



Karuah East Quarry
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Karuah East Quarry Pty Limited
Blue Rock Close, Karuah NSW 2324

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Karuah East Quarry

Environmental Monitoring Report

July 2025



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1.0 Introduction

This report has been completed to meet the requirements of Section 66(6) of the *Protection of the Environment Operations Act 1997* and the NSW Environmental Protection Authority's (EPA) Requirements for Publishing Pollution Monitoring Data (EPA, 2013). This report summarises the required monitoring data under Environmental Protection Licence 20611 (the EPL) and Project Approval MP09_0175 (the Consent) for the Karuah East Quarry (the Quarry) as summarised by **Table 1** and **Table 2** respectively.

Table 1 *Summary of Environment Protection Licence, EPL 20611*

| | |
|--|--|
| EPL Number: | EPL 20611 |
| Licensee's Name: | Karuah East Quarry Pty Limited |
| Licensee's Address: | Karuah East Quarry PO Box 3284, Thornton NSW 2322 Blue Rock Close, Karuah NSW 2324 |
| Link to Full Licence on the EPA website: | EPL 20611 |

Table 2 *Summary of Project Approval, MP09_0175*

| | |
|--|--|
| Project Approval: | MP09_0175 |
| Applicant: | Karuah East Quarry Pty Limited |
| Consent Authority: | NSW Planning Assessment Commission |
| Link to Full Project Approval on the NSW Planning website: | Project Approval MP09_0175 |

A summary of the environmental monitoring data for the July 2025 Reporting Period (the Reporting Period) is covered in this report. Tables throughout this report provide key monitoring information from the EPL and the Consent, including:

- location of monitoring;
- pollutant;
- unit of measurement; and
- monitoring frequency required.

Monitoring locations are illustrated by the site plan provided by **Appendix 1**.

2.0 Air Quality Monitoring

Dust emissions generated by the Quarry operation must not cause additional exceedances of ambient air quality criterion outlined in Schedule 3, Condition 13 of the Consent and summarised by **Table 3**, **Table 4** and **Table 5**.

Deposited dust and TSP/PM10 monitoring is undertaken at the locations listed in **Table 6**, in accordance with the Approved Methods of Sampling and Analysis of Air Pollutants in NSW (EPA, 2022).

Table 3 Long-term Assessment Criteria for Deposited Dust (MP09-0175).

| Pollutant | Averaging Period | Maximum Increase in Deposited Dust Level ¹ | Maximum Total Deposited Dust Level ¹ |
|----------------|------------------|---|---|
| Deposited Dust | Annual | 2 g/m ² /month | 4 g/m ² /month |

¹ Deposited dust is assessed as insoluble solids as defined by AS 3580.10.1-2003.

Table 4 Long-term Assessment Criteria for Particulate Matter (MP09-0175).

| Pollutant | Averaging Period | Criterion |
|-----------------------------------|------------------|----------------------|
| Total Suspended Particulates | Annual | 90 µg/m ³ |
| Particulate Matter < 10 µm (PM10) | Annual | 30 µg/m ³ |

Table 5 Short-term Assessment Criteria for Particulate Matter (MP09-0175).

| Pollutant | Averaging Period | Criterion |
|-----------------------------------|------------------|----------------------|
| Particulate Matter < 10 µm (PM10) | 24-hour | 50 µg/m ³ |

Table 6 Air Quality Monitoring Locations (EPL 20611).

| Site Monitoring Point ID | EPL Monitoring Point ID | Location | Address |
|--------------------------|-------------------------|----------------------------------|---|
| DDG 1 | 12 | South-West of Karuah East Quarry | 54 Mill Hill Close, Karuah NSW 2324 |
| DDG 2 | 13 | South-West of Karuah East Quarry | 64 Mill Hill Close, Karuah NSW 2324 |
| DDG 3 | 14 | South-West of Karuah East Quarry | Lot 251 DP1092111, Karuah NSW 2324 |
| DDG 4 | 15 | East of Karuah East Quarry | 21 Halloran Road, North Arm Cove NSW 2324 |
| DDG 5 | 16 | South-West of Karuah East Quarry | Lot 21 DP1024341, Karuah NSW 2324 |
| HVAS | 9 | South-West of Karuah East Quarry | 64 Mill Hill Close, Karuah NSW 2324 |

2.1 Deposited Dust Monitoring

Deposited dust results for the 12-months prior-to and including July 2025 are summarised by **Table 7**. Monitoring results for the Reporting Period at all five DDG monitoring sites are within the long-term annual deposited dust limit of 4 g/m²/month.

Table 7 *Deposited dust monitoring results.*

| Reporting Period | Start Date | End Date | Days | DDG 1 (EPL ID 4) EPL ID 12 | DDG 2 (EPL ID 5) EPL ID 13 | DDG 3 (EPL ID 6) EPL ID 14 | DDG 4 (EPL ID 7) EPL ID 15 | DDG 5 (EPL ID 8) EPL ID 16 |
|----------------------------|------------|------------|------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Aug-24 | 30/07/2024 | 30/08/2024 | 31 | (0.7) | (0.5) | (0.7) | (0.9) | (0.6) |
| Sep-24 | 30/08/2024 | 30/09/2024 | 31 | (2.2) | (1.2) | (1.3) | (1.2) | (0.9) |
| Oct-24 | 30/09/2024 | 31/10/2024 | 31 | (1.0) | (0.7) | (0.7) | (5.1)* | (0.4) |
| Nov-24 | 31/10/2024 | 29/11/2024 | 29 | (1.4) | (1.1) | (1.1) | (1.7) | (0.9) |
| Dec-24 | 29/11/2024 | 30/12/2024 | 29 | (0.6) | (1.4) | (1.3) | (3.1) | (1.1) |
| Jan-25 | 30/12/2024 | 31/01/2025 | 32 | (3.8) | (1.7) | (1.9) | (1.3) | (1.3) |
| Feb-25 | 31/01/2025 | 03/03/2025 | 31 | (1.2) | (0.9) | (1.1) | (1.2) | (2.1) |
| Mar-25 | 03/03/2025 | 03/04/2025 | 31 | (0.7) | (1.0) | (1.4) | | (28.2)^ |
| | 04/03/2025 | 03/04/2025 | 30 | | | | (1.1) | |
| Apr-25 | 03/04/2025 | 05/05/2025 | 32 | 1.2 | 3.2 | 0.4 | (1.0) | 1.1 |
| May-25 | 05/05/2025 | 03/06/2025 | 29 | 2.0 | 3.9 | 0.2 | (0.3) | 0.6 |
| Jun-25 | 03/06/2025 | 01/07/2025 | 28 | 2.9 | 1.0 | 0.6 | 0.4 | 2.1 |
| Jul-25 | 01/07/2025 | 01/08/2025 | 31 | 10.1* | 0.5 | 0.4 | 0.2 | 0.9 |
| Progressive Annual Average | | | | 2.3 | 1.4 | 0.9 | 1.5 | 3.4 |

Notes: * Recorded anomalous exceedances which were reported to the NSW Department of Planning, Housing & Infrastructure (NSW Planning), the NSW EPA and surrounding landholders in accordance with the relevant conditions of the Consent and EPL.

^ An exceedance was recorded at DDG5 during the March 2025 Monitoring Period, due to an elevated quantity of combustible matter being recorded (27.5 g). This is attributed to the development of a significant algal bloom on the collected rainwater surface within the dust gauge glassware. This event was reported to the NSW Department of Planning, Housing & Infrastructure (NSW Planning), the NSW EPA and surrounding landholders in accordance with the relevant conditions of the Consent and EPL.

2.2 High Volume Air Sampling

TSP and PM10 results for the Reporting Period are summarised by **Table 8** and illustrated respectively by **Figure 1** and **Figure 2**.

Table 8 *HVAS TSP and PM10 monitoring results for the Reporting Period.*

| Run Date | Total Suspended Particulates, TSP (µg/m ³) | Particulate Matter < 10 µm, PM10 (µg/m ³) |
|-----------------|---|--|
| 05/07/2025 | 5 | 4 |
| 11/07/2025 | 10 | 3 |
| 17/07/2025 | 9 | 5 |
| 23/07/2025 | 5 | 4 |
| 29/07/2025 | 15 | 7 |
| Monthly Average | 8.8 | 4.6 |

Monitoring results for the five HVAS run days within the Reporting Period were compliant with the long-term limits for TSP and PM10 and short-term limits for PM10.

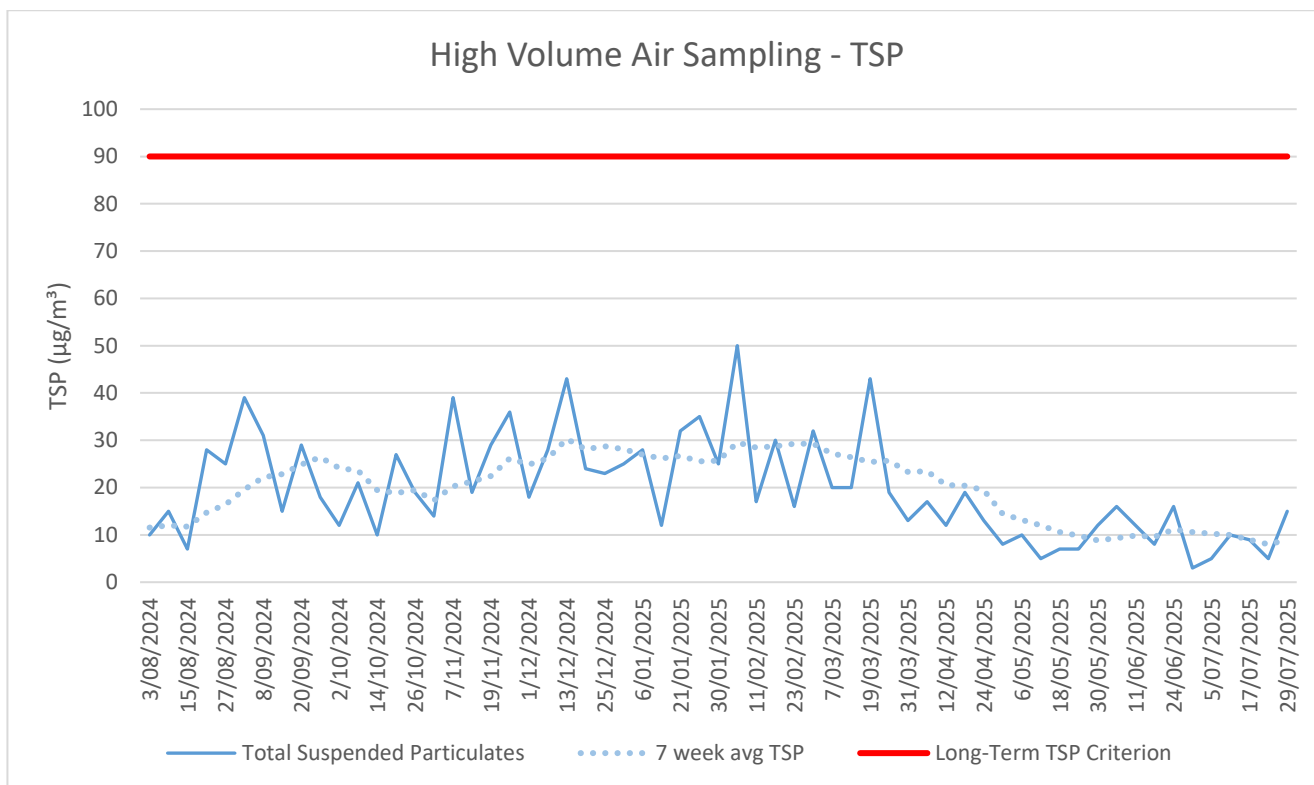


Figure 1 Long-term TSP monitoring trends.

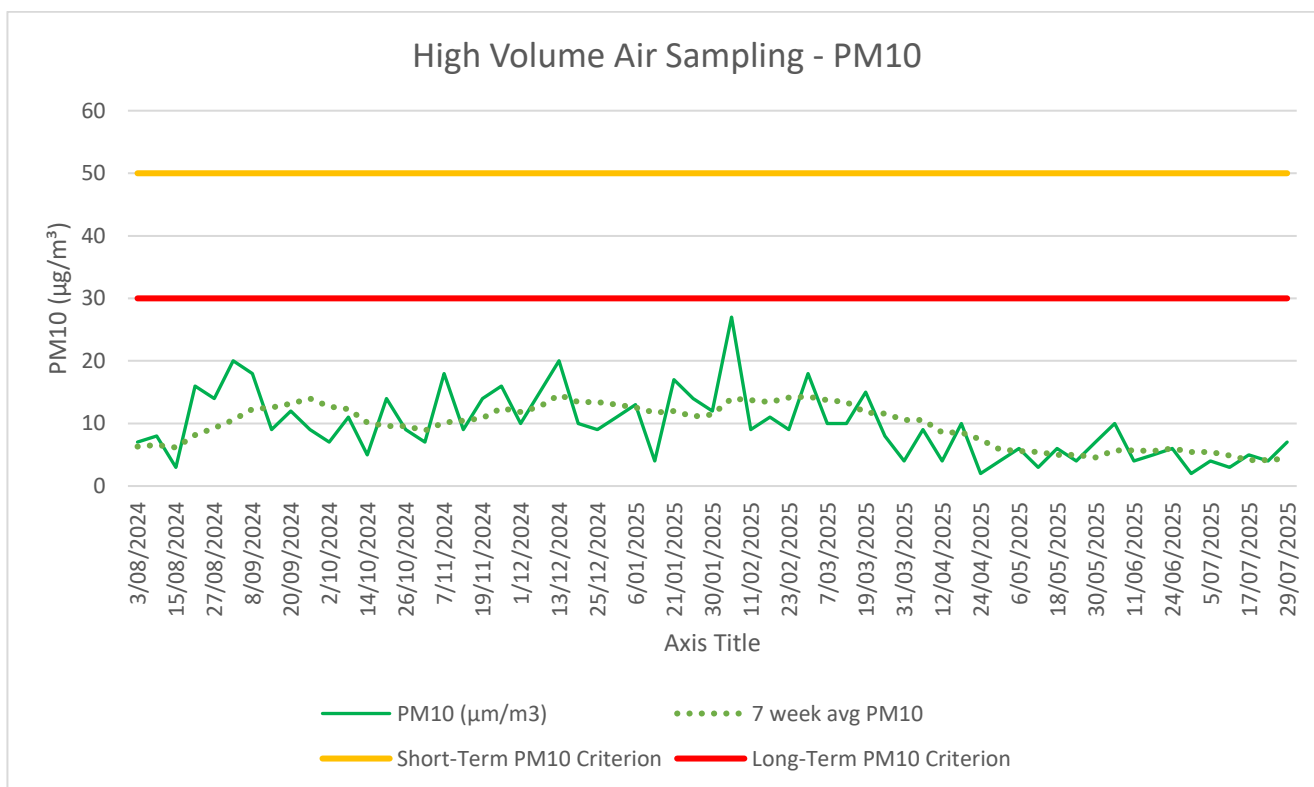


Figure 2 Long-term PM10 monitoring trends.

3.0 Blast Monitoring

Blast monitoring is undertaken for all blasts at the Quarry at the nearest residential location (EPL Monitoring Point 11) to ensure that air blast overpressure and ground vibration remain within the compliance limits, as summarised by **Table 9**; with the monitoring results summarised by **Table 10**.

There were two blasts undertaken during the Reporting Period, which were observed to be within compliance limits, as summarised by **Table 10**.

Table 9 *Blasting Airblast Overpressure and Ground Vibration Criteria (MP09-0175 & EPL 20611).*

| Location | Airblast Overpressure (dB(L)) | Ground Vibration (mm/s) | Allowable Exceedance |
|----------------------------|-------------------------------|-------------------------|------------------------------------|
| Private Residence B | 120 | 10 | 0% |
| EPL Monitoring Point ID 11 | 115 | 5 | 5% over 12-month reporting period. |

Table 10 *Blasting Monitoring Results.*

| Date | Time | Location | Airblast Overpressure (dB(L)) | Ground Vibration (mm/s) |
|------------|-------|----------|-------------------------------|-------------------------|
| 15/07/2025 | 12:32 | RL120 | 114.1 | 0.96 |
| 30/07/2025 | 13:15 | RL120 | 110.7 | 0.56 |

*Not triggered = n/t
Ground Vibration < 0.5 mm/s
Overpressure < 108 dB(L)

4.0 Noise Monitoring

Noise monitoring is undertaken in accordance with the EPL and NSW Planning approved Noise Management Plan, which requires attended noise monitoring to be conducted on a quarterly basis.

No noise monitoring was undertaken during the Reporting Period.

5.0 Surface Water Monitoring

Water monitoring is undertaken in accordance with the EPL and NSW Planning approved Water Management Plan, with daily monitoring of surface water being discharged from the Quarry via the licenced discharge points in accordance with Condition L2 and M2 of the EPL.

Discharge events that occurred during the Reporting Period are summarised by **Table 11**.

Controlled discharge events were compliant with the limits provided by the Consent and EPL, including Total Suspended Solids (TSS) below 40 mg/L and pH within the range of 6.5 to 8.5.

However, a major rainfall event greater than the design storm event was experienced at the site over three days from 01 to 03 July 2025. The quarry received 120.4 mm of rainfall during this event resulting in uncontrolled discharges from all three sediment dams, exceeding the site's TSS limits. During the event the site's Pollution Incident Response Management Plan (PIRMP) was enacted.

Table 11 Discharge Water Monitoring Results.


| Date | pH | Turbidity (NTU) | Total Suspended Solids, TSS (mg/L) | Oil and Grease | Discharge Type |
|----------------------|-----|-----------------|------------------------------------|----------------|----------------|
| LDP 1 – Dam 1 | | | | | |
| 01/07/2025 | 7.2 | >1000 | 1200 | Not Visible | Uncontrolled |
| 02/07/2025 | 7.5 | >1000 | 1200 | Not Visible | Uncontrolled |
| 03/07/2025 | 7.5 | >1000 | 1300 | Not Visible | Uncontrolled |
| LDP 2 – Dam 2 | | | | | |
| 01/07/2025 | 6.8 | 290 | 86 | Not Visible | Uncontrolled |
| 02/07/2025 | 7.0 | 370 | 150 | Not Visible | Uncontrolled |
| 03/07/2025 | 7.0 | 290 | 180 | Not Visible | Uncontrolled |
| 05/07/2025 | 7.1 | 50 | 27 | Not Visible | Controlled |
| 19/07/2025 | 7.5 | 13 | 5 | Not Visible | Controlled |
| 29/07/2025 | 7.8 | 3 | <5 | Not Visible | Controlled |
| LDP 3 – Dam 3 | | | | | |
| 01/07/2025 | 7.0 | 200 | 120 | Not Visible | Uncontrolled |
| 02/07/2025 | 6.9 | 120 | 47 | Not Visible | Uncontrolled |
| 03/07/2025 | 6.9 | 120 | 76 | Not Visible | Uncontrolled |
| 05/07/2025 | 6.9 | 60 | 25 | Not Visible | Controlled |
| 06/07/2025 | 6.7 | 60 | 30 | Not Visible | Controlled |
| 07/07/2025 | 6.8 | 60 | 34 | Not Visible | Controlled |
| 18/07/2025 | 7.0 | 26 | 15 | Not Visible | Controlled |
| 19/07/2025 | 7.1 | 29 | 14 | Not Visible | Controlled |
| 20/07/2025 | 7.0 | 18 | 6 | Not Visible | Controlled |
| 29/07/2025 | 7.1 | 8.4 | 6 | Not Visible | Controlled |
| 30/07/2025 | 7.0 | 9 | 7 | Not Visible | Controlled |
| 31/07/2025 | 7.1 | 15 | 12 | Not Visible | Controlled |

6.0 Weather Station Monitoring

The Quarry operates and maintains a permanent meteorological monitoring station to record weather parameters including temperature, wind speed and direction, solar radiation, and rainfall. **Figure 3** below outlines the weather records for the Reporting Period.

Monthly Weather Summary

Site: **Karuah Quarry Complex**
Month: **July 2025**



| Date | Day | Temperature @ 2m | | | Temperature @ 10m | | | Winds | | | Solar Radiation | | Rain ² mm |
|--------------|-----|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------|--------------------------------|-----------------------------|--------------------------------------|--------------------------------------|-------------------------|
| | | Max ¹ °C | Min ² °C | Ave ¹ °C | Max ¹ °C | Min ² °C | Ave ¹ °C | Max Gust ¹ km/h | Ave Speed ² km/h | Dir Ave ¹ deg | Max ¹ W/m ² | Ave ¹ W/m ² | |
| 1 | Tue | 13.2 | 8.7 | 11.9 | 13.2 | 8.5 | 11.9 | 33.1 | 18.8 | 203 | 175.8 | 29.2 | 71.6 |
| 2 | Wed | 12.4 | 9.3 | 10.5 | 12.8 | 9.4 | 10.6 | 61.5 | 32.4 | 240 | 111.7 | 10.7 | 34.0 |
| 3 | Thu | 15.9 | 11.3 | 13.4 | 16.3 | 11.8 | 13.8 | 54.4 | 27.2 | 256 | 303.3 | 25.5 | 14.8 |
| 4 | Fri | 17.1 | 6.3 | 11.4 | 16.8 | 8.3 | 12.3 | 35.5 | 17.6 | 254 | 430.0 | 63.0 | 0.0 |
| 5 | Sat | 18.4 | 5.0 | 9.8 | 17.0 | 5.7 | 10.2 | 26.0 | 19.5 | 231 | 402.5 | 93.9 | 0.0 |
| 6 | Sun | 19.3 | 8.1 | 13.1 | 18.5 | 8.2 | 13.8 | 16.6 | 9.9 | 172 | 402.4 | 77.4 | 0.0 |
| 7 | Mon | 22.4 | 6.1 | 13.2 | 21.4 | 7.2 | 14.3 | 39.0 | 20.1 | 223 | 466.6 | 84.4 | 0.4 |
| 8 | Tue | 18.3 | 5.1 | 11.6 | 17.3 | 6.4 | 12.6 | 35.5 | 19.1 | 245 | 481.7 | 96.0 | 0.0 |
| 9 | Wed | 15.7 | 3.4 | 8.5 | 15.2 | 4.2 | 9.1 | 20.1 | 12.3 | 218 | 349.9 | 54.3 | 0.0 |
| 10 | Thu | 21.0 | 5.0 | 11.7 | 19.9 | 6.4 | 12.8 | 27.2 | 14.7 | 220 | 421.7 | 100.0 | 0.2 |
| 11 | Fri | 17.6 | 9.1 | 12.7 | 16.6 | 9.8 | 12.8 | 59.2 | 36.9 | 235 | 463.3 | 100.7 | 0.0 |
| 12 | Sat | 17.8 | 6.1 | 12.4 | 17.2 | 8.9 | 13.3 | 34.3 | 24.0 | 246 | 413.3 | 99.6 | 0.0 |
| 13 | Sun | 19.2 | 3.8 | 9.9 | 18.2 | 4.8 | 10.6 | 27.2 | 21.5 | 241 | 419.9 | 98.9 | 0.0 |
| 14 | Mon | 19.4 | 7.6 | 12.3 | 18.6 | 8.3 | 13.5 | 30.8 | 18.2 | 237 | 517.5 | 99.9 | 0.0 |
| 15 | Tue | 19.9 | 3.2 | 9.7 | 18.7 | 4.3 | 10.3 | 34.3 | 20.9 | 225 | 434.2 | 101.9 | 0.0 |
| 16 | Wed | 14.8 | 3.4 | 9.7 | 14.0 | 4.8 | 10.5 | 28.4 | 15.6 | 245 | 354.0 | 58.7 | 0.2 |
| 17 | Thu | 16.8 | 1.8 | 7.6 | 15.9 | 2.8 | 8.3 | 16.6 | 11.6 | 255 | 438.3 | 106.5 | 0.0 |
| 18 | Fri | 16.9 | 6.2 | 10.1 | 16.4 | 7.2 | 10.7 | 11.8 | 8.5 | 227 | 493.3 | 95.4 | 0.0 |
| 19 | Sat | 17.1 | 8.2 | 11.0 | 15.5 | 9.2 | 11.2 | 24.9 | 14.5 | 223 | 618.3 | 43.7 | 36.2 |
| 20 | Sun | 14.7 | 2.8 | 8.7 | 14.7 | 3.5 | 9.3 | 17.8 | 11.8 | 254 | 552.4 | 60.3 | 0.4 |
| 21 | Mon | 17.1 | 5.3 | 9.8 | 15.9 | 6.7 | 10.0 | 16.6 | 10.5 | 218 | 440.0 | 103.9 | 2.2 |
| 22 | Tue | 19.6 | 7.5 | 11.9 | 18.5 | 8.3 | 12.5 | 16.6 | 11.6 | 197 | 498.3 | 98.1 | 0.2 |
| 23 | Wed | 20.3 | 11.8 | 15.0 | 19.0 | 12.1 | 15.3 | 23.7 | 16.3 | 234 | 520.8 | 78.4 | 1.8 |
| 24 | Thu | 19.8 | 2.9 | 10.9 | 19.0 | 4.1 | 12.0 | 20.1 | 11.7 | 249 | 566.7 | 57.6 | 2.0 |
| 25 | Fri | 16.0 | 1.5 | 7.2 | 15.1 | 2.6 | 7.8 | 30.8 | 22.8 | 251 | 458.3 | 112.7 | 0.0 |
| 26 | Sat | 18.1 | 5.7 | 13.2 | 17.1 | 6.9 | 13.5 | 30.8 | 16.3 | 206 | 455.8 | 100.8 | 4.4 |
| 27 | Sun | 16.4 | 4.7 | 9.6 | 15.5 | 5.7 | 10.4 | 40.2 | 26.0 | 210 | 495.8 | 43.1 | 1.6 |
| 28 | Mon | 17.6 | 10.1 | 13.2 | 16.8 | 10.9 | 13.5 | 54.4 | 24.1 | 239 | 651.7 | 86.3 | 0.2 |
| 29 | Tue | 16.5 | 10.9 | 13.3 | 15.6 | 11.6 | 13.4 | 50.9 | 30.6 | 238 | 608.3 | 107.2 | 0.0 |
| 30 | Wed | 17.0 | 8.1 | 11.2 | 15.9 | 8.7 | 11.5 | 39.0 | 21.1 | 222 | 618.3 | 82.1 | 0.0 |
| 31 | Thu | 11.9 | 9.5 | 10.6 | 11.6 | 9.6 | 10.6 | 22.5 | 12.5 | 226 | 170.8 | 27.5 | 34.4 |
| Ave or Total | | 17.4 | 6.4 | 11.1 | 16.6 | 7.3 | 11.7 | 31.6 | 18.7 | 230.3 | 443.1 | 77.3 | 204.6 |
| High | | 22.4 | 11.8 | 15.0 | 21.4 | 12.1 | 15.3 | 61.5 | 36.9 | | 651.7 | 112.7 | 71.6 |
| Low | | 11.9 | 1.5 | 7.2 | 11.6 | 2.6 | 7.8 | 11.8 | 8.5 | | 111.7 | 10.7 | |
| | | | | | | | | | | | | No. rain days >1mm: | 10 |

Notes: 1. Values are for the 24 hour period from 9am to 9am next day.
2. Values are for the 24 hours to 9am.

Figure 3 Weather Records Summary during the Reporting Period.

7.0 Production Data

Monthly monitoring of sales and truck movements are summarised by **Table 12**.

Table 12 *Quarry Production Data.*

| Month | Truck Movements | Quarry Product Sales (t) |
|---------------------------------|-----------------|--------------------------|
| Jan-25 | 1,822 | 54,080 |
| Feb-25 | 3,048 | 95,968 |
| Mar-25 | 3,001 | 95,438 |
| Apr-25 | 2,044 | 63,662 |
| May-25 | 2,174 | 65,786 |
| Jun-25 | 3,087 | 93,552 |
| Jul-25 | 2,964 | 88,839 |
| Progressive Annual Total | 18,140 | 557,325 |

8.0 Reporting

8.1 Reportable Environmental Incidents

During the Reporting Period, one reportable environmental incident occurred at the Quarry.

- Uncontrolled discharge of sediment-laden water to Yalimbah and Bulga Creeks from Tuesday, 01 July to Thursday, 03 July 2025 following the receipt of 120.4 mm of rainfall over three days. This rainfall event exceeded the 95th percentile 5x day rainfall depth of 90.6 mm, which the site's sediment dams are designed to withstand in accordance with Landcom's Blue Book (Managing Urban Stormwater: Soils and Construction – Volume 2E, Mines and quarries).

During the event the site's PIRMP was enacted through reporting to relevant authorities, the KEQPL executive and the local community. Formal incident reports were subsequently submitted to NSW Planning and the NSW EPA.

8.2 Reportable Non-Compliances

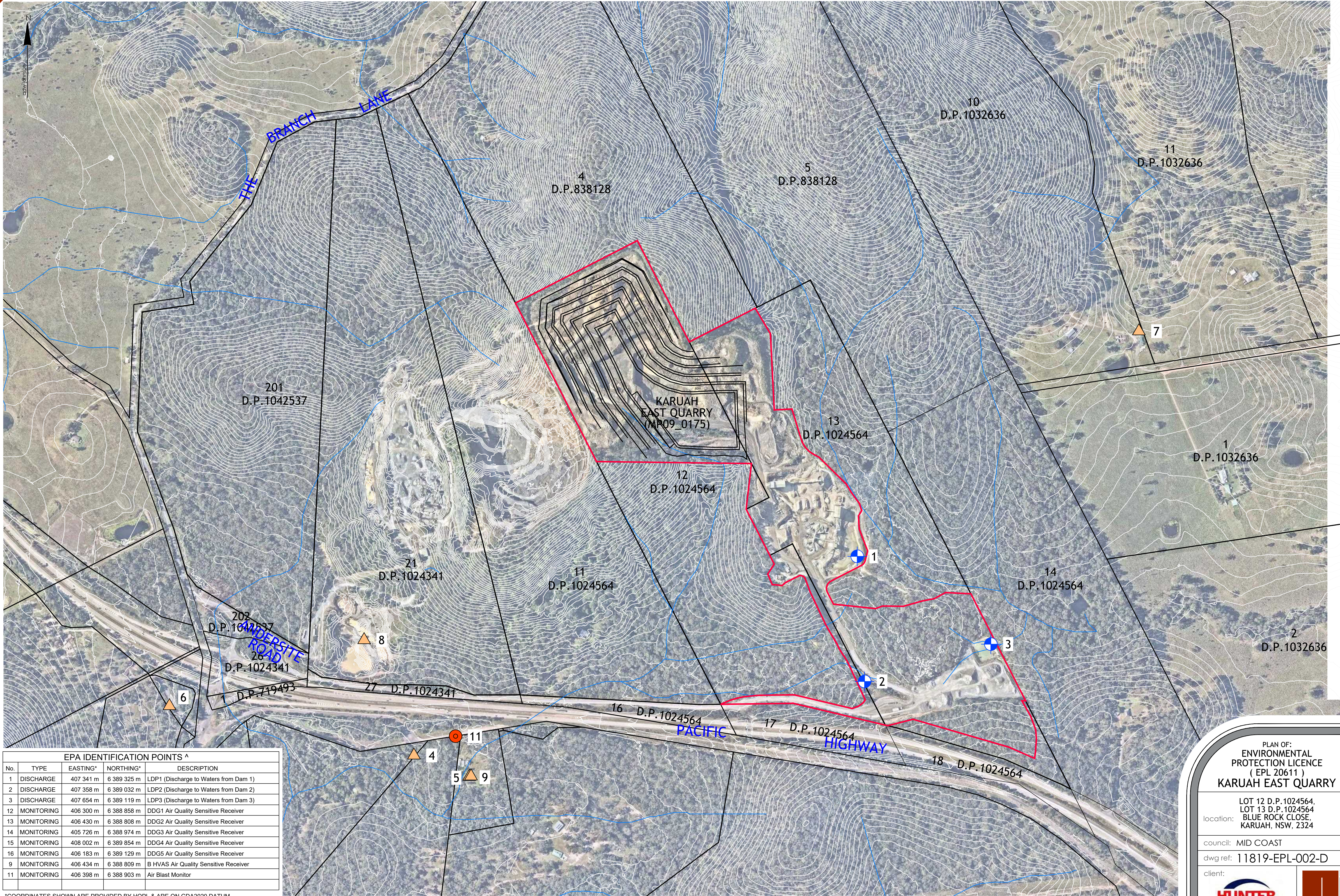
During the Reporting Period, the Quarry had one reportable non-compliance in relation to air quality:

- Anomalous exceedance of performance criteria at one Depositional Dust Gauge.

8.3 Community Complaints

During the Reporting Period, no community complaints were received by the Quarry.

Appendix 1 – EPL 20611 Monitoring Locations



| EPA IDENTIFICATION POINTS ^ | | | | |
|-----------------------------|------------|-----------|-------------|---------------------------------------|
| No. | TYPE | EASTING* | NORTHING* | DESCRIPTION |
| 1 | DISCHARGE | 407 341 m | 6 389 325 m | LDP1 (Discharge to Waters from Dam 1) |
| 2 | DISCHARGE | 407 358 m | 6 389 032 m | LDP2 (Discharge to Waters from Dam 2) |
| 3 | DISCHARGE | 407 654 m | 6 389 119 m | LDP3 (Discharge to Waters from Dam 3) |
| 12 | MONITORING | 406 300 m | 6 388 858 m | DDG1 Air Quality Sensitive Receiver |
| 13 | MONITORING | 406 430 m | 6 388 808 m | DDG2 Air Quality Sensitive Receiver |
| 14 | MONITORING | 405 726 m | 6 388 974 m | DDG3 Air Quality Sensitive Receiver |
| 15 | MONITORING | 408 002 m | 6 389 854 m | DDG4 Air Quality Sensitive Receiver |
| 16 | MONITORING | 406 183 m | 6 389 129 m | DDG5 Air Quality Sensitive Receiver |
| 9 | MONITORING | 406 434 m | 6 388 809 m | B HVAS Air Quality Sensitive Receiver |
| 11 | MONITORING | 406 398 m | 6 388 903 m | Air Blast Monitor |

*COORDINATES SHOWN ARE PROVIDED BY HQPL & ARE ON GDA2020 DATUM

| ver. | date | comment | surveyed | drawn | checked | pm | co-ordinate information | level information | scale (A1 original size) | page |
|------|------------|------------------------------|----------|-------|---------|------|------------------------------------|------------------------------|--------------------------|--------|
| A | 11.06.2020 | INITIAL EPL PLAN | -- | Z.J. | M.R. | M.R. | CO-ORDINATE SYSTEM: M.G.A. ZONE 56 | DATUM: A.H.D. | 0 100 200m | 1 OF 1 |
| B | 24.07.2023 | UPDATED EPL BOUNDARY | -- | Z.J. | M.R. | M.R. | FOR PLAN CONTENT GDA94 | CONTOUR INTERVAL: 2.0 m | SCALE: 1:4000 (FULL) | |
| C | 17.05.2024 | UPDATED MONITORING LOCATIONS | HQPL | Z.J. | M.R. | M.R. | ORIGIN OF CO-ORDINATES: P.M. | ORIGIN OF LEVELS: LIDAR DATA | | |
| D | 20.05.2024 | UPDATED LDP NAMING & POINTS | HQPL | Z.J. | M.R. | M.R. | | | | |

- project management
- civil engineering
- infrastructure
- superintendency
- economic analysis
- social impact
- town planning
- surveying
- development feasibility
- visualisation
- urban design

^ MONITORING POINTS HAVE BEEN PROVIDED BY HUNTER QUARRIES PTY LTD.
REFER TO PLAN 'KARUAH HARD ROCK QUARRY ENVIRONMENTAL MONITORING LOCATIONS - FIGURE 1'
BY SLR CONSULTING AUSTRALIA - REFERENCE: 633.HQP00.0030 DATED 23/06/2014.

PLAN OF:
ENVIRONMENTAL
PROTECTION LICENCE
(EPL 20611)
KARUAH EAST QUARRY

location:
LOT 12 D.P.1024564,
LOT 13 D.P.1024564
BLUE ROCK CLOSE,
KARUAH, NSW, 2324

council: MID COAST

dwg ref: 11819-EPL-002-D

client:



central coast office ph: (02) 4305 4300
hunter office ph: (02) 4978 5100
sydney office ph: (02) 8046 7411

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