



## VICKERY COAL MINE – MONTHLY MONITORING SUMMARY

### Site Information

**EPL No:** 21283

**EPA Website Link:**

<https://whitehavencoal.com.au/Documentations/Vickery%20Extension%20Project/Approvals/Environment%20Protection%20Licence/VIC%20-%20Environmental%20Protection%20Licence.pdf?v=1702936903>

**Licensee:** Vickery Coal Pty Ltd

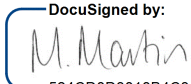
**Licensee Address:** Vickery Coal Mine, Blue Vale Road, BOGGABRI NSW 2382

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

**Sampling Period:** June 2025

**Obtained Date:** 4/07/2025

**Publication Date:** 16/07/2025

| Name         | Role                         | Signature                                                                                                                                     | Date         |
|--------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Megan Martin | Environmental Superintendent | <div>DocuSigned by:</div>  <div>524CD8D3818B4C3...</div> | 16 July 2025 |

**Table 1: Surface Water – No Pollutant Limits Apply**

| EPL ID | Pollutant    | Units of Measure | Monitoring Frequency            | No. of Samples for the Period | Date Sampled | Date of Max. Value Obtained | Min Value | Mean Value | Median Value | Max or Only Value | Comment/s    |
|--------|--------------|------------------|---------------------------------|-------------------------------|--------------|-----------------------------|-----------|------------|--------------|-------------------|--------------|
| 2      | TSS          | mg/L             | Quarterly (Mar, Jun, Sep & Dec) | 0                             | 25/06/2025   | -                           | -         | -          | -            | -                 | DRY          |
|        | Conductivity | µS/cm            |                                 |                               |              |                             | -         | -          | -            | -                 |              |
|        | Oil & Grease | mg/L             |                                 |                               |              |                             | -         | -          | -            | -                 |              |
|        | pH           | pH               |                                 |                               |              |                             | -         | -          | -            | -                 |              |
| 3      | TSS          | mg/L             | Quarterly (Mar, Jun, Sep & Dec) | 0                             | 25/06/2025   | -                           | -         | -          | -            | -                 | DRY          |
|        | Conductivity | µS/cm            |                                 |                               |              |                             | -         | -          | -            | -                 |              |
|        | Oil & Grease | mg/L             |                                 |                               |              |                             | -         | -          | -            | -                 |              |
|        | pH           | pH               |                                 |                               |              |                             | -         | -          | -            | -                 |              |
| 9      | TSS          | mg/L             | Quarterly (Mar, Jun, Sep & Dec) | 1                             | 25/06/2025   | 25/06/2025                  | -         | -          | -            | 34                | -            |
|        | Conductivity | µS/cm            |                                 |                               |              |                             | -         | -          | -            | 579               |              |
|        | Oil & Grease | mg/L             |                                 |                               |              |                             | -         | -          | -            | <5                |              |
|        | pH           | pH               |                                 |                               |              |                             | -         | -          | -            | 8.32              |              |
| 10     | TSS          | mg/L             | Upon discharge                  | -                             | -            | -                           | -         | -          | -            | -                 | No discharge |
|        | Conductivity | µS/cm            |                                 | -                             | -            | -                           | -         | -          | -            | -                 |              |
|        | Oil & Grease | mg/L             |                                 | -                             | -            | -                           | -         | -          | -            | -                 |              |
|        | pH           | pH               |                                 | -                             | -            | -                           | -         | -          | -            | -                 |              |

**Table 2: Surface Water - Pollutant Limits Apply**

| EPL ID | Pollutant    | Units of Measure | Monitoring Frequency | No. of Samples for the Month | Date Sampled | Date of Max. Value Obtained | Min Value | Max or Only Value | 100%ile Limit | Exceed -ance (Yes/ No) | Comment/s    |
|--------|--------------|------------------|----------------------|------------------------------|--------------|-----------------------------|-----------|-------------------|---------------|------------------------|--------------|
| 14     | TSS          | mg/L             | Upon discharge       | -                            | -            | -                           | -         | -                 | 50            | -                      | No discharge |
|        | Conductivity | µS/cm            |                      | -                            | -            | -                           | -         | -                 | NA            |                        |              |
|        | Oil & Grease | mg/L             |                      | -                            | -            | -                           | -         | -                 | 10            | -                      |              |
|        | pH           | pH               |                      | -                            | -            | -                           | -         | -                 | 8.5           | -                      |              |
| 20     | TSS          | mg/L             | Upon discharge       | -                            | -            | -                           | -         | -                 | 50            | -                      | No discharge |
|        | Conductivity | µS/cm            |                      | -                            | -            | -                           | -         | -                 | NA            |                        |              |
|        | Oil & Grease | mg/L             |                      | -                            | -            | -                           | -         | -                 | 10            | -                      |              |
|        | pH           | pH               |                      | -                            | -            | -                           | -         | -                 | 8.5           | -                      |              |
| 21     | TSS          | mg/L             | Upon discharge       | -                            | -            | -                           | -         | -                 | 50            | -                      | No discharge |
|        | Conductivity | µS/cm            |                      | -                            | -            | -                           | -         | -                 | NA            | -                      |              |
|        | Oil & Grease | mg/L             |                      | -                            | -            | -                           | -         | -                 | 10            | -                      |              |
|        | pH           | pH               |                      | -                            | -            | -                           | -         | -                 | 8.5           | -                      |              |

**Table 3: Groundwater – No Limits apply**

| <b>EPL ID</b> | <b>Pollutant</b>     | <b>Units of Measure</b> | <b>Monitoring Frequency</b> | <b>No. of Samples for the Period</b> | <b>Date Sampled</b> | <b>Date of Max. Value Obtained</b> | <b>Min Value</b> | <b>Mean Value</b> | <b>Median Value</b> | <b>Max or Only Value</b> |
|---------------|----------------------|-------------------------|-----------------------------|--------------------------------------|---------------------|------------------------------------|------------------|-------------------|---------------------|--------------------------|
| 15            | Conductivity         | µS/cm                   | Six Monthly (April & Oct)   | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Lead                 | mg/L                    |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | pH                   | pH                      |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Standing Water Level | metres                  |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
| 16            | Conductivity         | µS/cm                   | Six Monthly (April & Oct)   | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Lead                 | mg/L                    |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | pH                   | pH                      |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Standing Water Level | metres                  |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
| 17            | Conductivity         | µS/cm                   | Six Monthly (April & Oct)   | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Lead                 | mg/L                    |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | pH                   | pH                      |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Standing Water Level | metres                  |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
| 18            | Conductivity         | µS/cm                   | Six Monthly (April & Oct)   | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Lead                 | mg/L                    |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | pH                   | pH                      |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |
|               | Standing Water Level | metres                  |                             | -                                    | -                   | -                                  | -                | -                 | -                   | -                        |

| EPL ID | Pollutant            | Units of Measure | Monitoring Frequency      | No. of Samples for the Period | Date Sampled | Date of Max. Value Obtained | Min Value | Mean Value | Median Value | Max or Only Value |
|--------|----------------------|------------------|---------------------------|-------------------------------|--------------|-----------------------------|-----------|------------|--------------|-------------------|
| 19     | Conductivity         | µS/cm            | Six Monthly (April & Oct) | -                             | -            | -                           | -         | -          | -            | -                 |
|        | Lead                 | mg/L             |                           | -                             | -            | -                           | -         | -          | -            | -                 |
|        | pH                   | pH               |                           | -                             | -            | -                           | -         | -          | -            | -                 |
|        | Standing Water Level | metres           |                           | -                             | -            | -                           | -         | -          | -            | -                 |
| 22     | Conductivity         | µS/cm            | Six Monthly (April & Oct) | -                             | -            | -                           | -         | -          | -            | -                 |
|        | Lead                 | mg/L             |                           | -                             | -            | -                           | -         | -          | -            | -                 |
|        | pH                   | pH               |                           | -                             | -            | -                           | -         | -          | -            | -                 |
|        | Standing Water Level | metres           |                           | -                             | -            | -                           | -         | -          | -            | -                 |

**Table 4 – Monthly Attended Noise Monitoring**

(Noise Limits Apply - 40dB LAeq(15min) -Day, 37dB LAeq(15min) Evening and Night; 52dB LA1(1min) -Night)

| <b>Table 4</b>                                                                      |             |                       |                                           |                                |                                     |                            |                                               |                                |
|-------------------------------------------------------------------------------------|-------------|-----------------------|-------------------------------------------|--------------------------------|-------------------------------------|----------------------------|-----------------------------------------------|--------------------------------|
| <b>VCM Operational Noise Monitoring Results Leq(15min) – 06 June 2025 (Day)</b>     |             |                       |                                           |                                |                                     |                            |                                               |                                |
| <b>Location</b>                                                                     | <b>Time</b> | <b>dB(A),<br/>Leq</b> | <b>VCM<br/>Contribution<br/>dB(A),Leq</b> | <b>Criterion<br/>dB(A),Leq</b> | <b>Wind<br/>speed<br/>(m/s),dir</b> | <b>Stability<br/>Class</b> | <b>Identified Noise Sources<br/>dB(A),Leq</b> | <b>Exceedance<br/>(Yes/No)</b> |
| N-AT1 / 7                                                                           | 4:22<br>pm  | 31                    | IA                                        | 40                             | 2.1 / 320                           | D                          | Wind (28), birds (27), <b>VCM (IA)</b>        | No                             |
| N-AT2 / 8                                                                           | 2:10<br>pm  | 34                    | IA                                        | 40                             | 1.9 / 348                           | D                          | Traffic (34), <b>VCM (IA)</b>                 | No                             |
| <b>Table 5</b>                                                                      |             |                       |                                           |                                |                                     |                            |                                               |                                |
| <b>VCM Operational Noise Monitoring Results Leq(15min) – 06 June 2025 (Evening)</b> |             |                       |                                           |                                |                                     |                            |                                               |                                |
| <b>Location</b>                                                                     | <b>Time</b> | <b>dB(A),<br/>Leq</b> | <b>VCM<br/>Contribution<br/>dB(A),Leq</b> | <b>Criterion<br/>dB(A),Leq</b> | <b>Wind<br/>speed<br/>(m/s),dir</b> | <b>Stability<br/>Class</b> | <b>Identified Noise Sources<br/>dB(A),Leq</b> | <b>Exceedance<br/>(Yes/No)</b> |
| N-AT1 / 7                                                                           | 9:24<br>pm  | 36                    | 25                                        | 35                             | 0.4 / 357                           | F                          | Cattle (34), traffic (29), <b>VCM (24)</b>    | No                             |
| N-AT2 / 8                                                                           | 8:13<br>pm  | 34                    | IA                                        | 37                             | 0.2 / 89                            | F                          | Traffic (34), wind (23), <b>VCM (IA)</b>      | No                             |

| <b>Table 6</b><br><b>VCM Operational Noise Monitoring Results Leq(15min) – 06 June 2025 (Night)</b> |             |                             |                                                    |                                          |                            |                    |                                            |                        |
|-----------------------------------------------------------------------------------------------------|-------------|-----------------------------|----------------------------------------------------|------------------------------------------|----------------------------|--------------------|--------------------------------------------|------------------------|
| Location                                                                                            | Time        | dB(A),<br>Leq               | VCM<br>Contribution<br>dB(A),Leq                   | Criterion<br>dB(A),Leq                   | Wind<br>speed<br>(m/s),dir | Stability<br>Class | Identified Noise Sources<br>dB(A),Leq      | Exceedance<br>(Yes/No) |
| N-AT1 / 7                                                                                           | 10:01<br>pm | 38                          | 22                                                 | 40*                                      | 0.6 / 192                  | F                  | Cattle (36), Traffic (29), <b>VCM (23)</b> | No                     |
| N-AT2 / 8                                                                                           | 11:47<br>pm | 40                          | <20                                                | 42*                                      | 0.6 / 235                  | F                  | Traffic (40), <b>VCM (&lt;20)</b>          | No                     |
| <b>Table 7</b><br><b>VCM Operational Noise Monitoring Results LA<sub>max</sub> – 06 June 2025</b>   |             |                             |                                                    |                                          |                            |                    |                                            |                        |
| Location                                                                                            | Time        | dB(A),<br>LA <sub>max</sub> | VCM<br>Contribution<br>dB(A),<br>LA <sub>max</sub> | Criterion<br>dB(A),<br>LA <sub>max</sub> | Wind speed<br>(m/s),dir    | Stability<br>Class | LA <sub>max</sub> Noise Source             | Exceedance<br>(Yes/No) |
| N-AT1 / 7                                                                                           | 10:01 pm    | 48                          | 24                                                 | 57                                       | 0.6 / 192                  | F                  | Cattle                                     | No                     |
| N-AT2 / 8                                                                                           | 11:47 pm    | 55                          | <20                                                | 57                                       | 0.6 / 235                  | F                  | Highway                                    | No                     |

\* Criteria increased 5 dB due to non-compliant meteorological conditions

**Table 5 – Monthly Monitoring (Blasts – Limits Apply)**

| Location    | Parameter              | Units of Measure     | Frequency          | No. of Blasts for the Month | Average Value | Max Value | 100%ile Limit | (Potential) Non-compliance /breach | Date of Max. Value Obtained |
|-------------|------------------------|----------------------|--------------------|-----------------------------|---------------|-----------|---------------|------------------------------------|-----------------------------|
| <b>B-01</b> | <b>Blast Noise</b>     | <b>dB (Lin Peak)</b> | <b>Every Blast</b> | 3                           | 102.60        | 104.5     | <b>N/A</b>    | <b>Nil</b>                         | 07/06/2025                  |
|             | <b>Blast Vibration</b> | <b>mm/s</b>          | <b>Every Blast</b> | 3                           | 0.85          | 1.59      | <b>N/A</b>    | <b>Nil</b>                         | 21/06/2025                  |

| Location    | Parameter              | Units of Measure     | Frequency          | No. of Blasts for the Month | Average Value | Max Value | 100%ile Limit | (Potential) Non-compliance /breach | Date of Max. Value Obtained |
|-------------|------------------------|----------------------|--------------------|-----------------------------|---------------|-----------|---------------|------------------------------------|-----------------------------|
| <b>B-02</b> | <b>Blast Noise</b>     | <b>dB (Lin Peak)</b> | <b>Every Blast</b> | 3                           | 106.87        | 107.70    | <b>N/A</b>    | <b>Nil</b>                         | 13/06/2025                  |
|             | <b>Blast Vibration</b> | <b>mm/s</b>          | <b>Every Blast</b> | 3                           | 3.76          | 7.52      | <b>N/A</b>    | <b>Nil</b>                         | 21/06/2025                  |

| Location    | Parameter              | Units of Measure     | Frequency          | No. of Blasts for the Month | Average Value | Max Value | 100%ile Limit | (Potential) Non-compliance /breach | Date of Max. Value Obtained |
|-------------|------------------------|----------------------|--------------------|-----------------------------|---------------|-----------|---------------|------------------------------------|-----------------------------|
| <b>B-03</b> | <b>Blast Noise</b>     | <b>dB (Lin Peak)</b> | <b>Every Blast</b> | 3                           | 98.0          | 99.30     | <b>120</b>    | <b>N/A</b>                         | 07/06/2025                  |
|             | <b>Blast Vibration</b> | <b>mm/s</b>          | <b>Every Blast</b> | 3                           | 0.52          | 0.87      | <b>10</b>     | <b>N/A</b>                         | 21/06/2025                  |

**Table 6- PM1 Monthly Monitoring (Limits apply)**

| Location                                   | No. of samples required by licence | Lowest sample value | Mean of sample | Highest sample value |
|--------------------------------------------|------------------------------------|---------------------|----------------|----------------------|
| PM10<br>TEOM ( $\mu\text{g}/\text{m}^3$ )  | Continuous                         | 2.9                 | 6.5            | 14.9                 |
| PM2.5<br>TEOM ( $\mu\text{g}/\text{m}^3$ ) | Continuous                         | 1.3                 | 3.7            | 13.2                 |

**Table 7- PM2 Monthly Monitoring (Limits apply)**

| Location                                   | No. of samples required by licence | Lowest sample value | Mean of sample | Highest sample value |
|--------------------------------------------|------------------------------------|---------------------|----------------|----------------------|
| PM10<br>TEOM ( $\mu\text{g}/\text{m}^3$ )  | Continuous                         | 3.6                 | 7.2            | 16.0                 |
| PM2.5<br>TEOM ( $\mu\text{g}/\text{m}^3$ ) | Continuous                         | 1.4                 | 3.8            | 13.8                 |

Figure 1 – EPL 21283 Monitoring Locations

