

Site Information EPL No.: 12290

EPA Website Link: http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=31280&SYSUID=1&LICID=12290

Licensee: Werris Creek Coal Pty Limited

Premises: Werris Creek Coal, 1435 Werris Creek Road, WERRIS CREEK NSW 2341

EPL Monitoring Points: See figure at end of document

Sampling Period: DECEMBER 2022

Obtained Date: 13/01/2023 Publication Date: 13/01/2023

Table 1 - No Pollutant Limits Apply

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurement s for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|-----------|---------------------|---------------------|-------------------------|---|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| 28 | PM10 | μg/m³ | Every 6 days | 5 | 30/12/2022 | 13/01/2023 | 0.7 | 6.7 | 6.3 | 16.1 |
| 28 | Solid Particles | g/m²/month | Continuous | 1 | 19/12/2022 | 12/01/2023 | ¹ NS | ¹ NS | ¹ NS | ¹ NS |
| 29 | PM10 | μg/m³ | Every 6 days | 5 | 30/12/2022 | 13/01/2023 | 3.9 | 8.9 | 6.0 | 20.4 |
| 29 | Solid Particles | g/m²/month | Continuous | 1 | 19/12/2022 | 12/01/2023 | 3.5 | 3.5 | 3.5 | 3.5 |
| 30 | PM10 | μg/m³ | Continuous | Continuous | 31/12/2022 | 01/01/2023 | 4.7 | 13.0 | 11.1 | 24.5 |
| 30 | Solid Particles | g/m²/month | Continuous | 1 | 19/12/2022 | 12/01/2023 | 0.6 | 0.6 | 0.6 | 0.6 |
| | Conductivity | μS/cm | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| 10 | Nitrogen (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| 12 | Nitrogen (Total) | mg/L | Special Frequency 1 | 0* | - | - | | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurement s for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|-----------|----------------------------|---------------------|-------------------------|---|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Conductivity | μS/cm | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| 14 | Nitrogen (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Oil and Grease | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| 32 | рН | рН | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | Special Frequency 1 | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Oil and Grease | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| 23 | рН | рН | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Special Frequency 2 | 0* | - | - | - | - | - | - |
| 24 | Nitrate | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| 24 | Nitrogen (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Oil and Grease | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurement s for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|-----------|---------------------------|---------------------|-------------------------|---|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | рН | рН | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Oil and Grease | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| 25 | рН | рН | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Oil and Grease | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| 26 | рН | рН | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | Special Frequency 2 | 0* | - | - | - | - | - | - |
| 33 | Aluminium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| 33 | Arsenic (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Barium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurement s for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|-----------|--------------------------|---------------------|-------------------------|---|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Beryllium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | BOD | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Cadmium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Chromium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Cobalt (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Copper (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Iron (dissolved) | mg/L | Special Frequency 3 | 0* | ı | ı | - | - | - | - |
| | Lead (dissolved) | mg/L | Special Frequency 3 | 0* | ı | ı | - | - | - | - |
| | Magnesium | mg/L | Special Frequency 3 | 0* | ı | ı | - | - | - | - |
| | Manganese (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Nickel (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Potassium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Selenium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Sodium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Total dissolved solids | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Vanadium (dissolved) | mg/L | Special Frequency 3 | 0* | ı | ı | - | - | - | - |
| | Zinc (dissolved) | mg/L | Special Frequency 3 | 0* | ı | ı | - | - | - | - |
| | Aluminium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Arsenic (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Barium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| 34 | Beryllium (dissolved) | mg/L | Special Frequency 3 | 0* | - | 1 | - | - | - | - |
| | BOD | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Cadmium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Chromium (dissolved) | mg/L | Special Frequency 3 | 0* | 1 | ı | - | - | - | - |
| | Cobalt (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurement s for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|-----------|--------------------------|---------------------|-------------------------|---|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Copper (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Iron (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Lead (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Magnesium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Manganese (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Nickel (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Potassium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Selenium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Sodium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Total dissolved solids | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Vanadium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Zinc (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Aluminium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Arsenic (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Barium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Beryllium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | BOD | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| 35 | Cadmium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Chromium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Cobalt (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Copper (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Iron (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Lead (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Magnesium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurement s for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|-----------|--------------------------|---------------------|-------------------------|---|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Manganese (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Nickel (dissolved) | mg/L | Special Frequency 3 | 0* | ı | ı | - | - | - | - |
| | Potassium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Selenium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Sodium | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Total dissolved solids | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Vanadium (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |
| | Zinc (dissolved) | mg/L | Special Frequency 3 | 0* | - | - | - | - | - | - |

¹NS – No sample. EPL ID 28 sample site vandalised and sample bottle shot and smashed.

Table 2 - Pollutant Limits Apply

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of samples for the Month | Date Sampled | Date Obtained | Min Value | Max Value | 100%ile Limit | Exceedance (Yes/No) | Comments |
|-----------|---------------------------|---------------------|-------------------------|------------------------------|-----------------|------------------|--------------|--------------|------------------|------------------------|----------|
| 10 | Total Suspended Solids | mg/L | Special Frequency 1 | 0* | - | - | - | 1 | 50~ | No | |
| 10 | Oil and Grease | mg/L | Special Frequency 1 | 0* | - | - | - | 1 | 10 | No | |
| | рН | рН | Special Frequency 1 | 0* | - | - | - | 1 | 6.5-8.5 | No | |
| 12 | Total Suspended Solids | mg/L | Special Frequency 1 | 0* | - | - | - | - | 50~ | No | |
| 12 | Oil and Grease | mg/L | Special Frequency 1 | 0* | - | - | - | - | 10 | No | |
| | рН | рН | Special Frequency 1 | 0* | - | - | - | - | 6.5-8.5 | No | |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of samples for the Month | Date Sampled | Date Obtained | Min Value | Max Value | 100%ile Limit | Exceedance (Yes/No) | Comments |
|-----------|----------------------------|---------------------|-------------------------|------------------------------|-----------------------|------------------|--------------|--------------|------------------|------------------------|----------|
| 14 | Total Suspended Solids | mg/L | Special Frequency 1 | 0* | - | - | - | - | 50~ | No | |
| 14 | Oil and Grease | mg/L | Special Frequency 1 | 0* | - | - | - | - | 10 | No | |
| | рН | рН | Special Frequency 1 | 0* | - | - | - | - | 6.5-8.5 | No | |
| 32 | Total Suspended Solids | mg/L | Special Frequency 1 | 0* | - | - | - | - | 2000 | No | |
| 32 | Oil and Grease | mg/L | Special Frequency 1 | 0* | - | - | - | - | 10 | No | |
| | рН | рН | Special Frequency 1 | 0* | - | - | - | - | 9 | No | |
| | Electrical Conductivity | μS/cm | Special Frequency 4 | 2 | 6/12 & 28/12/2022- | 05/01/2023 | 1717 | 1788 | 2000 | No | |
| 33^ | Oil and Grease | mg/L | Special Frequency 3 | 1 | 11/23/2022 | 01/12/2022 | <5 | <5 | 10 | No | |
| | рН | рН | Special Frequency 4 | 2 | 6/12 & 28/12/2022- | 05/01/2023 | 8.1 | 8.17 | 9 | No | |
| 34 | Electrical Conductivity | μS/cm | Special Frequency 4 | 0* | - | - | - | - | 2000 | No | |
| 34 | Oil and Grease | mg/L | Special Frequency 3 | 0* | - | - | - | - | 10 | No | |
| | рН | рН | Special Frequency 4 | 0* | - | - | - | - | 9 | No | |
| 35 | Electrical Conductivity | μS/cm | Special Frequency 4 | 0* | - | - | - | - | 2000 | No | |
| 33 | Oil and Grease | mg/L | Special Frequency 3 | 0* | - | - | - | - | 10 | No | |
| | рН | рН | Special Frequency 4 | 0* | - | - | - | - | 9 | No | |

[~] Total Suspended Solids permitted to exceed 50mg/L if 5 day rainfall is greater than 39.2mm prior to discharge

• For the purposes of this condition, Special Frequency 1 means as soon as practicable after overflow commences and in any case not more than 12 hours after any overflow commencing.

[^] EPL ID Point 33 is the point of discharge for discharge sampling

^{*}No Special Frequency Events occurred during Sampling Period, therefore no data has been collected.

[#]The discharge sample was inconsistent with pre-discharge sampling of the dam and has been discussed with the EPA. This will be documented in the Annual Return.



- For the purposes of this condition, Special Frequency 2 means within 12 hours after any overflow from a storage dam(s) on the premises occurring.
- For the purposes of this condition, Special Frequency 3 means every three months. If no mine void water is planned to be provided for agricultural purposes within the three months following scheduled sampling, then sampling is not required.
- For the purposes of this condition, Special Frequency 4 means prior to, but not more than 24 hours prior to providing mine void water for agricultural purposes and then weekly thereafter, until the provision of water ceases. Samples are only required to be taken from the void water dam that is supplying water for agricultural purposes.

Table 3 – Monitoring (Quarterly & 6 monthly – no limits apply)

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurements for the Period | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|--------|---------------------------|---------------------|-------------------------|--|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Conductivity | μS/cm | Every 3 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| | Oil and Grease | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| 16 | рН | рН | Every 3 Months | 0* | - | - | 1 | - | - | - |
| | Phosphorus (Total) | mg/L | Every 3 Months | 0* | - | - | 1 | - | - | - |
| | Reactive Phosphorus | mg/L | Every 3 Months | 0* | - | - | 1 | - | - | - |
| | Total Suspended Solids | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Every 3 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Every 3 Months | 0* | - | - | 1 | - | - | - |
| | Oil and Grease | mg/L | Every 3 Months | 0* | - | - | 1 | - | - | - |
| 27 | рН | рН | Every 3 Months | 0* | - | - | 1 | - | - | - |
| | Phosphorus (Total) | mg/L | Every 3 Months | 0* | - | - | 1 | - | - | - |
| | Reactive Phosphorus | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | Every 3 Months | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 17 | Nitrogen (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 1/ | рН | рН | Every 6 Months | 0* | - | - | 1 | - | - | - |
| | Phosphorus (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurements for the Period | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|--------|----------------------|---------------------|-------------------------|--|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Standing Water Level | Metres | Every 6 Months | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 18 | рН | рН | Every 6 Months | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Standing Water Level | Metres | Every 6 Months | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 19 | рН | рН | Every 6 Months | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Standing Water Level | Metres | Every 6 Months | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 20 | рН | рН | Every 6 Months | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Standing Water Level | Metres | Every 6 Months | 0* | - | - | - | - | - | - |
| | Conductivity | μS/cm | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 21 | Nitrogen (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | рН | рН | Every 6 Months | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurements for the Period | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value |
|--------|----------------------|---------------------|-------------------------|--|-----------------|------------------|--------------|---------------|-----------------|--------------|
| | Reactive Phosphorus | mg/L | Every 6 Months | 0* | 1 | - | - | - | - | - |
| | Standing Water Level | Metres | Every 6 Months | 0* | ı | - | - | - | - | - |
| | Conductivity | μS/cm | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrate | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Nitrogen (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| 22 | рН | рН | Every 6 Months | 0* | - | - | - | - | - | - |
| | Phosphorus (Total) | mg/L | Every 6 Months | 0* | - | - | - | - | - | - |
| | Reactive Phosphorus | mg/L | Every 6 Months | 0* | - 1 | - | - | - | - | - |
| | Standing Water Level | Metres | Every 6 Months | 0* | 1 | - | - | - | - | - |

TLTS – too low to sample

^{*}This reporting period does not include measurements for the 6 monthly or 3 monthly monitoring as they did not occur in this period. These will be reported in their relevant periods.

Table 4 – Monitoring (Noise – Limits Apply)

| | | Measurement | Start | | ed levels – B(A) | | Weather (Inversion | | (Potential) Non- | Date |
|----------|------------------|-------------|---------|------------------|---------------------|----------|--|--|-----------------------|------------|
| Location | Date | Period | Time | LA1, 1 Minute | LAeq, 15 Minute | Limit(s) | °C/100m & / Wind m/s / Wind Direction °) | Observations | compliance /breach | Obtained |
| R24 | 19 December 2022 | 60 minutes | 3:48pm | N/A | 44 | Day 37 | 4.5 / 162 | Traffic (42), birds (40), WCC (<20) | No | 11/01/2023 |
| R12 | 19 December 2022 | 60 minutes | 1:45pm | N/A | 44 | Day 38 | 3.5 / 146 | Birds (44), traffic (33), WCC (<20) | No | 11/01/2023 |
| R96 | 19 December 2022 | 60 minutes | 12:38pm | N/A | 40 | Day 38 | 3.0 / 158 | Birds (39), insects (33), traffic (26), WCC (<20) | No | 11/01/2023 |
| R98 | 19 December 2022 | 60 minutes | 11:29am | N/A | 37 | Day 35 | 2.6 / 180 | Birds (34), insects (32), train (30), WCC (<20) | No | 11/01/2023 |
| R57 | 19 December 2022 | 60 minutes | 10:00am | N/A | 51 | Day 35 | 3.2 / 144 | Train (51), birds (38), traffic (30), WCC (<20) | No | 11/01/2023 |
| R24 | 19 December 2022 | 60 minutes | 7:57pm | <20 | 47 | Night 37 | Lapse / 4.1 / 168 | Traffic (47), birds (32), insects (27), WCC (<20) | No | 11/01/2023 |
| R12 | 20 December 2022 | 60 minutes | 12:01am | <20 | 41 | Night 38 | Lapse / 3.6 / 145 | Train (41), insects (30), traffic (24), WCC (<20) | No | 11/01/2023 |
| R96 | 19 December 2022 | 60 minutes | 10:49pm | <20 | 42 | Night 37 | Lapse / 4.8 / 138 | Insects (42), traffic (27), WCC (<20) | No | 11/01/2023 |
| R98 | 19 December 2022 | 60 minutes | 9:40pm | <20 | 52 | Night 35 | Lapse / 5.6 / 142 | Insects (51), dog (45), WCC (<20) | No | 11/01/2023 |
| R57 | 19 December 2022 | 60 minutes | 7:43pm | <20 | 51 | Night 35 | Lapse / 6.1 / 146 | Train (50), birds (43), traffic (38), WCC (<20) | No | 11/01/2023 |

NM = Not Measurable. This denotes noise from the mine was audible at low levels however cannot be quantified. IA = Inaudible.

Table 5 – Monitoring (Blasts – Limits Apply)

| Location | Parameter | Units of | Frequency | No. of Blasts | Average | Max | 100%ile | (Potential) Non- | Date |
|----------|-----------------|---------------|--------------------|---------------|---------|-------|---------|--------------------|------------|
| | | Measure | | for the Month | Value | Value | Limit | compliance /breach | Obtained |
| R11 | Blast Noise | dB (Lin Peak) | Every Blast | 5 | 99.7 | 111.5 | 120.0 | No | 01/01/2023 |
| | Blast Vibration | mm/s | Every Blast | 5 | 0.13 | 0.27 | 10.0 | No | 01/01/2023 |
| R98 | Blast Noise | dB (Lin Peak) | Every Blast | 5 | 99.9 | 102.5 | 120.0 | No | 01/01/2023 |
| | Blast Vibration | mm/s | Every Blast | 5 | 0.99 | 1.34 | 10.0 | No | 01/01/2023 |
| R62 | Blast Noise | dB (Lin Peak) | Every Blast | 5 | 102.2 | 103.2 | 120.0 | No | 01/01/2023 |
| | Blast Vibration | mm/s | Every Blast | 5 | 0.72 | 1.14 | 10.0 | No | 01/01/2023 |
| R92 | Blast Noise | dB (Lin Peak) | Every Blast | 5 | 100.1 | 101.6 | 120.0 | No | 01/01/2023 |
| | Blast Vibration | mm/s | Every Blast | 5 | 0.38 | 0.50 | 10.0 | No | 01/01/2023 |



