



Karuah Hard Rock Quarry

Community Consultation Report 2020/2



# Table of Contents

1	Introduction .....	2
1.1	Background.....	2
1.2	Community Consultation Report.....	2
2	Air Quality Monitoring .....	3
2.1	Deposited Dust Monitoring .....	3
2.2	High Volume Air Sampling .....	3
3	Blast Monitoring .....	5
4	Noise Monitoring .....	6
4.1	Attended Monitoring.....	6
4.2	Unattended Noise Monitoring .....	6
5	Water Monitoring .....	7
5.1	Surface Water.....	7
5.2	Discharge Compliance .....	7
5.2.1	Sediment Dam 2 .....	7
6	Production.....	8
7	Reporting.....	9
7.1	Incidents .....	9
7.2	Non-Compliance .....	9
7.3	Complaints.....	9
7.4	Training.....	9
7.5	Audit Reports.....	10
7.6	Management Plans.....	10
8	Feedback.....	11
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 2020 to 31 December 2020

# 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 2020 to 31 December 2020 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
02/07/2020	0.2	0.1	0.2	0.6
31/07/2020	0.4	0.2	0.4	1
01/09/2020	0.6	0.5	0.4	1.0
01/10/2020	0.2	0.1	1.3	0.7
02/11/2020	3.2	2.3	0.8	0.7
03/11/2020	0.3	0.5	0.1	0.4
<b>Rolling Annual Average</b>	0.8	0.6	0.5	0.7
<b>Annual Average Criteria</b>	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**

<b>Date</b>	<b>TSP (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>PM10 (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Comment</b>
1/07/2020	32	21	
7/07/2020	13	7	
13/07/2020	5	4	
19/07/2020	5	3	
25/07/2020	12	6	
31/07/2020	18	12	
6/08/2020	13	5	
12/08/2020	9	4	
18/08/2020	8	2	
24/08/2020	13	4	
30/08/2020	15	14	
5/09/2020	15	10	
11/09/2020	7	3	
17/09/2020	27	17	
23/09/2020	25	13	
29/09/2020	10	8	
5/10/2020	29	16	
11/10/2020	16	9	
17/10/2020	40	20	
23/10/2020	25	13	
29/10/2020	9	7	
4/11/2020	14	10	
10/11/2020	8	7	
16/11/2020	36	21	
22/11/2020	24	19	
28/11/2020	27	16	
4/12/2020	28	16	
10/12/2020	33	17	
16/12/2020	47	16	
22/12/2020	10	8	
28/12/2020	22	15	
03/01/2021	10	10	
09/01/2021	8	8	
15/01/2021	35	23	
<sup>1</sup> 24hr Max Criteria	<b>N/A</b>	<b>50</b>	
Year-to-date Average	19.1	11.3	
<sup>1</sup> Annual Average Criteria	<b>90</b>	<b>30</b>	

### 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**

<b>Date &amp; Time</b>	<b>Overpressure (dB(L))</b>	<b>Vibration (mm/s)</b>
Monday, 19 October 2020 12:59 PM	106.0	1.05
Monday, 14 December 2020 11:00 AM	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 - April 2020**

Location	Date Start Time Weather	LAMAX	LA1	LA10	LA90	LAEQ	Description of noise and typical maximum noise levels (dBA)
NM1	04/11/2020 1:20 PM W = calm	66	62	55	41	49	Pacific Highway 50 - 55  <b>Karuah Quarry inaudible</b>
NM2	04/11/2020 11:35 AM W = calm	75	70	66	57	63	Pacific Highway 55-65 Birds 40 - 45  <b>Karuah Quarry inaudible</b>

### 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	LA1	LA10	LA90	LAEQ
Day	64	60	51	57
Evening	66	62	49	59
Night	66	63	47	58

**Table 6 Unattended noise monitoring results – NM2**

INP Period	LA1	LA10	LA90	LAEQ
Day	70	67	54	63
Evening	71	66	52	63
Night	71	66	47	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 01 September 2020, 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, 30 November 2020	22.6	7.5	325	410	236	NV	0.3	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 a total of 6 days of discharge, 1 day controlled (23 July 2020) and 5 days uncontrolled (26 to 30 October 2020), from Sediment Dam 2, see **Table 8** for monitoring results.

**Table 8 Discharge 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, 23 July 2020	15.6	7.5	487	90	35	NV	0.8	0.1
Monday, 26 October 2020	17.6	6.3	61	615	297	NV	0.7	0.5
Tuesday, 27 October 2020	20.9	6.9	253	1000	1210	NV	0.5	0.2
Wednesday, 28 October 2020	21.6	6.9	263	1100	620	NV	0.5	0.3
Thursday, 29 October 2020	20.2	7	263	1382	680	NV	0.6	0.2
Friday, 30 October 2020	22.3	7.2	266	860	<b>497</b>	NV	0.5	0.2



## 6 PRODUCTION

---

Monthly monitoring of sales across the reporting period is detailed in **Table 9**, showing that there was a total of 722 truck movements taking 26,876 tonnes of material from the Quarry to various customers across New South Wales.

*Table 9 Monthly production data*

<b>Date</b>	<b>Truck Movements</b>	<b>Material (tonnes)</b>
July 2020	-	0
August 2020	-	0
September 2020	-	0
October 2020	-	0
November 2020	560	16,023
December 2020	162	10,853
<b>Total</b>	<b>722</b>	<b>26,876</b>

## 7 REPORTING

---

### 7.1 INCIDENTS

The Karuah region experienced a period of extreme rainfall, receiving 333.2 mm between 24 October and 29 October 2020. This was considered to be a 1 in 200 year rainfall event. On 26 October, uncontrolled discharges occurred from SD2 via LDP001 as a result of this extreme rainfall. Access roads were submerged and access tracks damaged. An incident report was completed by the Environmental Officer and maintenance work on erosion and sediment controls across the site were undertaken where safe to do so. The Pollution Incident Response Management Plan was activated, and relevant authorities contacted.

The EPA Pollution Hotline was contacted to self-report uncontrolled discharge from SD2. DPIE Compliance Officer (Jennifer Sage) and EPA Operations Officer (Rebecca Akhurst) were also both contacted and provided a summary of the extreme weather event and environmental incident that had occurred. A communication strategy was prepared in consultation with the DPIE and implemented as soon as practically possible, to notify nearby residents.

At the morning toolbox talk, all site workers and contractors were briefed that the PIRMP had been enacted and were advised to notify their supervisor if they noticed anything that may cause environmental concern.

### 7.2 NON-COMPLIANCE

During the reporting period, the uncontrolled discharge event in October 2020 was the only reportable non-compliance.

### 7.3 COMPLAINTS

During the reporting period, HQPL received one complaint directly from a local resident regarding noise at 7.30am on 13 November 2020. The noise complaint was investigated and the quarry was found to be operating within approved limits and operation hours at the time of the complaint.

### 7.4 TRAINING

HQPL generally 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, three key environmental factors were revised with all site workers:

- Fuel & Oil Spill Control (22 July 2020);
- Biodiversity Conservation (16 October 2020); and
- Waste Management (20 November 2020).

## 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, the following management plans revisions were approved by DPIE:

- Rehabilitation and Quarry Closure (August 2020);
- Flora and Fauna (October 2020); and
- Environmental Management Strategy (October 2020).

## 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 on the *Community Consultation Report* from community.

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

\\slr\slr\local\Corporate\Projects-SLR\630-Sv\NTL\630-NTL\630-30036\00000 Karuah Quarry EMS 2020 Review\06 SLR Data\01 CAD\GIS\GIS\SR63030036\_EIMP\_Monitoring\_01.mxd

406000

407000







408000

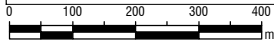
639 0000

639 9000



**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)