



Karuah Hard Rock Quarry

Community Consultation Report 2020/1



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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 2020 to 30 June 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 January 2020 to 30 June 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.

DDG4 was not able to be analysed for date 7/05/2020 due to the sample jar being broken during collection. This was immediately reported to the Department and no further action was required.

Table 1 Deposited dust monitoring results

| Date | DDG1 | DDG2 | DDG3 | DDG4 |
|--------------------------------|------|------|------|------|
| 13/01/2020 | 2.0 | 2.7 | 1.9 | 2.0 |
| 13/02/2020 | 3.4 | 1.6 | 2.3 | 3.5 |
| 12/03/2020 | 1.7 | 1.5 | 0.7 | 0.9 |
| 9/04/2020 | 0.8 | 0.8 | 0.5 | 0.1 |
| 7/05/2020 | 1.2 | 0.9 | 1.0 | - |
| 4/06/2020 | 0.2 | 0.3 | 0.3 | 0.7 |
| Rolling Annual Average | 1.4 | 1.3 | 1.2 | 1.5 |
| 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 |
|--------------------------------------|----------------------------------|-----------------------------------|---------|
| 3/01/2020 | 49 | 26 | |
| 9/01/2020 | 45 | 30 | |
| 15/01/2020 | 32 | 14 | |
| 21/01/2020 | 66 | 32 | |
| 27/01/2020 | 47 | 25 | |
| 2/02/2020 | 57 | 29 | |
| 8/02/2020 | 26 | 16 | |
| 14/02/2020 | 22 | 15 | |
| 20/02/2020 | 31 | 16 | |
| 26/02/2020 | 36 | 16 | |
| 3/03/2020 | 34 | 14 | |
| 9/03/2020 | 21 | 7 | |
| 15/03/2020 | 23 | 10 | |
| 21/03/2020 | 38 | 18 | |
| 27/03/2020 | 20 | 9 | |
| 2/04/2020 | 51 | 17 | |
| 8/04/2020 | 13 | 10 | |
| 14/04/2020 | 27 | 12 | |
| 20/04/2020 | 18 | 11 | |
| 26/04/2020 | 27 | 15 | |
| 2/05/2020 | 15 | 7 | |
| 8/05/2020 | 29 | 16 | |
| 14/05/2020 | 9 | 4 | |
| 20/05/2020 | 16 | 8 | |
| 26/05/2020 | 15 | 8 | |
| 1/06/2020 | 12 | 6 | |
| 7/06/2020 | 15 | 11 | |
| 13/06/2020 | 8 | 3 | |
| 19/06/2020 | 17 | 8 | |
| 25/06/2020 | 5 | 1 | |
| ¹ 24hr Max Criteria | N/A | 50 | |
| Year-to-date Average | 37.2 | 18.1 | |
| 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) |
|--|-------------------------|---------------------|
| Wednesday, 15 January 2020 12:00 PM | 105.5 | 1.20 |
| Friday, 28 February 2020 12:44 PM | 101.0 | 1.60 |
| Friday, 17 April 2020 11:01 AM | 104.2 | 1.44 |

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 April, 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 | 18/04/2020 8:30 AM W = calm | 72 | 67 | 63 | 52 | 60 | Pacific Highway 60 Birds 50 Farm activities 50 Karuah Quarry inaudible |
| NM2 | 18/04/2020 9:20 AM W = calm | 77 | 67 | 63 | 56 | 60 | Pacific Highway 55-65 Birds 50 Karuah Quarry inaudible |

4.2 UNATTENDED NOISE MONITORING

Unattended noise monitoring was undertaken during April 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 | 67 | 64 | 54 | 61 |
| Evening | 67 | 63 | 50 | 60 |
| Night | 66 | 63 | 45 | 58 |

Table 6 Unattended noise monitoring results – NM2

| INP Period | LA1 | LA10 | LA90 | LAEQ |
|------------|-----|------|------|------|
| Day | 72 | 68 | 60 | 65 |
| Evening | 70 | 67 | 53 | 63 |
| Night | 69 | 65 | 48 | 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 19 May 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) |
|----------------------|-----------|---------------|------------|-----------------|------------|---------------------|----------------|----------------|
| Tuesday, 19 May 2020 | 20.5 | 8 | 457 | 280 | 147 | <5 | 0.8 | 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 no discharges undertaken 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 2,293 truck movements taking 73,336.54 tonnes of material from the Quarry to various customers across New South Wales.

Table 8 Monthly production data

| Date | Truck Movements | Material (tonnes) |
|---------------|-----------------|-------------------|
| January 2020 | 462 | 16,144.20 |
| February 2020 | 914 | 29,805.86 |
| March 2020 | 416 | 12,777.38 |
| April 2020 | 227 | 7,372.72 |
| May 2020 | 152 | 4,223.14 |
| June | 122 | 3,013.24 |
| Total | 2,293 | 73,336.54 |

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.

Noise & Vibration (11/02/2020)

The Quarry Manager (G. Dressler) received a direct phone call from EPA Regional Operations Officer (R. Akhurst) on 11 February 2020. The EPA received a complaint from a member of the public who allegedly heard loud noises coming from Karuah Hard Rock Quarry at approximately 3:00 AM. Mr Dressler outlined the Quarry operation hours and that no personnel or work would be occurring at the Quarry at that time. No further action was taken and this 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.

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

- Dust (7 February 2020); and
- Noise and vibration (13 March 2020).

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, the following management plans were being revised:

- Flora and Fauna (approval pending)
- Environmental Management Strategy (approval pending)
- Rehabilitation and Quarry Closure (approval pending)

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

0 100 200 300 400
m

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

05-Aug-2020
630.30036

Source: Nearmap (June 2020)

Sheet Size : A4