

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

Table 1: Depositional Dust Monitoring Results: January 2024

Obtained: 24/01/2024		Premise: Cullen Valley Mine		
Published: 27/02/2024		Licensee: Shoalhaven Coal		
		EPL Number: 10341		
		Exposure Period: 29 days		
Sampling Point	Start Date	End Date	Insoluble Solids (g/m²/month)	Rolling Annual Average (g/m²/month)
CDD1 (Railway)	08/12/2023	06/01/2024	0.3	0.57
CDD2 (Hillcroft)	08/12/2023	06/01/2024	0.1	0.47
CDD3 (Office)	08/12/2023	06/01/2024	0.4	0.64
CDD4 (Cranes)	08/12/2023	06/01/2024	0.7	0.96
CDD5 (Doble)	08/12/2023	06/01/2024	0.1	0.53
Annual Average Limit				4.0

Required Frequency: Monthly - exposure period 30 ± 2 days

Rolling annual average calculation period from February 2023 and January 2024

3.2 PM10 AND TSP

The particulate matter (PM₁₀) and total suspended particulate (TSP) were not recorded for the month of January 2024 due to engaging a new laboratory contractor. The TSP and PM₁₀ annual rolling average results were calculated with the available data for the period of February 2023 to January 2024. The average values were less than the annual average EPL limit as presented in **Error! Reference source not found.**

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

Obtained: N/A		Premise: Cullen Valley Mine	
Published: 25/06/2024		Licensee: Shoalhaven Coal	
		EPL Number: 10341	
Sampling Point	Run Date	PM10 (µg/m ³)	TSP (µg/m ³) ^
HVAS1	05/01/2024	NR	NR
	11/01/2024	NR	NR
	17/01/2024	NR	NR
	23/01/2024	NR	NR
	31/01/2024	NR	NR
Rolling Annual Average (Calculation period February 2023 to January 2024)		9.46	15.40
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 January 2024, a sample was collected from Dam 3 for due diligence purposes only. A discharge event occurred at Dam 4 (EPA Point 4) in January 2024. Water quality results are presented in **Table 3**.

Table 3: Discharge Water Quality Results – January 2024

Obtained: 24/01/2024 Published: 13/02/2024		Premise: Cullen Valley Mine 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	24/01/2024	8.48
		TSS (mg/L)	50	24/01/2024	6
		Oil & Grease (mg/L)	10	24/01/2024	<5
		Conductivity (µS/cm)	--	24/01/2024	344
		Total Iron (mg/L)	--	24/01/2024	0.2
		Total Manganese (mg/L)	--	24/01/2024	0.62
Dam 4 (EPA Point 4)	Weekly during discharge	pH (pH unit)	6.5 – 8.5	11/01/2024	6.87
		TSS (mg/L)	50	11/01/2024	7
		Oil & Grease (mg/L)	10	11/01/2024	<5
		Conductivity (µS/cm)	--	11/01/2024	568
		Total Iron (mg/L)	--	11/01/2024	0.64
		Total Manganese (mg/L)	--	11/01/2024	0.32
		pH (pH unit)	6.5 – 8.5	18/01/2024	6.74
		TSS (mg/L)	50	18/01/2024	7
		Oil & Grease (mg/L)	10	18/01/2024	<5
		Conductivity (µS/cm)	--	18/01/2024	380
		Total Iron (mg/L)	--	18/01/2024	0.44
		Total Manganese (mg/L)	--	18/01/2024	0.17
		pH (pH unit)	6.5 – 8.5	24/01/2024	7.87
		TSS (mg/L)	50	24/01/2024	6
		Oil & Grease (mg/L)	10	24/01/2024	<5
		Conductivity (µS/cm)	--	24/01/2024	489
		Total Iron (mg/L)	--	24/01/2024	0.29
		Total Manganese (mg/L)	--	24/01/2024	0.17

¹ – 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 January 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