicable due to weather conditions.
2. Site-only L_{Aeq,15minute} includes modifying factor penalties if applicable.
3. Degrees magnetic north, “-” indicates calm conditions.

4.2 Unattended Noise Monitoring

Unattended noise monitoring was undertaken during late November and early December at monitoring locations NM1 and NM2, the results are displayed in Table 5. The unattended noise monitoring results are assessed as compliant with the criteria of the Consent and the EPL.

Table 4 *Unattended Noise Monitoring Results – November/December 2023*

Location	Period	Measured noise levels, dB	
		RBL	L _{Aeq,period}
NM1 29 November- 7 December 2023	Day	46	53
	Evening	45	55
	Night	45	52
NM2 24-29 November 2023	Day	57	65
	Evening	49	65
	Night	40	62

Notes: 1. Levels in this table are not necessarily the result of activity at site.

5.0 Water Monitoring

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

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 is not compromised due to the Quarry operation.

During the reporting period, surface water monitoring was undertaken on 06 October 2023, with monitoring results summarised in **Table 5**.

Table 5 *Surface Water Monitoring Results – Sediment Dam 2.*

Date	Temp (°C)	pH	EC (µS/cm)	Turbidity (NTU)	TSS (mg/L)	Oil & Grease (mg/L)	Total N (mg/L)	Total P (mg/L)
06/10/2023	18.3	7.7	412	260	120	<5	0.2	0.09

5.2 Discharge Compliance

Water quality monitoring is undertaken daily during discharge to demonstrate compliance with parameters specified in the EPL. During the reporting period, there were no discharges from our LDP located at Sediment Dam 2, as summarised in **Table 6**.

Table 6 *Discharge Monitoring Results – Sediment Dam 2.*

Date	Temp (°C)	pH	EC (µS/cm)	Turbidity (NTU)	TSS (mg/L)	Oil & Grease (mg/L)
-	-	-	-	-	-	-

6.0 Production

Monthly monitoring of sales across the reporting period is summarised in **Table 7**. In total there were approximately 138,000 tonnes of product sold, with an associated 4,487 truck movements.

Table 7 *Monthly Production Data.*

Month	Truck Movements	Quarry Product (tonnes)
July 2023	769	24,880
August 2023	563	18,090
September 2023	599	18,790
October 2023	606	19,527
November 2023	821	23,165
December 2023	1,129	33,316
Total	4,487	137,768

7.0 Reporting

7.1 Environmental Incidents

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

7.2 Non-Compliances

During the reporting period, HQPL had one reportable non-compliance, both in relation to air quality, as outlined below:

- Failure to Monitor event associated with contamination of one Deposited Dust Gauges with organic matter in the November 2023 monitoring period.

7.3 Community Complaints

During the reporting period, HQPL received no complaints.

7.4 Management Plans

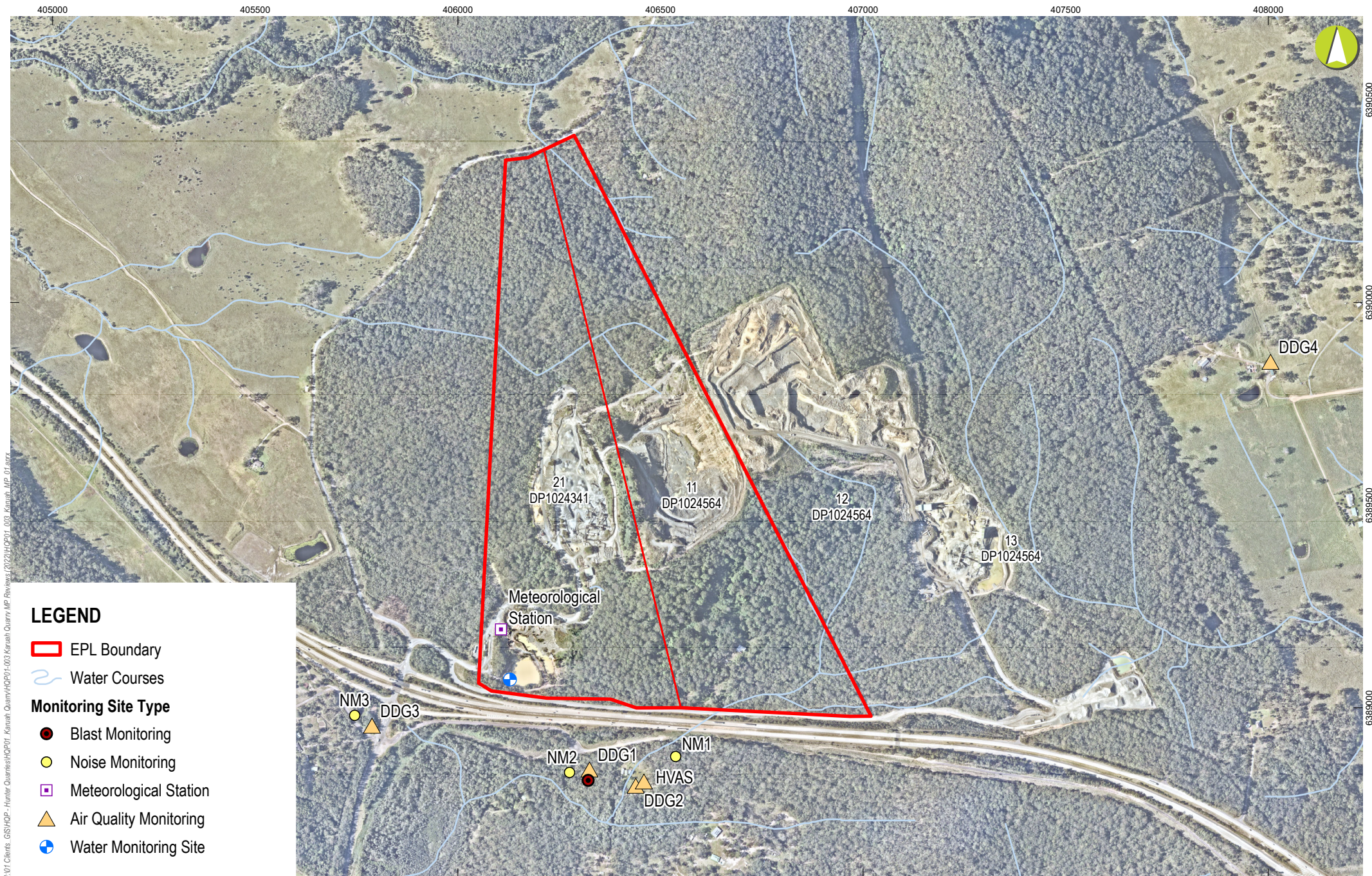
During the reporting period, HQPL updated the following Management Plans:

- Environmental Monitoring Program, and
- Site Water Management Plan.

7.5 Audits

During the reporting period, HQPL did not undertake any compliance audits.

Appendix 1 – EPL 11569 Monitoring Locations



LEGEND

▭ EPL Boundary

~ Water Courses

Monitoring Site Type

● Blast Monitoring

● Noise Monitoring

▣ Meteorological Station

▲ Air Quality Monitoring

⊕ Water Monitoring Site

