

# **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 publishing pollution monitoring data (2013).

## **2 ENVIRONMENTAL PROTECTION LICENCE DETAILS**

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

**Licensee:** Shoalhaven Coal Pty Ltd

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

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

## **3 ENVIRONMENTAL PROTECTION LICENCE DETAILS**

### **3.1 DEPOSITIONAL DUST**

All depositional dust sampling locations were in compliance with the rolling annual average limit ( $4\text{g/m}^2$  /month) for the period April 2023 to March 2024. Maximum annual increase in deposited dust levels are also below the criteria limit of  $2\text{g/m}^2$  /month except for sampling point CDD4 and CDD5 which were slightly above the limit criteria. Depositional dust monitoring results are presented in **Table 1**.

Table 1: Depositional Dust Monitoring Results: March 2024

<b>Obtained:</b> 19/03/2024		<b>Premise:</b> Cullen Valley Mine		
<b>Published:</b> 25/06/2024		<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 (g/m <sup>2</sup> /month)
CDD1 (Railway)	06/02/2024	07/03/2024	1.70	0.62
CDD2 (Hillcroft)	06/02/2024	07/03/2024	1.00	0.51
CDD3 (Office)	06/02/2024	07/03/2024	1.40	0.70
CDD4 (Cranes)	06/02/2024	07/03/2024	3.10	1.17
CDD5 (Doble)	06/02/2024	07/03/2024	2.40	0.68
Annual Average Limit				4.0

Required Frequency: Monthly - exposure period 30 ± 2 days  
Rolling annual average calculation period from April 2023 to March 2024.

### 3.2 PM10 AND TSP

The particulate matter (PM<sub>10</sub>) and total suspended particulate (TSP) were not recorded for the month of March 2024 due to a delay in the replacement of the dust gauge generator. The TSP and PM<sub>10</sub> annual rolling average results were calculated with the available data for the period of April 2023 to March 2024. The average values were less than the annual average EPL limit as presented in **Table 2**.

Table 2: High Volume Air Sampler Monitoring Results: March 2024

<b>Obtained:</b> N/A		<b>Premise:</b> Cullen Valley Mine	
<b>Published:</b> 25/06/2024		<b>Licensee:</b> Shoalhaven Coal	
		<b>EPL Number:</b> 10341	
Sampling Point	Run Date	PM10 (µg/m <sup>3</sup> )	TSP (µg/m <sup>3</sup> ) ^
HVAS1 (EPA Point 3)	05/03/2024	NR	NR
	11/03/2024	NR	NR
	17/03/2024	NR	NR
	23/03/2024	NR	NR
	29/03/2024	NR	NR
<b>Rolling Annual Average</b> (Calculation period April 2023 to March 2024)		9.31	15.15
<b>24 Hour Limit</b>		<b>50</b>	--
<b>Annual Average Limit</b>		<b>30</b>	<b>90</b>

Required Frequency: Weekly – High Volume Air Sample run events occur every six days for 24 hours. -- No Limit

#### 4 SURFACE WATER QUALITY

A discharge event is deemed to occur when water leaves the site either through the overflow channel or as a result of actively pumping water. Site did not discharge from Dam 3 (EPA Point 1) in March 2024, a sample was collected from Dam 3 for due diligence purposes only. A discharge event was observed at Dam 4 (EPA Point 4) in March 2024. Water quality results are presented in **Table 3**.

**Table 3: Discharge Water Quality Results – March 2024**

<b>Obtained:</b> 19/03/2024 <b>Published:</b> 25/06/2024		<b>Premise:</b> Cullen Valley Mine <b>Licensee:</b> Shoalhaven Coal <b>EPL Number:</b> 10341			
<b>Sampling Point</b>	<b>Frequency</b>	<b>Pollutant</b>	<b>Limit</b>	<b>Date</b>	<b>Measurement</b>
Dam 3 (EPA Point 1) <sup>1</sup>	Weekly during discharge	pH (pH unit)	6.5 – 8.5	6/03/2024	8.02
		TSS (mg/L)	50	6/03/2024	9
		Oil & Grease (mg/L)	10	6/03/2024	<5
		Conductivity (µS/cm)*	--	6/03/2024	316
		Total Iron (mg/L)*	--	6/03/2024	0.17
		Total Manganese (mg/L)*	--	6/03/2024	0.08
Dam 4 (EPA Point 4)	Weekly during discharge	pH (pH unit)	6.5 – 8.5	6/03/2024	7.59
		TSS (mg/L)	50	6/03/2024	9
		Oil & Grease (mg/L)	10	6/03/2024	<5
		Conductivity (µS/cm)*	--	6/03/2024	630
		Total Iron (mg/L)*	--	6/03/2024	0.12
		Total Manganese (mg/L)*	--	6/03/2024	0.37
		pH (pH unit)	6.5 – 8.5	15/03/2024	7.06
		TSS (mg/L)	50	15/03/2024	<5
		Oil & Grease (mg/L)	10	15/03/2024	<5
		Conductivity (µS/cm)*	--	15/03/2024	1831
		Total Iron (mg/L)*	--	15/03/2024	0.51
		Total Manganese (mg/L)*	--	15/03/2024	0.25
		pH (pH unit)	6.5 – 8.5	20/03/2024	6.68
		TSS (mg/L)	50	20/03/2024	12
		Oil & Grease (mg/L)	10	20/03/2024	<5
		Conductivity (µS/cm)*	--	20/03/2024	610
		Total Iron (mg/L)*	--	20/03/2024	0.09
		Total Manganese (mg/L)*	--	20/03/2024	0.23

<sup>1</sup> – sample collected for due diligence purposes only.

-- No limit provided in EPL 10341

The pH, total suspended solids (TSS) and oil and grease concentration were compliant with the EPL limits at Dam 4 which was discharging at the time of sampling. Dam 3 was sampled for due diligence purposes only.

## **5 NOISE LIMITS**

Attended noise monitoring is required to be undertaken on a quarterly frequency. Noise Monitoring reports for previous quarters are available on the Castlereagh Coal website: <https://ccoal.com.au/environmental-reporting-compliance/>

## **6 BLASTING**

No blasting was undertaken during March 2024.

## **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**