



## Rocglen Coal Mine- Monthly Monitoring Summary

### Site Information

**EPL No:** 12870

**EPA Website Link:** <http://epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=40278&SYSUID=1&LICID=12870>

**Licensee:** Whitehaven Coal Mining Pty Ltd

**Licensee Address:** Rocglen Coal Mine, Wean Road, GUNNEDAH NSW 2380

**EPL Monitoring Points:** See Figure 1 below

**Sampling Period:** February 2019

**Obtained Date:** 22 March 2019

**Publication Date:** 22 March 2019

**Table 1 - No Pollutant Limits Apply**

| EPL ID | Pollutant                     | Units of Measure        | Monitoring Frequency  | No. of Samples for the Month | Date(s) Sampled | Date(s) Obtained | Min Value | Mean Value | Median Value | Max or Only Value |
|--------|-------------------------------|-------------------------|-----------------------|------------------------------|-----------------|------------------|-----------|------------|--------------|-------------------|
| 4      | Particulates-Deposited Matter | g/m <sup>2</sup> /month | Continuous            | 1                            | 14/01/19        | 6/02/19          | -         | -          | -            | 1.4               |
| 6      | Particulates-Deposited Matter | g/m <sup>2</sup> /month | Continuous            | 1                            | 14/01/19        | 6/02/18          | -         | -          | -            | 1.1               |
| 10     | PM <sub>10</sub>              | µg/m <sup>3</sup>       | Every 6 days          | 3                            | Various         | 4/02/19          | 49.8      | 94.93      | 108          | 127               |
| 11     | Conductivity                  | µS/cm                   | Special Frequency 1*  | -                            | -               | -                | -         | -          | -            | -                 |
|        | Total organic carbon          | mg/L                    |                       |                              |                 |                  | -         | -          | -            | -                 |
| 12     | Conductivity                  | µS/cm                   | Special Frequency 1*  | -                            | -               | -                | -         | -          | -            | -                 |
|        | Total organic carbon          | mg/L                    |                       |                              |                 |                  | -         | -          | -            | -                 |
| 13     | TSS                           | mg/L                    | Special Frequency 2** | -                            | -               | -                | -         | -          | -            | -                 |
|        | Conductivity                  | µS/cm                   |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | Oil & Grease                  | mg/L                    |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | pH                            | pH                      |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | Total organic carbon          | mg/L                    |                       |                              |                 |                  | -         | -          | -            | -                 |
| 14     | TSS                           | mg/L                    |                       | -                            | -               | -                | -         | -          | -            | -                 |
|        | Conductivity                  | µS/cm                   |                       |                              |                 |                  | -         | -          | -            | -                 |



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| EPL ID | Pollutant            | Units of Measure | Monitoring Frequency  | No. of Samples for the Month | Date(s) Sampled | Date(s) Obtained | Min Value | Mean Value | Median Value | Max or Only Value |
|--------|----------------------|------------------|-----------------------|------------------------------|-----------------|------------------|-----------|------------|--------------|-------------------|
|        | Oil & Grease         | mg/L             | Special Frequency 2** |                              |                 |                  | -         | -          | -            | -                 |
|        | pH                   | pH               |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | Total organic carbon | mg/L             |                       |                              |                 |                  | -         | -          | -            | -                 |
| 15     | TSS                  | mg/L             | Special Frequency 2** | 1                            | -               | -                | -         | -          | -            | -                 |
|        | Conductivity         | µS /cm           |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | Oil & Grease         | mg/L             |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | pH                   | pH               |                       |                              |                 |                  | -         | -          | -            | -                 |
|        | Total organic carbon | mg/L             |                       |                              |                 |                  | -         | -          | -            | -                 |

<sup>1</sup>result caused by a regional dust event, not mine related.

**Table 2 - Pollutant Limits Apply**

| EPL ID | Pollutant    | Units of Measure | Monitoring Frequency | No. of Samples for the Month | Date(s) Sampled | Date(s) Obtained | Min Value | Max or Only Value | 100%ile Limit | Exceedance (Yes/No) | Comments |
|--------|--------------|------------------|----------------------|------------------------------|-----------------|------------------|-----------|-------------------|---------------|---------------------|----------|
| 11     | TSS          | mg/L             | Special Frequency 1* | -                            | -               | -                | -         | -                 | 50            | -                   |          |
|        | Oil & Grease | mg/L             |                      |                              |                 |                  | -         | -                 | 10            | -                   |          |
|        | pH           | pH               |                      |                              |                 |                  | -         | -                 | 6.5-8.5       | -                   |          |
| 12     | TSS          | mg/L             | Special Frequency 1* | -                            | -               | -                | -         | -                 | 50            | -                   |          |
|        | Oil & Grease | mg/L             |                      |                              |                 |                  | -         | -                 | 10            | -                   |          |
|        | pH           | pH               |                      |                              |                 |                  | -         | -                 | 6.5-8.5       | -                   |          |

\* Special Frequency 1 means the collection of samples as soon as practicable after each discharge commences and in any case not more than 12 hours after each discharge commences.

\*\* Special Frequency 2 means collection of samples quarterly (in the event of flow during the quarter) at a time when there is flow and as soon as practicable after each wet weather discharge from points 11 and 12 commences and in any case not more than 12 hours after each discharge commences.



## Rocgen Coal Mine- Monthly Monitoring Summary

Table 3 – Monitoring (Quarterly & Yearly – No Limits apply)

| EPL ID | Pollutant    | Units of Measure | Monitoring Frequency | No. of Samples for the Month | Date Sampled | Date Obtained | Min Value | Mean Value | Median Value | Max Value/Only Value |
|--------|--------------|------------------|----------------------|------------------------------|--------------|---------------|-----------|------------|--------------|----------------------|
| 16     | Aluminium    | mg/L             | Yearly               | -                            | -            | -             | -         | -          | -            | -                    |
|        | Arsenic      | mg/L             |                      |                              |              |               | -         | -          | -            | -                    |
|        | Bicarbonate  | mg/L             |                      |                              |              |               | -         | -          | -            | -                    |
|        | Chloride     | mg/L             |                      |                              |              |               | -         | -          | -            | -                    |
|        | Iron         | mg/L             |                      |                              |              |               | -         | -          | -            | -                    |
|        | Manganese    | mg/L             |                      |                              |              |               | -         | -          | -            | -                    |
|        | Sodium       | mg/L             |                      |                              |              |               | -         | -          | -            | -                    |
| 16     | Conductivity | µS/cm            | Quarterly            | 1                            | 21/02/2019   | -             | -         | -          | -            | 5040                 |
|        | Oil & Grease | mg/L             |                      |                              |              |               | -         | -          | -            | <5                   |
|        | pH           | pH               |                      |                              |              |               | -         | -          | -            | 8.95                 |
|        | TOC          | mg/L             |                      |                              |              |               | -         | -          | -            | 12                   |
|        | TSS          | mg/L             |                      |                              |              |               | -         | -          | -            | 62                   |



## Rocglen Coal Mine- Monthly Monitoring Summary

**Table 4 – Monitoring (Noise – Limits Apply)**

| EPL ID | Date     | Start Time | Period (mins) | Rocglen Measured Levels – dB(A)<br>Leq 15min Day | Rocglen Measured Levels – dB(A)<br>Leq 15min Evening | Rocglen Measured Levels – dB(A)<br>Leq 15min Night | Rocglen Measured Levels – dB(A)<br>LA 1min Night | Limits  | Wind speed (m/s) | Compliant (Y/N)                                   | Comments                             |
|--------|----------|------------|---------------|--|--|--|--|---|------------------|---|--------------------------------------|
| N1     | 19/02/19 | 15:03      | 90            | I/A  |  |  |  | 35 dB(A) Leq (15 min)<br>Day, Evening, Night<br><br>45dB(A) L <sub>A</sub> (1 min)<br>Night | 3 m/s NW         | Y   | Inaudible                            |
|        |          | 20:38      | 30            |  | I/A  |  |  |   | 1.5 m/s NE       | Y   | Inaudible                            |
|        |          | 23:24      | 60            |  |  | 24   |  |   | 5 m/s S          | Y   | Barely audible<br>Engine noise 24-26 |
|        |          | 23:24      | 60            |  |  |  | 24   |   | 5 m/s S          | Y   |                                      |
|        | 20/02/19 | 11:37      | 90            | I/A  |  |  |  |   | 3 m/s SW         | Y   | Inaudible                            |
|        |          | 20:24      | 30            |  | <25  |  |  |   | 6 m/s S          | Y   | Intermittently audible               |
|        |          | 00:10      | 60            |  |  | I/A  |  |   | 4.5 m/s S        | Y   | Truck noise 28-31                    |
|        |          | 00:10      | 60            |  |  |  | I/A  |   | 4.5 m/s S        | Y   | Inaudible                            |
|        | 21/02/19 | 11:00      | 90            | I/A  |  |  |  |   | 4 m/s SE         | Y   | Inaudible                            |
|        |          | 20:53      | 30            |  | I/A  |  |  |   | 8 m/s SE         | Y   | Inaudible                            |
|        |          | 23: 35     | 60            |  |  | I/A  |  |   | 3.5 m/s SE       | Y   |                                      |
|        |          | 23: 35     | 60            |  |  |  | I/A  |   | 3.5 m/s SE       | Y   | Inaudible<br>Inaudible               |
| N2     | 19/02/19 | 13:07      | 90            | I/A  |  |  |  | 2.5 m/s NW  | Y                | Not Measureable                                   |                                      |
|        |          | 19:46      | 30            |  | I/A  |  |  | 1.5 m/s NW  | Y                | Audible Engine noise 22-28                        |                                      |
|        |          | 22:01      | 60            |  |  | 28   |  | 2 m/s SE  | Y                |   |                                      |
|        |          | 22:01      | 60            |  |  |  | 24   | 2 m/s SE  | Y                | Barely audible Engine noise 24<br>Not Measureable |                                      |
|        | 20/02/19 | 09:39      | 90            | N/M  |  |  |  | 2.2 m/s SW  | Y                | Audible Engine noise 22-28                        |                                      |
|        |          | 20:01      | 30            |  | I/A  |  |  | 6 m/s SE  | Y                | Inaudible   |                                      |
|        |          | 22:53      | 60            |  |  | I/A  |  | 2 m/s SE  | Y                |   |                                      |
|        |          | 22:53      | 60            |  |  |  | I/A  | 2 m/s SE  | Y                | Barely audible Engine noise 24                    |                                      |
|        | 21/02/19 | 09:39      | 90            | N/M  |  |  |  | 2.2 m/s SW  | Y                | Not Measureable                                   |                                      |
|        |          | 20:01      | 30            |  | I/A  |  |  | 6 m/s SE  | Y                | Inaudible   |                                      |
|        |          | 22:53      | 60            |  |  | I/A  |  | 2 m/s SE  | Y                |   |                                      |
|        |          | - 22:53    | 60            |  |  |  | I/A  | 2 m/s SE  | Y                | Inaudible<br>Inaudible                            |                                      |

Note: Measured noise levels are not necessarily the result of activity at Rocglen Coal Mine



# WHITEHAVEN COAL

## Roclen Coal Mine- Monthly Monitoring Summary

Table 5 – Monitoring (Blasts – Limits Apply)

| EPL ID | Parameter       | Units of Measure | Frequency   | No. of Blasts for the Month | Average Value | Max or Only Value | 100%ile Limit | (Potential) Non-compliance /breach |
|--------|-----------------|------------------|-------------|-----------------------------|---------------|-------------------|---------------|------------------------------------|
| BB1    | Blast Noise     | dB (Lin Peak)    | Every Blast | 2                           | 93            | 95.6              | 120           | No                                 |
|        | Blast Vibration | mm/s             | Every Blast |                             | 0.2           | 0.27              | 10            | No                                 |
| BB3    | Blast Noise     | dB (Lin Peak)    | Every Blast | 2                           | 96.2          | 103.3             | 120           | No                                 |
|        | Blast Vibration | mm/s             | Every Blast |                             | 0.57          | 0.67              | 10            | No                                 |

## Rocgen Coal Mine- Monthly Monitoring Summary

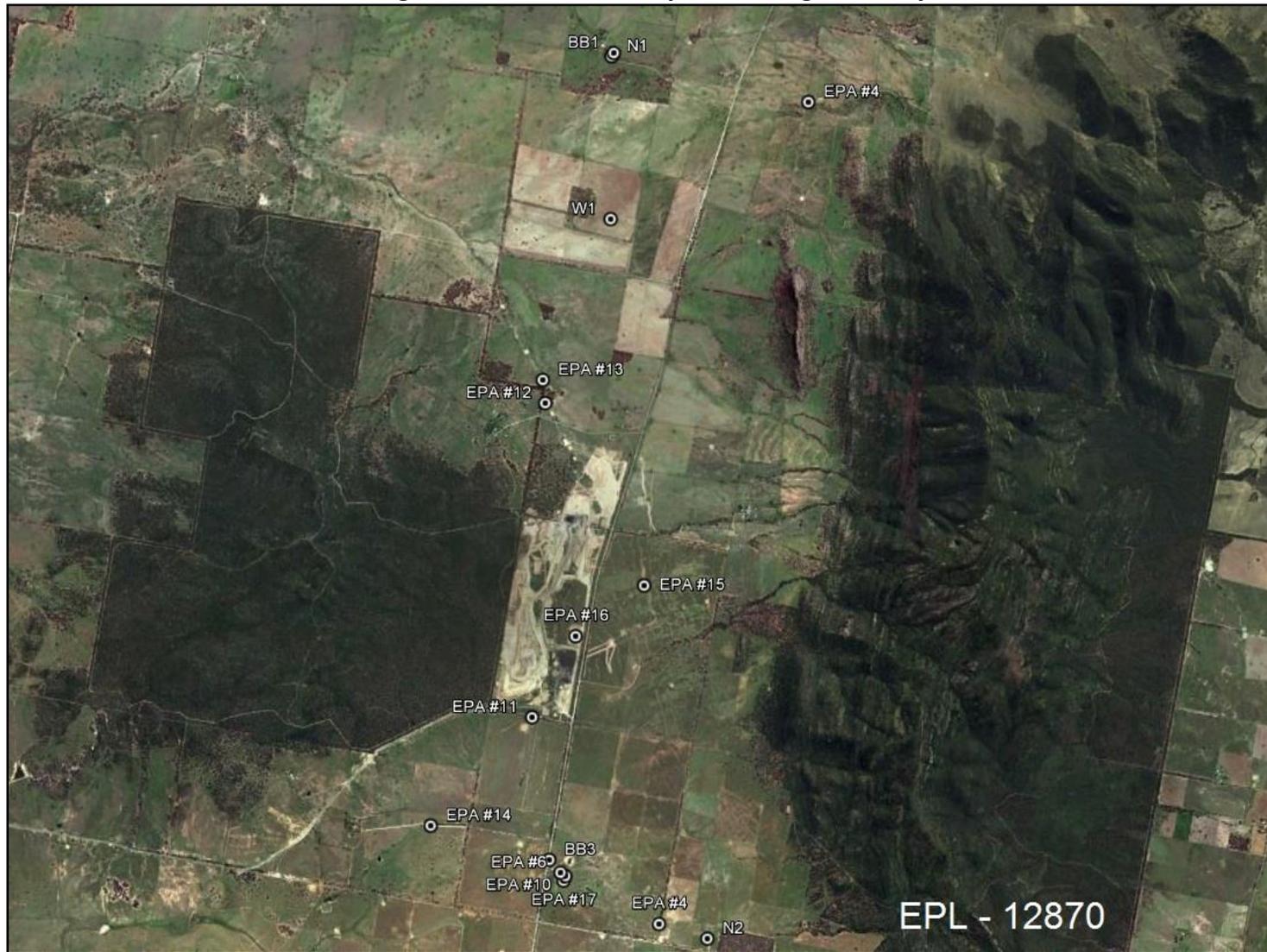


Figure 1 – EPL 12870 Monitoring Locations