

## **CULLEN VALLEY MINE**

### **Monthly Environmental Monitoring data**

**for**

***Castlereagh Coal***

#### **1 INTRODUCTION**

Castlereagh Coal owns and operates Cullen Valley Mine located near Cullen Bullen in the Central West district of New South Wales. This report has been prepared pursuant to Chapter 2, Part 3.5, Condition 66(6) of the *Protection of the Environment operations Act 1997* for the publication of results of monitoring and the NSW Environmental Protection Authority guideline titled *Requirements for publish pollution monitoring data 2012*.

#### **2 ENVIRONMENT PROTECTION LICENCE DETAILS**

##### **Cullen Valley Mine (EPL 10341)**

Licensee: Shoalhaven Coal Pty Ltd

Address: Cullen Valley Mine, Portland Road, Cullen Bullen NSW 2790

Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50797&SYSUID=1&LICID=10341>

# MONTHLY ENVIRONMENTAL MONITORING DATA

November 2016

## 3 AIR QUALITY

**Table 1** *Depositional Dust Monitoring Results*

| <b>Obtained:</b> 15/12/2016  |            | <b>Premise:</b> Cullen Valley Mine |                                            |                        |
|------------------------------|------------|------------------------------------|--------------------------------------------|------------------------|
| <b>Published:</b> 16/12/2016 |            | <b>Licensee:</b> Shoalhaven Coal   |                                            |                        |
|                              |            | <b>EPL number:</b> 10341           |                                            |                        |
|                              |            | <b>Exposure Period:</b> 31 days    |                                            |                        |
| Sampling Point               | Start Date | End Date                           | Insoluble Solids (g/m <sup>2</sup> /month) | Rolling Annual Average |
| CDD1 (Railway)               | 8/11/2016  | 9/12/2016                          | 0.2                                        | 0.3                    |
| CDD2 (Hillcroft)             | 8/11/2016  | 9/12/2016                          | 1.1                                        | 0.6                    |
| CDD3 (Office)                | 8/11/2016  | 9/12/2016                          | 0.7                                        | 0.4                    |
| CDD4 (Cranes)                | 8/11/2016  | 9/12/2016                          | 1.7                                        | 0.6                    |
| CDD5 (Doble)                 | 8/11/2016  | 9/12/2016                          | 1.3                                        | 0.8                    |
| Annual Average Limit         |            |                                    |                                            | 4.0                    |

Required Frequency: Monthly - exposure period 30 ± 2 days.

All depositional dust sampling locations were in compliance with the rolling annual average limit (4g/m<sup>2</sup>/month) for the month of November 2016.

**Table 2** *High Volume Air Sampler Monitoring Results*

| <b>Premise:</b>      |            | Cullen Valley Mine                    |                           |
|----------------------|------------|---------------------------------------|---------------------------|
| <b>Obtained:</b>     | 6/12/2016  | <b>Licensee:</b>                      | Shoalhaven Coal           |
| <b>Published:</b>    | 16/12/2016 | <b>EPL number:</b>                    | 10341                     |
| Sampling Point       | Run Date   | PM <sub>10</sub> (µg/m <sup>3</sup> ) | TSP (µg/m <sup>3</sup> )^ |
| HV02 (EPA Point 3)   | 01-Nov-16  | 6                                     | 15.0                      |
|                      | 07-Nov-16  | 8                                     | 20.0                      |
|                      | 13-Nov-16  | 7                                     | 17.5                      |
|                      | 19-Nov-16  | 13                                    | 32.5                      |
|                      | 25-Nov-16  | 6                                     | 15.0                      |
| Annual Average       |            | 9.3                                   | 23.3                      |
| 24 Hour Limit        |            | 50                                    | --                        |
| Annual Average Limit |            | 30                                    | 90                        |

Required Frequency: High Volume Air Sample run event every six days for 24 hours

-- No Limit

<sup>^</sup> TSP result is an estimate obtained from a calculation of the PM<sub>10</sub> concentration.

The 24 hour maximum PM<sub>10</sub> allowable limit of 50µg/m<sup>3</sup> was not exceeded for the month of November 2016.

The TSP and PM<sub>10</sub> annual average results were in compliance with the annual average limit for the month of November 2016.

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### 4 WATER QUALITY

**Table 3** *Monthly Water Quality Results*

| <b>Sampled:</b>   | 8/11/2016  | <b>Premise:</b>         | Cullen Valley Mine |             |
|-------------------|------------|-------------------------|--------------------|-------------|
| <b>Obtained:</b>  | 25/11/2016 | <b>Licensee:</b>        | Shoalhaven Coal    |             |
| <b>Published:</b> | 16/12/2016 | <b>EPL number:</b>      | 110341             |             |
| Sampling Point    | Frequency  | Pollutant               | Limit              | Measurement |
| Dam 1 (Point 1)   | Monthly    | pH (pH unit)            | 6.5 – 8.5          | 7.55        |
|                   |            | TSS (mg/L)              | 50                 | 11          |
|                   |            | Oil & Grease (mg/L)     | 10                 | <5          |
|                   |            | Conductivity (µS/cm)*   | --                 | ND          |
|                   |            | Total Iron (mg/L)*      | --                 | ND          |
|                   |            | Total Manganese (mg/L)* | --                 | ND          |
| Dam 4 (Point 4)   | Monthly    | pH (pH unit)            | 6.5 – 8.5          | 7.44        |
|                   |            | TSS (mg/L)              | 50                 | 6           |
|                   |            | Oil & Grease (mg/L)     | 10                 | <5          |
|                   |            | Conductivity (µS/cm)*   | --                 | ND          |
|                   |            | Total Iron (mg/L)*      | --                 | ND          |
|                   |            | Total Manganese (mg/L)* | --                 | ND          |

-- No limit provided in EPL 10341

ND – no data as there was no discharge from the site during this period.

\* Only analysed during discharge events.

All water samples collected during November 2016 were in compliance with their respective EPL criteria.

### 5 NOISE LIMITS

Quarterly noise monitoring was not required to be undertaken at Cullen Valley Mine during this month.

### 6 BLASTING

No blasting was undertaken during November 2016. Cullen Valley Mine is not currently operating.

### 7 DISCLAIMER

This report is considered accurate at the date of issue with regard to current environmental conditions. Monitoring results may vary from those presented in this report following further assessment. This report must not be reproduced except in full. Results or figures from this report must not be used without acknowledgment.

Yours Faithfully,

**CASTLEREAGH COAL**