



WHITEHAVEN CHPP – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 3637

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33514&SYSUID=1&LICID=3637>

Licensee: Whitehaven Coal Mining Limited

Licensee Address: Boggabri Road, Gunnedah NSW 2380

EPL Monitoring Points: See Figure 1 below

Sampling Period: December 2021

Obtained Date: 16 January 2022

Publication Date: 24 January 2022

Table 1 - No Pollutant Limits Apply

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Measurements for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max or Only Value |
|--------|------------------------|-------------------------|----------------------|-----------------------------------|--------------|---------------|-----------|------------|--------------|-------------------|
| 3 | Solid Particles | g/m ² /month | Continuous | 1 | 16/12/21 | 30/12/21 | - | - | - | 0.66 |
| 11 | PM ₁₀ | µg/m ³ | Every 6 days | 5 | Various | 17/01/22 | 3.6 | 9.6 | 4.5 | 26.3 |
| 12 | PM ₁₀ | µg/m ³ | Every 6 days | 5 | Various | 17/01/22 | 3.0 | 5.8 | 5.4 | 10.6 |
| 6 | Conductivity | µs/cm | Each overflow event | 0 | - | - | - | - | - | - |
| | Oil and Grease | mg/L | | 0 | - | - | - | - | - | - |
| | Total Organic Carbon | mg/L | | 0 | - | - | - | - | - | - |
| | Total Suspended Solids | mg/L | | 0 | - | - | - | - | - | - |
| | pH | pH | | 0 | - | - | - | - | - | - |
| 7 | Conductivity | µs/cm | Quarterly | 1 | 9/12/2021 | 21/12/2021 | - | - | - | 1180 |
| | Oil and Grease | mg/L | | | | | - | - | - | <5 |
| | Total Organic Carbon | mg/L | | | | | - | - | - | 9 |
| | Total Suspended Solids | mg/L | | | | | - | - | - | 18 |



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|--------|-----------|------------------|----------------------|-----------------------------------|--------------|---------------|-----------|------------|--------------|-------------------|
| | pH | pH | | | | | - | - | - | 8.3 |

Table 2 – Groundwater Monitoring (Quarterly – No Limits apply)

| EPL ID | Pollutant | Units of Measure | Monitoring Frequency | No. of Samples for the Period | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max or Only Value |
|--------|----------------------|------------------|----------------------|-------------------------------|--------------|---------------|-----------|------------|--------------|-------------------|
| 8 | Ammonia | mg/L | Quarterly | 1 | 9/12/21 | 23/12/21 | - | - | - | 0.04 |
| | Bicarbonate | mg/L | | | | | - | - | - | 1140 |
| | Calcium | mg/L | | | | | - | - | - | 66 |
| | Chloride | mg/L | | | | | - | - | - | 2180 |
| | Conductivity | µs/cm | | | | | - | - | - | 9670 |
| | Lead | mg/L | | | | | - | - | - | 0.001 |
| | Magnesium | mg/L | | | | | - | - | - | 186 |
| | Nitrate | mg/L | | | | | - | - | - | 2.14 |
| | Potassium | mg/L | | | | | - | - | - | 28 |
| | Sodium | mg/L | | | | | - | - | - | 2120 |
| | Standing Water Level | m | | | | | - | - | - | 5.26 |
| | Sulphate | mg/L | | | | | - | - | - | 1410 |
| pH | pH | - | - | - | 7.7 | | | | | |
| 9 | Ammonia | mg/L | Quarterly | 1 | 9/12/21 | 23/12/21 | - | - | - | 0.08 |
| | Bicarbonate | mg/L | | | | | - | - | - | 697 |
| | Calcium | mg/L | | | | | - | - | - | 232 |



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|--------|----------------------|------------------|----------------------|-------------------------------|--------------|---------------|-----------|------------|--------------|-------------------|
| | Chloride | mg/L | | | | | - | - | - | 1180 |
| | Conductivity | µs/cm | | | | | - | - | - | 5890 |
| | Lead | mg/L | | | | | - | - | - | 0.001 |
| | Magnesium | mg/L | | | | | - | - | - | 229 |
| | Nitrate | mg/L | | | | | - | - | - | 1.15 |
| | Potassium | mg/L | | | | | -- | - | - | 119 |
| | Sodium | mg/L | | | | | - | - | - | 695 |
| | Standing Water Level | M | | | | | - | - | - | 1.03 |
| | Sulphate | mg/L | | | | | - | - | - | 699 |
| | pH | pH | | | | | - | - | - | 7.4 |
| 10 | Ammonia | mg/L | Quarterly | 1 | 9/12/21 | 23/12/21 | - | - | - | 0.06 |
| | Bicarbonate | mg/L | | | | | - | - | - | 647 |
| | Calcium | mg/L | | | | | - | - | - | 208 |
| | Chloride | mg/L | | | | | - | - | - | 1470 |
| | Conductivity | µs/cm | | | | | - | - | - | 5950 |
| | Lead | mg/L | | | | | - | - | - | 0.001 |
| | Magnesium | mg/L | | | | | - | - | - | 216 |
| | Nitrate | mg/L | | | | | - | - | - | 3.04 |
| | Potassium | mg/L | | | | | - | - | - | 64 |
| | Sodium | mg/L | | | | | - | - | - | 703 |
| | Standing Water Level | m | | | | | - | - | - | 0.72 |
| | Sulphate | mg/L | | | | | - | - | - | 274 |
| | pH | pH | | | | | - | - | - | 7.3 |



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Table 3 – Monitoring (Quarterly Noise – Limits Apply)

| EPL ID | Date | Measurement Period | Measured levels – CHPP – dB(A) | | Limit(s)- dB(A) | Wind speed (m/s) | Comments | (Potential) Non-compliance /breach |
|--------|----------|--------------------|--------------------------------|------------------------------|-----------------|------------------|---------------------|------------------------------------|
| | | | L _{A1} , 1 minute | L _{Aeq} , 15 minute | | | | |
| N1 | 14/12/21 | 15 mins day | - | N/M | 35 | 1.8 | CHPP barely audible | No |
| | | 15 mins evening | - | 30 | 35 | 2.5 | - | |
| | | 15 mins night | - | 31 | 35 | 2.4 | - | |
| | | 1 min night | 35 | - | 45 | 2.4 | - | |

Notes:

dB(A): The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an “A-weighting” filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

L_{Aeq}, 15 minute: The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound, in this instance over a period of 15 minutes.

L_{A1}, 1 minute: The noise level exceeded for 1% of the 15 minute interval.

I/A: When site noise is noted as inaudible (I/A), no site noise was audible at the monitoring location.

Not Measurable (NM): indicates that some site noise was audible, but indeterminate due to one of the following reasons:

- site noise levels were insignificant and unlikely, in many cases, to be even noticed; or
- site noise levels were masked by another relatively loud noise source, but were estimated to be less than L_{Aeq} 30 dB, which is insignificant in terms of any applicable criterion.

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Figure 1 – EPL 3637 Monitoring Locations

