

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 ($4\text{g}/\text{m}^2$ /month) for the period March 2023 to February 2024. Maximum annual increase in deposited dust levels are also below the criteria limit of $2\text{g}/\text{m}^2$ /month. Depositional dust monitoring results are presented in **Table 1**.

Table 1: Depositional Dust Monitoring Results: February 2024

Obtained: 19/02/2024		Premise: Cullen Valley Mine		
Published: 25/06/2024		Licensee: Shoalhaven Coal		
		EPL Number: 10341		
		Exposure Period: 31 days		
Sampling Point	Start Date	End Date	Insoluble Solids (g/m ² /month)	Rolling Annual Average (g/m ² /month)
CDD1 (Railway)	06/01/2024	06/02/2024	0.30	0.57
CDD2 (Hillcroft)	06/01/2024	08/01/2024	0.10	0.47
CDD3 (Office)	06/01/2024	06/02/2024	0.40	0.64
CDD4 (Cranes)	06/01/2024	06/02/2024	0.70	0.96
CDD5 (Doble)	06/01/2024	06/02/2024	0.10	0.53
Annual Average Limit				4.0

Required Frequency: Monthly - exposure period 30 ± 2 days

3.2 PM10 AND TSP

The particulate matter (PM₁₀) and total suspended particulate (TSP) were not recorded for the month of February 2024 due to dust gauge generator failure. The TSP and PM₁₀ annual rolling average results were calculated with the available data for the period of March 2023 to February 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: February 2024

Obtained: N/A		Premise: Cullen Valley Mine	
Published: 25/06/2024		Licensee: Shoalhaven Coal	
		EPL Number: 10341	
Sampling Point	Run Date	PM ₁₀ (µg/m ³)	TSP (µg/m ³) [^]
HVAS1 (EPA Point 3)	04/02/2024	NR	NR
	10/02/2024	NR	NR
	16/02/2024	NR	NR
	22/02/2024	NR	NR
	28/02/2024	NR	NR
Rolling Annual Average (Calculation period March 2023 to February 2024)		9.31	15.14
24 Hour Limit		50	--
Annual Average Limit		30	90

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 February 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 February 2024. Water quality results are presented in **Table 3**.

Table 3: Discharge Water Quality Results – February 2024

Obtained: 19/02/2024		Premise: Cullen Valley Mine			
Published: 25/06/2024		Licensee: Shoalhaven Coal			
		EPL Number: 10341			
Sampling Point	Frequency	Pollutant	Limit	Date	Measurement
Dam 3 (EPA Point 1) ¹	Weekly during discharge	pH (pH unit)	6.5 – 8.5	06/02/2024	8.30
		TSS (mg/L)	50	06/02/2024	15
		Oil & Grease (mg/L)	10	06/02/2024	<5
		Conductivity (µS/cm)	--	06/02/2024	429
		Total Iron (mg/L)	--	06/02/2024	0.18
		Total Manganese (mg/L)	--	06/02/2024	0.052
Dam 4 (EPA Point 4)	Weekly during discharge	pH (pH unit)	6.5 – 8.5	06/02/2024	8.0
		TSS (mg/L)	50	06/02/2024	88
		Oil & Grease (mg/L)	10	06/02/2024	<5
		Conductivity (µS/cm)	--	06/02/2024	560
		Total Iron (mg/L)	--	06/02/2024	0.98
		Total Manganese (mg/L)	--	06/02/2024	0.13
		pH (pH unit)	6.5 – 8.5	12/02/2024	6.22
		TSS (mg/L)	50	12/02/2024	16
		Oil & Grease (mg/L)	10	12/02/2024	<5
		Conductivity (µS/cm)	--	12/02/2024	545
		Total Iron (mg/L)	--	12/02/2024	6.5
		Total Manganese (mg/L)	--	12/02/2024	1.8

¹ – sample collected for due diligence purposes only.

-- No limit provided in EPL 10341

NR – No result obtained from laboratory

The 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, however pH was slightly below EPL limits. 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 February 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