



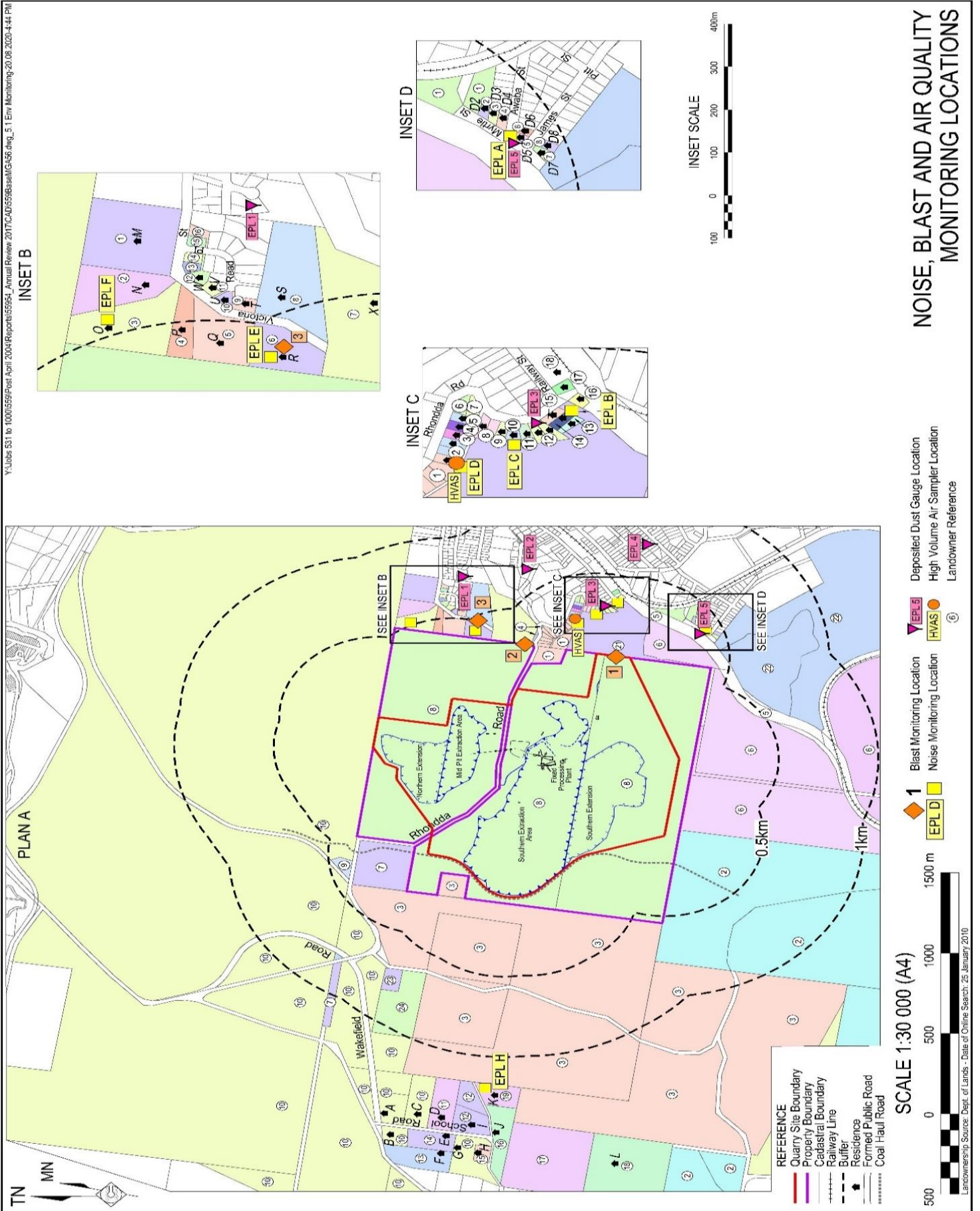
# Teralba Quarry Environmental Monitoring Summary

December 2023

|  |   |
|--|---|
| <b>Environmental Protection Licence (EPL):</b> | 536   |
| <b>Licensee:</b>                               | Metromix Pty Limited  |
| <b>Licensee Address:</b>                       | PO Box 1295<br>Parramatta, NSW 2124   |
| <b>Premises:</b>                               | Metromix Pty Limited Teralba Quarry<br>Rhondda Road<br>Teralba, NSW 2284  |
| <b>Licensee Website:</b>                       | <a href="https://www.metromix.com.au/">https://www.metromix.com.au/</a>   |
| <b>Licensee Website - Monitoring Results:</b>  | <a href="https://www.metromix.com.au/resources/#quarry">https://www.metromix.com.au/resources/#quarry</a>   |
| <b>EPA Public Register:</b>                    | <a href="https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers">https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers</a> |
| <b>Prepared by:</b>                            | R. W. Corkery & Co.   |
| <b>Sample Period:</b>                          | December 2023   |
| <b>Date Last Data Received</b>                 | 10 January 2024   |
| <b>Date of Report</b>                          | 19 January 2024   |

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**Deposited Dust**

Sample Period Start: 01/12/2023  
Sample Period End: 02/01/2024  
Sample Frequency: 30 ± 2 days  
Sample Collected By: Metromix - JJ  
Date Received by Laboratory: 02/01/2024  
Date Results Received by Metromix: 11/01/2024

| EPA Identification No. | Location          | Criteria (g/m <sup>2</sup> /month) | Insoluble Solids (g/m <sup>2</sup> /month) | Ash Fraction (g/m <sup>2</sup> /month) | % Ash Fraction |
|------------------------|-------------------|------------------------------------|--|--|----------------|
| 1                      | Hillside Crescent | 4.0                                | 0.7  | 0.3                                    | 43             |
| 8                      | Rodgers Street    | 4.0                                | 1.1  | 0.8                                    | 73             |
| 9                      | Rhonda Road       | 4.0                                | 0.8  | 0.5                                    | 63             |
| 11                     | Myrtle Street     | 4.0                                | 1.5  | 0.7                                    | 47             |
| 23                     | York Street       | 4.0                                | 2.3  | 1.1                                    | 48             |

**Comments**

No exceedances of the approved criteria were detected during the sample period.

## Deposited Dust - Year to Date

|                           | Rhondda Road            |                         |            | Myrtle Street           |                         |            | Hillside Crescent       |                         |            | Rodgers Street          |                         |            | York Street             |                         |            |
|---------------------------|-------------------------|-------------------------|------------|-------------------------|-------------------------|------------|-------------------------|-------------------------|------------|-------------------------|-------------------------|------------|-------------------------|-------------------------|------------|
|                           | Total Insoluble Solids  | Ash Fraction            | % Ash      | Total Insoluble Solids  | Ash Fraction            | % Ash      | Total Insoluble Solids  | Ash Fraction            | % Ash      | Total Insoluble Solids  | Ash Fraction            | % Ash      | Total Insoluble Solids  | Ash Fraction            | % Ash      |
| Units                     | g/m <sup>2</sup> /month | g/m <sup>2</sup> /month |            | g/m <sup>2</sup> /month | g/m <sup>2</sup> /month |            | g/m <sup>2</sup> /month | g/m <sup>2</sup> /month |            | g/m <sup>2</sup> /month | g/m <sup>2</sup> /month |            | g/m <sup>2</sup> /month | g/m <sup>2</sup> /month |            |
| <b>EPA Approved Level</b> | <b>4.0</b>              |                         |            | <b>4.0</b>              |                         |            | <b>4.0</b>              |                         |            | <b>4.0</b>              |                         |            | <b>4.0</b>              |                         |            |
| January                   | 0.2                     | 0.2                     | 100        | 0.5                     | 0.4                     | 80         | 0.3                     | 0.3                     | 100        | 0.4                     | 0.2                     | 50         | 0.8                     | 0.6                     | 75         |
| February                  | 5.2                     | 4.5                     | 87         | 0.4                     | 0.1                     | 25         | 0.5                     | 0.1                     | 20         | 0.4                     | 0.2                     | 50         | 0.8                     | 0.2                     | 25         |
| March                     | 2.1                     | 1.6                     | 76         | 1.3                     | 0.8                     | 62         | 0.7                     | 0.3                     | 43         | 0.8                     | 0.5                     | 63         | 1.1                     | 0.7                     | 64         |
| April                     | 0.4                     | 0.2                     | 50         | 0.4                     | 0.1                     | 25         | 0.3                     | 0.1                     | 33         | 0.3                     | 0.1                     | 33         | 0.4                     | 0.2                     | 50         |
| May                       | 0.5                     | 0.2                     | 40         | 0.3                     | 0.1                     | 33         | 0.4                     | 0.1                     | 25         | 0.3                     | 0.1                     | 33         | 0.7                     | 0.2                     | 29         |
| June                      | 0.3                     | 0.2                     | 67         | 0.3                     | 0.2                     | 67         | 0.1                     | 0.1                     | 100        | 0.1                     | 0.1                     | 100        | 0.5                     | 0.3                     | 60         |
| July                      | 1.2                     | 1.0                     | 83         | 0.3                     | 0.3                     | 100        | 0.1                     | 0.1                     | 100        | 0.1                     | 0.1                     | 100        | 0.1                     | 0.1                     | 100        |
| August                    | 0.5                     | 0.2                     | 40         | 0.6                     | 0.2                     | 33         | 0.4                     | 0.4                     | 100        | 0.4                     | 0.1                     | 25         | 0.7                     | 0.3                     | 43         |
| September                 | 1.0                     | 0.7                     | 70         | 0.4                     | 0.3                     | 75         | 0.2                     | 0.2                     | 100        | 0.3                     | 0.2                     | 67         | 0.4                     | 0.1                     | 25         |
| October                   | 0.9                     | 0.5                     | 56         | 1.0                     | 0.5                     | 50         | 0.6                     | 0.1                     | 17         | 0.6                     | 0.3                     | 50         | 1.6                     | 0.7                     | 44         |
| November                  | 1.1                     | 0.3                     | 27         | 3.6                     | 0.9                     | 25         | 1.2                     | 0.3                     | 25         | 2.9                     | 2.0                     | 69         | 2.6                     | 0.8                     | 31         |
| December                  | 0.8                     | 0.5                     | 63         | 1.5                     | 0.7                     | 47         | 0.7                     | 0.3                     | 43         | 1.1                     | 0.8                     | 73         | 2.3                     | 1.1                     | 48         |
| <b>Annual Average</b>     | <b>1.2</b>              | <b>0.8</b>              | <b>63</b>  | <b>0.9</b>              | <b>0.4</b>              | <b>52</b>  | <b>0.5</b>              | <b>0.2</b>              | <b>59</b>  | <b>0.6</b>              | <b>0.4</b>              | <b>59</b>  | <b>1.0</b>              | <b>0.4</b>              | <b>49</b>  |
| <b>Annual Maximum</b>     | <b>5.2</b>              | <b>4.5</b>              | <b>100</b> | <b>3.6</b>              | <b>0.9</b>              | <b>100</b> | <b>1.2</b>              | <b>0.4</b>              | <b>100</b> | <b>2.9</b>              | <b>2.0</b>              | <b>100</b> | <b>2.6</b>              | <b>1.1</b>              | <b>100</b> |
| <b>Annual Minimum</b>     | <b>0.2</b>              | <b>0.2</b>              | <b>27</b>  | <b>0.3</b>              | <b>0.1</b>              | <b>25</b>  | <b>0.1</b>              | <b>0.1</b>              | <b>17</b>  | <b>0.1</b>              | <b>0.1</b>              | <b>25</b>  | <b>0.1</b>              | <b>0.1</b>              | <b>25</b>  |

**Particulate Matter (PM<sub>10</sub>)**

Sample Location: EPA 3 - Rodgers Street  
 Sample Frequency: 6 days

| Date Sample Taken (24-hr) | Collected by | Date Results Received | PM <sub>10</sub> $\mu\text{g}/\text{m}^3$ | Monthly Average Criteria ( $\mu\text{g}/\text{m}^3$ ) | Annual Average Criteria ( $\mu\text{g}/\text{m}^3$ ) |
|---------------------------|--------------|-----------------------|---|---|--|
| 01/12/2023                | CBased - TD  | 13/12/2023            | 19.3                                      | 50  |  |
| 07/12/2023                | CBased - MB  | 22/12/2023            | 25.4                                      | 50  |  |
| 13/12/2023                | CBased - MB  | 22/12/2023            | 20.4                                      | 50  |  |
| 19/12/2023                | CBased - LK  | 2/01/2024             | 41.8                                      | 50  |  |
| 25/12/2023                | CBased - MB  | 05/01/2024            | 10.1                                      | 50  |  |
| 31/12/2023                | CBased - LK  | 10/01/2024            | 13.0                                      | 50  |  |
| <b>Monthly Average</b>    |              |                       | 21.7                                      |   | 25/30*   |

\*Project Approval (PA 10\_0183) outlines the annual average PM<sub>10</sub> criteria to be 30 $\mu\text{g}/\text{m}^3$ . However, EPL 536 Condition R4.5a) requires that the air quality monitoring data is assessed against the Air Impact Assessment Criteria outlined in EPA's *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*. The most up to date version of this guideline was published in 2022 and outlines the annual average PM<sub>10</sub> criteria to be 25 $\mu\text{g}/\text{m}^3$ . Metromix has considered both criteria for its review of particulate matter monitoring.

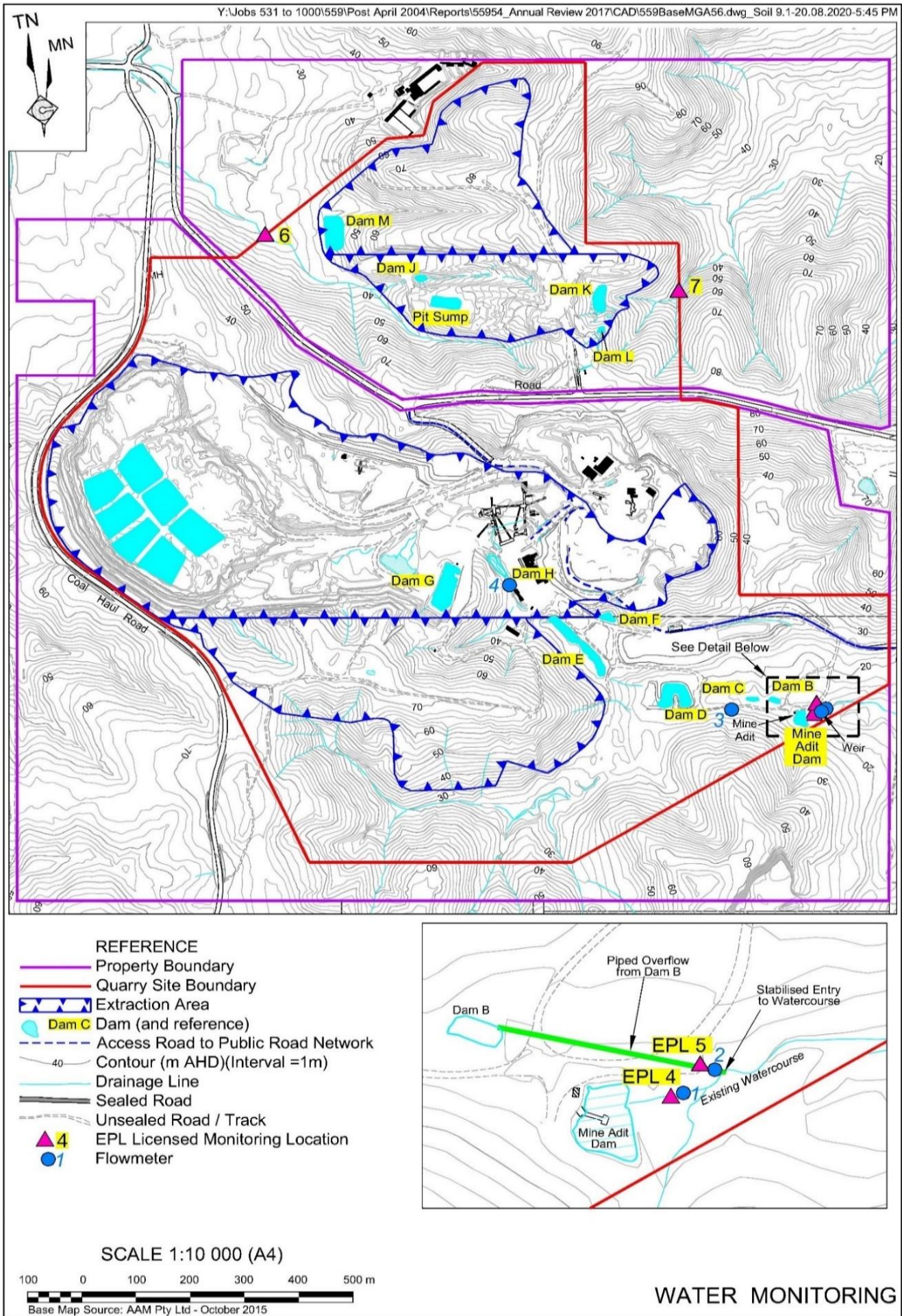
**Comments**

The monthly average of PM<sub>10</sub> results remained below the approved criteria for the sample period.

**Particulate Matter (PM<sub>10</sub>) - Year to Date**

| Date       | PM <sub>10</sub><br>(µg/m <sup>3</sup> ) | Monthly Average<br>(µg/m <sup>3</sup> ) | Year to Date Average<br>(µg/m <sup>3</sup> ) | 24-Hr Criteria<br>(µg/m <sup>3</sup> ) | Comments                                      |
|------------|--|---|--|--|---|
| 05/01/2023 | 15.0                                     | 12.5                                    | 15.0   | 50                                     |   |
| 11/01/2023 | 11.4                                     |   | 13.2   | 50                                     |   |
| 17/01/2023 | 10.5                                     |   | 12.3   | 50                                     |   |
| 23/01/2023 | 9.6                                      |   | 11.6   | 50                                     |   |
| 29/01/2023 | 16.1                                     |   | 12.5   | 50                                     |   |
| 04/02/2023 | 11.5                                     | 14.9                                    | 12.4   | 50                                     |   |
| 10/02/2023 | 12.8                                     |   | 12.4   | 50                                     |   |
| 16/02/2023 | 23.6                                     |   | 13.8   | 50                                     |   |
| 22/02/2023 | 12.0                                     |   | 13.6   | 50                                     |   |
| 28/02/2023 | 14.4                                     |   | 13.7   | 50                                     |   |
| 06/03/2023 | 27.3                                     | 20.7                                    | 14.9   | 50                                     |   |
| 12/03/2023 | 23.6                                     |   | 15.7   | 50                                     |   |
| 18/03/2023 | 27.5                                     |   | 16.6   | 50                                     |   |
| 24/03/2023 | 12.4                                     |   | 16.3   | 50                                     |   |
| 30/03/2023 | 12.8                                     |   | 16.0   | 50                                     |   |
| 05/04/2023 | 12.2                                     | 10.9                                    | 15.8   | 50                                     |   |
| 11/04/2023 | 10.0                                     |   | 15.5   | 50                                     |   |
| 17/04/2023 | 11.8                                     |   | 15.3   | 50                                     |   |
| 23/04/2023 | 9.3                                      |   | 14.9   | 50                                     |   |
| 29/04/2023 | 11.4                                     |   | 14.8   | 50                                     |   |
| 05/05/2023 | 11.2                                     | 13.1                                    | 14.6   | 50                                     |   |
| 11/05/2023 | 14.3                                     |   | 14.6   | 50                                     |   |
| 17/05/2023 | 11.2                                     |   | 14.4   | 50                                     | Short run due to power outage (1,365 minutes) |
| 23/05/2023 | 21.0                                     |   | 14.7   | 50                                     |   |
| 29/05/2023 | 8.0                                      |   | 14.4   | 50                                     |   |
| 04/06/2023 | 13.2                                     | 11.4                                    | 14.4   | 50                                     |   |
| 10/06/2023 | 6.9                                      |   | 14.1   | 50                                     |   |
| 16/06/2023 | 13.3                                     |   | 14.1   | 50                                     |   |
| 22/06/2023 | 16.0                                     |   | 14.1   | 50                                     |   |
| 28/06/2023 | 7.5                                      |   | 13.9   | 50                                     |   |
| 04/07/2023 | 9.4                                      | 11.6                                    | 13.8   | 50                                     |   |
| 10/07/2023 | 12.9                                     |   | 13.8   | 50                                     |   |
| 16/07/2023 | 9.3                                      |   | 13.6   | 50                                     |   |
| 22/07/2023 | 9.8                                      |   | 13.5   | 50                                     |   |
| 28/07/2023 | 16.8                                     |   | 13.6   | 50                                     |   |
| 03/08/2023 | 12.9                                     | 9.7                                     | 13.6   | 50                                     |   |
| 09/08/2023 | 8.4                                      |   | 13.4   | 50                                     |   |
| 15/08/2023 | 5.9                                      |   | 13.2   | 50                                     |   |
| 21/08/2023 | 13.4                                     |   | 13.2   | 50                                     |   |
| 27/08/2023 | 8.0                                      |   | 13.1   | 50                                     |   |
| 02/09/2023 | 10.2                                     | 18.7                                    | 13.0   | 50                                     |   |
| 08/09/2023 | 6.8                                      |   | 12.9   | 50                                     |   |
| 14/09/2023 | 16.8                                     |   | 13.0   | 50                                     |   |
| 20/09/2023 | 39.0                                     |   | 13.6   | 50                                     |   |
| 26/09/2023 | 20.7                                     |   | 13.7   | 50                                     |   |
| 02/10/2023 | 35.5                                     | 14.4                                    | 14.2   | 50                                     |   |
| 08/10/2023 | 5.4                                      |   | 14.0   | 50                                     |   |
| 14/10/2023 | 6.9                                      |   | 13.9   | 50                                     |   |
| 20/10/2023 | 16.9                                     |   | 13.9   | 50                                     |   |
| 26/10/2023 | 7.5                                      |   | 13.8   | 50                                     |   |
| 01/11/2023 | 12.6                                     | 12.6                                    | 13.8   | 50                                     |   |
| 07/11/2023 | 7.6                                      |   | 13.7   | 50                                     |   |
| 13/11/2023 | 21.6                                     |   | 13.8   | 50                                     |   |
| 19/11/2023 | 13.6                                     |   | 13.8   | 50                                     |   |
| 25/11/2023 | 7.4                                      |   | 13.7   | 50                                     |   |
| 01/12/2023 | 19.3                                     | 23.4                                    | 13.8   | 50                                     |   |
| 07/12/2023 | 25.4                                     |   | 14.0   | 50                                     |   |
| 13/12/2023 | 20.4                                     |   | 14.1   | 50                                     |   |
| 19/12/2023 | 41.8                                     |   | 14.6   | 50                                     |   |
| 25/12/2023 | 10.1                                     |   | 14.5   | 50                                     |   |
| 31/12/2023 | 13.0                                     |   | 14.5   | 50                                     |   |

|   |        |
|---|--------|
| <b>Minimum</b>                          | 5.4    |
| <b>Maximum</b>                          | 41.8   |
| <b>Average</b>                          | 14.5   |
| <b>Standard Deviation</b>               | 7.7    |
| <b>24-hr Criteria</b>                   | 50     |
| <b>Number of Exceedences</b>            | 0      |
| <b>Annual Average Criteria</b>          | 25/30* |
| <b>Annual Average Criteria Exceeded</b> | No     |
| *See explanation on previous page.      |        |





**Water****Water Monitoring****EPL Point 4 - Monthly Monitoring**

| Date       | Time   | Sampled By    | Date Results Received |                             | pH       | EC       | TSS  | Oil & Grease | Comments |
|------------|--------|---------------|-----------------------|-----------------------------|----------|----------|------|--------------|----------|
|            |        |               |                       | Units                       | pH Units | µS/cm    | mg/L | mg/L         |          |
|            |        |               |                       | EPL Criterion*              | 6.5-8.5  | NA       | <50  | 10           |          |
|            |        |               |                       | ANZECC Water Quality Limits | 6.5-8.5  | 125-2200 | <50  | -            |          |
| 02/01/2024 | 8:00am | Metromix - JJ | 10/01/2024            |                             | 7.3      | 1920     | <5   | <5           |          |

**EPL Point 5 - Monitoring Daily During Discharge**

| Date  | Time | Sampled By | Date Results Received |                             | pH       | EC       | TSS  | Oil & Grease | Comments |
|---|------|------------|-----------------------|-----------------------------|----------|----------|------|--------------|----------|
|   |      |            |                       | Units                       | pH Units | µS/cm    | mg/L | mg/L         |          |
|   |      |            |                       | EPL Criterion*              | 6.5-8.5  | NA       | <50  | 10           |          |
|   |      |            |                       | ANZECC Water Quality Limits | 6.5-8.5  | 125-2200 | <50  | -            |          |
| No discharge occurred at this location and therefore no monitoring was required |      |            |                       |                             |          |          |      |              |          |

**EPL Point 6 - Monthly Monitoring**

| Date  | Time | Sampled By | Date Results Received |                             | pH       | EC       | TSS  | Oil & Grease | Comments |
|---|------|------------|-----------------------|-----------------------------|----------|----------|------|--------------|----------|
|   |      |            |                       | Units                       | pH Units | µS/cm    | mg/L | mg/L         |          |
|   |      |            |                       | EPL Criterion*              | 6.5-8.5  | NA       | <50  | 10           |          |
|   |      |            |                       | ANZECC Water Quality Limits | 6.5-8.5  | 125-2200 | <50  | -            |          |
| No discharge occurred at this location and therefore no monitoring was required |      |            |                       |                             |          |          |      |              |          |

**EPL Point 7 - Monthly Monitoring**

| Date  | Time | Sampled By | Date Results Received |                             | pH       | EC       | TSS  | Oil & Grease | Comments |
|---|------|------------|-----------------------|-----------------------------|----------|----------|------|--------------|----------|
|   |      |            |                       | Units                       | pH Units | µS/cm    | mg/L | mg/L         |          |
|   |      |            |                       | EPL Criterion*              | 6.5-8.5  | NA       | <50  | 10           |          |
|   |      |            |                       | ANZECC Water Quality Limits | 6.5-8.5  | 125-2200 | <50  | -            |          |
| No discharge occurred at this location and therefore no monitoring was required |      |            |                       |                             |          |          |      |              |          |

**Flow Meter Records**

| EPA Identified Point | Location | Description  | Sample Period           | Daily Average Flow ML | Monthly Total Flow ML |
|----------------------|----------|--|-------------------------|-----------------------|-----------------------|
| 4                    | Adit Dam | Adit Dam to Creek (off site)                         | 01/12/2023 - 02/01/2024 | 0.29                  | 9.2                   |
| 5                    | Dam B    | Discharge from Dam B (from Quarry)                   | 01/12/2023 - 02/01/2024 | 0.00                  | 0.0                   |
| 4                    | Adit Dam | Water pumped from Adit Dam to Dam G (processing use) | 01/12/2023 - 02/01/2024 | 2.50                  | 79.9                  |

**Comments**

All water monitoring results remained within the approved criteria levels during the monitoring period.

**Water - Year to Date****EPL Point 4 : Monthly Monitoring**

|                             | <b>pH</b> | <b>EC</b> | <b>TSS</b> | <b>Oil &amp; Grease</b> | <b>Comments</b> |
|-----------------------------|-----------|-----------|------------|-------------------------|-----------------|
| Units                       | pH Units  | µS/cm     | mg/L       | mg/L                    | -               |
| EPL Criterion*              | 6.5-8.5   | NA        | <50        | 10                      | -               |
| ANZECC Water Quality Limits | 6.5-8.5   | 125-2200  | <50        | -                       | -               |
| January                     | 7.3       | 2090      | <5         | 6                       | -               |
| February                    | 7.2       | 1740      | <5         | <5                      | -               |
| March                       | 7.5       | 1710      | <5         | <5                      | -               |
| April                       | 7.2       | 1760      | 14         | <5                      | -               |
| May                         | 7.3       | 1840      | <5         | <5                      | -               |
| June                        | 7.4       | 1980      | <5         | <5                      | -               |
| July                        | 8.0       | 1890      | 30         | <5                      | -               |
| August                      | 7.3       | 1860      | 16         | <5                      | -               |
| September                   | 7.3       | 2170      | 8          | <5                      | -               |
| October                     | 7.4       | 2050      | <5         | <5                      | -               |
| November                    | 7.4       | 2000      | <5         | <5                      | -               |
| December                    | 7.3       | 1920      | <5         | <5                      | -               |

**EPL Point 5 : Monitoring During Discharge**

|                             | <b>pH</b> | <b>EC</b> | <b>TSS</b> | <b>Oil &amp; Grease</b> | <b>Comments</b>                            |
|-----------------------------|-----------|-----------|------------|-------------------------|--|
| Units                       | pH Units  | µS/cm     | mg/L       | mg/L                    | -  |
| EPL Criterion*              | 6.5-8.5   | NA        | <50        | 10                      | -  |
| ANZECC Water Quality Limits | 6.5-8.5   | 125-2200  | <50        | -                       | -  |
| 23 February                 | 7.2       | 332       | 95         | <5                      | TSS exceedance due to significant rainfall |
| 1 March                     | 6.8       | 642       | 12         | <5                      | -  |
| 3 March                     | 6.8       | 634       | <5         | <5                      | -  |
| 3 April                     | 7.0       | 649       | 18         | <5                      | -  |
| 1 May                       | 7.0       | 630       | <5         | <5                      | -  |

## Flow Meter Records

| EPA Identifier | Location | Description   | Date                    | Monthly |
|----------------|----------|---|-------------------------|---------|
| 4              | Adit Dam | Water pumped from Adit Dam to Dam G<br>(processing use) | 03/01/2023 - 02/02/2023 | 0.2     |
|                |          |   | 01/02/2023 - 01/03/2023 | 98.9    |
|                |          |   | 01/03/2023 - 03/04/2023 | 84.8    |
|                |          |   | 03/04/2023 - 01/05/2023 | 80.5    |
|                |          |   | 01/05/2023 - 01/06/2023 | 114.2   |
|                |          |   | 01/06/2023 - 01/07/2023 | 102.0   |
|                |          |   | 01/07/2023 - 01/08/2023 | 96.7    |
|                |          |   | 01/08/2023 - 01/09/2023 | 90.8    |
|                |          |   | 01/09/2023 - 01/10/2023 | 90.0    |
|                |          |   | 01/10/2023 - 01/11/2023 | 89.5    |
|                |          |   | 01/11/2023 - 01/12/2023 | 97.1    |
|                |          |   | 01/12/2023 - 02/01/2024 | 79.9    |

| EPA Identifier | Location | Description                        | Date                    | Monthly |
|----------------|----------|------------------------------------|-------------------------|---------|
| 5              | Dam B    | Discharge from Dam B (from Quarry) | 03/01/2023 - 02/02/2023 | 0.0     |
|                |          |                                    | 01/02/2023 - 01/03/2023 | 5.1     |
|                |          |                                    | 01/03/2023 - 03/04/2023 | 3.7     |
|                |          |                                    | 03/04/2023 - 01/05/2023 | 1.7     |
|                |          |                                    | 01/05/2023 - 01/06/2023 | 0.1     |
|                |          |                                    | 01/06/2023 - 01/07/2023 | 0.0     |
|                |          |                                    | 01/07/2023 - 01/08/2023 | 0.0     |
|                |          |                                    | 01/08/2023 - 01/09/2023 | 0.0     |
|                |          |                                    | 01/09/2023 - 01/10/2023 | 0.0     |
|                |          |                                    | 01/10/2023 - 01/11/2023 | 0.0     |
|                |          |                                    | 01/11/2023 - 01/12/2023 | 0.0     |
|                |          |                                    | 01/12/2023 - 02/01/2024 | 0.0     |

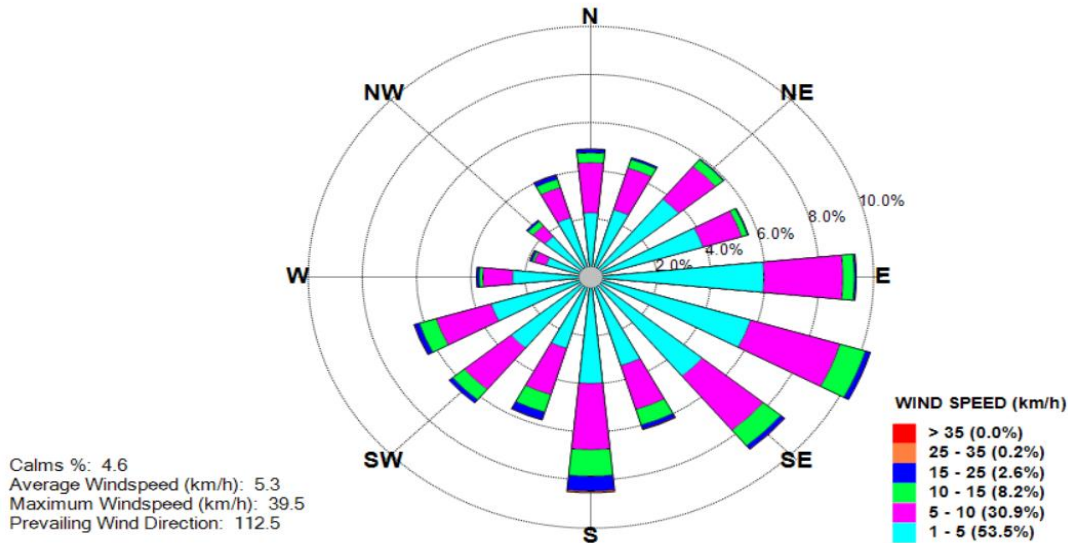
| EPA Identifier | Location | Description                  | Date                    | Monthly |
|----------------|----------|------------------------------|-------------------------|---------|
| 4              | Adit Dam | Adit Dam to Creek (off site) | 03/01/2023 - 02/02/2023 | 20.3    |
|                |          |                              | 01/02/2023 - 01/03/2023 | 37.6    |
|                |          |                              | 01/03/2023 - 03/04/2023 | 106.1   |
|                |          |                              | 03/04/2023 - 01/05/2023 | 71.1    |
|                |          |                              | 01/05/2023 - 01/06/2023 | 22.1    |
|                |          |                              | 01/06/2023 - 01/07/2023 | 11.8    |
|                |          |                              | 01/07/2023 - 01/08/2023 | 7.2     |
|                |          |                              | 01/08/2023 - 01/09/2023 | 10.4    |
|                |          |                              | 01/09/2023 - 01/10/2023 | 0.1     |
|                |          |                              | 01/10/2023 - 01/11/2023 | 1.4     |
|                |          |                              | 01/11/2023 - 01/12/2023 | 5.8     |
|                |          |                              | 01/12/2023 - 02/01/2024 | 9.2     |

### Meteorological Conditions

Monitoring Location: Mid-Pit Entrance  
Monitoring Frequency: Continuous

### Windrose

### Metromix Teralba - Windrose DECEMBER 2023



### Monthly Summary

| Date     | Mean Wind Direction (°) | Mean Wind Speed (km/h) | Daily Rainfall (mm) | Mean Sigma Theta | Max Temperature (°C) at 2m | Min Temperature (°C) at 2m |
|----------|-------------------------|------------------------|---------------------|------------------|----------------------------|----------------------------|
| 01/12/23 | 151                     | 3.8                    | 0.0                 | 34.1             | 28.6                       | 18.0                       |
| 02/12/23 | 172                     | 3.3                    | 9.4                 | 31.0             | 24.0                       | 18.8                       |
| 03/12/23 | 172                     | 4.8                    | 0.2                 | 38.5             | 27.6                       | 16.0                       |
| 04/12/23 | 157                     | 4.1                    | 0.0                 | 35.2             | 24.8                       | 16.4                       |
| 05/12/23 | 136                     | 5.0                    | 0.0                 | 24.6             | 35.6                       | 15.6                       |
| 06/12/23 | 149                     | 7.1                    | 0.0                 | 38.6             | 28.4                       | 19.1                       |
| 07/12/23 | 161                     | 4.2                    | 0.0                 | 32.9             | 32.2                       | 18.6                       |
| 08/12/23 | 119                     | 5.2                    | 0.0                 | 29.5             | 36.6                       | 19.8                       |
| 09/12/23 | 143                     | 7.4                    | 0.0                 | 34.4             | 43.4                       | 23.6                       |
| 10/12/23 | 170                     | 7.5                    | 0.0                 | 39.2             | 29.2                       | 21.2                       |
| 11/12/23 | 165                     | 4.3                    | 0.0                 | 39.3             | 31.2                       | 19.0                       |
| 12/12/23 | 113                     | 4.9                    | 0.0                 | 33.7             | 29.8                       | 20.0                       |
| 13/12/23 | 104                     | 4.2                    | 0.0                 | 36.1             | 32.8                       | 19.6                       |
| 14/12/23 | 228                     | 7.5                    | 0.0                 | 31.4             | 40.6                       | 22.9                       |
| 15/12/23 | 146                     | 7.0                    | 0.0                 | 36.3             | 28.4                       | 20.8                       |
| 16/12/23 | 179                     | 5.3                    | 0.0                 | 33.2             | 38.0                       | 18.2                       |
| 17/12/23 | 119                     | 6.1                    | 0.0                 | 34.5             | 28.6                       | 21.2                       |
| 18/12/23 | 135                     | 4.2                    | 0.0                 | 38.3             | 31.2                       | 21.6                       |
| 19/12/23 | 167                     | 5.9                    | 0.4                 | 29.9             | 32.0                       | 20.8                       |
| 20/12/23 | 212                     | 6.9                    | 26.4                | 32.5             | 23.8                       | 16.4                       |
| 21/12/23 | 215                     | 9.4                    | 3.8                 | 32.4             | 22.2                       | 16.0                       |
| 22/12/23 | 191                     | 6.2                    | 0.0                 | 34.4             | 24.8                       | 16.6                       |
| 23/12/23 | 155                     | 5.1                    | 0.0                 | 30.0             | 26.6                       | 16.6                       |
| 24/12/23 | 183                     | 3.6                    | 2.4                 | 32.4             | 26.4                       | 18.0                       |
| 25/12/23 | 174                     | 4.7                    | 35.0                | 38.6             | 28.0                       | 16.8                       |
| 26/12/23 | 147                     | 3.7                    | 3.2                 | 30.1             | 29.0                       | 19.4                       |
| 27/12/23 | 160                     | 4.9                    | 0.0                 | 32.0             | 28.2                       | 19.4                       |
| 28/12/23 | 212                     | 5.2                    | 0.0                 | 32.5             | 33.0                       | 19.0                       |
| 29/12/23 | 157                     | 3.9                    | 2.0                 | 31.0             | 28.8                       | 20.0                       |
| 30/12/23 | 148                     | 5.8                    | 0.2                 | 37.0             | 27.4                       | 19.6                       |
| 31/12/23 | 123                     | 4.5                    | 0.4                 | 35.1             | 21.4                       | 17.6                       |

**Meteorological Conditions - Year to Date**

| Monitored Parameter                         | Jan   | Feb   | Mar   | Apr   | May   | Jun  | Jul   | Aug   | Sep   | Oct   | Nov   | Dec   | Annual |
|---|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|--------|
| Total Rainfall (mm)                         | 120.0 | 217.0 | 169.4 | 131.8 | 37.8  | 8.6  | 39.4  | 49.0  | 18.6  | 75.0  | 122.4 | 83.4  | 1072.4 |
| Average Minimum Temperature (°C) at 2m      | 14.8  | 16.2  | 13.2  | 10.1  | 6.0   | 2.4  | 6.4   | 6.8   | 7.0   | 10.0  | 13.2  | 15.6  | 10.1   |
| Average Maximum Temperature (°C) at 2m      | 35.6  | 37.6  | 38.4  | 26.8  | 23.6  | 24.6 | 24.8  | 26.8  | 35.2  | 36.4  | 32.4  | 43.4  | 32.1   |
| Average Minimum Temperature (°C) at 10m     | 14.9  | 16.7  | 13.7  | 10.7  | 7.0   | 2.9  | 7.1   | 7.4   | 7.5   | 10.8  | 13.8  | 16.2  | 10.7   |
| Average Maximum Temperature (°C) at 10m     | 34.9  | 36.4  | 37.7  | 26.2  | 23.1  | 23.6 | 24.4  | 25.9  | 34.6  | 35.4  | 30.9  | 42.1  | 31.3   |
| Average Sigma Theta                         | 33.6  | 31.9  | 30.7  | 29.5  | 29.9  | 31.1 | 31.5  | 29.8  | 29.4  | 31.9  | 30.9  | 33.8  | 31.2   |
| Average Solar Radiation (W/m <sup>2</sup> ) | 215.6 | 222.6 | 171.3 | 130.1 | 116.0 | 94.5 | 101.2 | 129.1 | 178.0 | 220.3 | 190.8 | 223.0 | 166.0  |
| Average Relative Humidity (%)               | 73.0  | 65.0  | 67.0  | 70.0  | 60.0  | 60.0 | 62.0  | 67.0  | 55.0  | 56.0  | 72.0  | 70.0  | 64.8   |

**Blasting**

Monitoring Frequency: Each Blast

Blast Monitoring Completed By MAXAM

| Shot # | Day | Month     | Time     | Location   | Location 1            |                   | Location 2            |                   | Location 3            |                   | Comments                               |
|--------|-----|-----------|----------|------------|-----------------------|-------------------|-----------------------|-------------------|-----------------------|-------------------|--|
|        |     |           |          |            | Overpressure<br>dB(L) | Vibration<br>mm/s | Overpressure<br>dB(L) | Vibration<br>mm/s | Overpressure<br>dB(L) | Vibration<br>mm/s |  |
| 1      | 19  | January   | 13:39:30 | Stage 1C   | 104.7                 | 0.60              | 100.8                 | 0.06              | NM                    | NM                | Nil Trigger on monitor at bottom wheel |
| 2      | 8   | February  | 13:52:29 | Stage 2B-3 | 104.9                 | 0.37              | NT                    | NT                | NM                    | NM                |  |
| 3      | 22  | February  | 12:03:50 | Stage 2B-2 | 104.7                 | 0.30              | 101.7                 | 0.14              | NM                    | NM                |  |
| 4      | 3   | March     | 10:44:46 | Stage 2B-3 | 108.0                 | 0.28              | 102.7                 | 0.16              | NM                    | NM                |  |
| 5      | 24  | March     | 11:35:01 | Stage 1C   | 104.7                 | 0.23              | 108.4                 | 0.79              | NM                    | NM                |  |
| 6      | 31  | March     | 14:51:00 | Stage 2B-1 | NT                    | 0.28              | NT                    | 0.28              | NM                    | NM                |  |
| 7      | 26  | April     | 15:06:42 | Stage 1C   | NT                    | NT                | 103.9                 | 0.48              | NM                    | NM                |  |
| 8      | 11  | May       | 12:54:29 | Stage 2B-1 | NT                    | NT                | 103.7                 | 0.06              | NM                    | NM                |  |
| 9      | 23  | May       | 14:48:41 | Stage 1C   | 105.5                 | 0.16              | 98.5                  | 0.06              | NM                    | NM                |  |
| 10     | 2   | June      | 10:25:49 | Stage 2B-2 | 101.6                 | 0.16              | 96.8                  | 0.06              | NM                    | NM                |  |
| 11     | 14  | June      | 12:11:36 | Stage 2B-2 | 112.3                 | 0.31              | 108.6                 | 0.06              | NM                    | NM                |  |
| 12     | 23  | June      | 11:53:00 | Stage 1C   | 108.6                 | 0.29              | 104.2                 | 0.06              | NM                    | NM                |  |
| 13     | 7   | July      | 11:31:00 | Stage 2B-3 | 107.2                 | 0.30              | 106.3                 | 0.06              | NM                    | NM                | Shots #13 and #14 occurred             |
| 14     | 7   | July      | 11:31:00 | Stage 1C   | 107.2                 | 0.30              | 106.3                 | 0.06              | NM                    | NM                | Shots #13 and #14 occurred             |
| 15     | 19  | July      | 11:29:00 | Stage 2B-1 | 108.4                 | 0.29              | 106.3                 | 0.09              | NM                    | NM                |  |
| 16     | 2   | August    | 11:31:00 | Stage 1C   | 107.8                 | 0.37              | 112.0                 | 0.48              | NM                    | NM                |  |
| 17     | 22  | August    | 12:15:00 | Stage 1C   | 106.7                 | 0.45              | 101.8                 | 0.13              | NM                    | NM                |  |
| 18     | 20  | September | 13:00:45 | Stage 2B1  | 110.8                 | 0.34              | 106.0                 | 0.06              | NM                    | NM                |  |
| 19     | 26  | September | 11:41:39 | Stage 2B3  | 107.2                 | 0.36              | 107.0                 | 0.06              | NM                    | NM                |  |
| 20     | 4   | October   | 11:25:26 | Stage 2B1  | 107.4                 | 0.34              | 98.5                  | 0.06              | NM                    | NM                |  |
| 21     | 13  | October   | 10:49:22 | Stage 3    | 104.7                 | 0.30              | 97.7                  | 0.09              | NM                    | NM                |  |
| 22     | 25  | October   | 11:56:36 | Stage 2B1  | 99.7                  | 0.35              | 101.8                 | 0.06              | NM                    | NM                |  |
| 23     | 16  | November  | 12:41:24 | Stage 1C   | NT                    | NT                | 99.2                  | 0.02              | NM                    | NM                |  |
| 24     | 27  | November  | 10:45:37 | Stage 1C   | NT                    | NT                | 100.5                 | 0.06              | NM                    | NM                |  |
| 25     | 11  | December  | 12:36:07 | Stage 1C   | 104.9                 | 0.13              | 99.2                  | 0.06              | NM                    | NM                |  |
| 26     | 20  | December  | 10:42:15 | Stage 1C   | 105.2                 | 0.25              | 104.5                 | 0.06              | NM                    | NM                |  |

NT Not Triggered

NM Not Monitored

**Blasting Criteria**

| Parameter                                 | Units of Measure       | Limit                  |                |
|---|------------------------|------------------------|----------------|
|   |                        | 95% of blasts per year | 100% of blasts |
| Airblast Overpressure (Linear Peak)       | decibels (dBL)         | 115                    | 120            |
| Ground Vibration (Peak Particle Velocity) | millimeters per second | 5                      | 10             |

**Comments**

Two blasting events occurred during the monitoring period. All blast monitoring results were within the approved criteria.

**Waste Management****Waste Removal Summary**

| Month                                    | January  | February | March    | April    | May      | June     | July     | August   | September | October  | November | December |
|--|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| Item                                     | Quantity | Quantity | Quantity | Quantity | Quantity | Quantity | Quantity | Quantity | Quantity  | Quantity | Quantity | Quantity |
| General Waste Bin (10m <sup>3</sup> )    | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| General Waste Bin (4.5m <sup>3</sup> )   | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| General Waste Bin (6m <sup>3</sup> )     | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| General Waste Bin (20m <sup>3</sup> )    | 1        | 1        | 1        | 1        | -        | 1        | 1        | 1        | 1         | 1        | 1        | 1        |
| Paper & Cardboard Bin (3m <sup>3</sup> ) | 2        | 1        | -        | 1        | 1        | 2        | 1        | 2        | 1         | -        | 1        | 1        |
| Shredded Paper Bin (240L)                | -        | -        | -        | -        | -        | -        | 1        | -        | -         | 2        | -        | 6        |
| Co Mingled Recycling (2 x 240 L)         | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4         | 4        | 4        | 4        |
| Tonner Cartridges                        | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Waste Oil (L)                            | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Scrap Steel (t)                          | -        | 4.12     | -        | 2.48     | -        | 3.58     | 3.66     | 3.66     | -         | -        | 6.32     | -        |
| Timber (m <sup>3</sup> )                 | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Engine Coolant (L)                       | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Oil Filters (240L bin)                   | -        | -        | -        | 6        | -        | -        | -        | 3        | -         | -        | 4        | -        |
| Batteries                                | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Oily Rags (240L bin)                     | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Aerosols (120L bin)                      | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Tyres                                    | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |
| Other                                    | -        | -        | -        | -        | -        | -        | -        | 16.4     | -         | -        | -        | 15.84    |
| Oily Water (L)                           | -        | -        | -        | -        | -        | -        | -        | 3.42     | -         | -        | -        | -        |
| Grease Waste (L)                         | -        | -        | -        | -        | -        | -        | -        | -        | -         | -        | -        | -        |