

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 g/m² /month) for the period August 2023 to July 2024. Maximum annual increase in deposited dust levels is also below the criteria limit of 2 g/m² /month. Depositional dust monitoring results are presented in **Table 1**.

Table 1: Depositional Dust Monitoring Results: July 2024

Obtained: 30/08/2024		Premise: Cullen Valley Mine		
Published: 25/09/2024		Licensee: Shoalhaven Coal		
		EPL Number: 10341		
		Exposure Period: 29 days		
Sampling Point	Start Date	End Date	Insoluble Solids (g/m ² /month)	Rolling Annual Average (g/m ² /month)
CDD1 (Railway)	10/07/2024	08/08/2024	0.3	0.51
CDD2 (Hillcroft)	10/07/2024	08/08/2024	0.6	0.47
CDD3 (Office)	10/07/2024	08/08/2024	0.4	0.64
CDD4 (Cranes)	10/07/2024	08/08/2024	0.9	1.16
CDD5 (Doble)	10/07/2024	08/08/2024	0.2	0.64
Annual Average Limit				4.0

Required Frequency: Monthly - exposure period 30 ± 2 days

Rolling annual average calculation period from August 2023 to July 2024

3.2 PM₁₀ AND TSP

The 24-hour maximum PM₁₀ particulate matter concentration less than 10 microns (PM₁₀) criterion of 50 µg/m³ was not exceeded during July 2024. The PM₁₀ and total suspended particulate (TSP) annual average results were in compliance with the annual average limit for the period August 2023 to July 2024.

PM₁₀ and TSP results for July 2024 are presented in **Table 2**.

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

Obtained: 08/08/2024		Premise: Cullen Valley Mine	
Published: 25/09/2024		Licensee: Shoalhaven Coal	
		EPL Number: 10341	
Sampling Point	Run Date	PM ₁₀ (µg/m ³)	TSP (µg/m ³) ^
HVAS1	04/07/2024	3.0	7.5
	10/07/2024	1.0	2.5
	16/07/2024	0.0	0.0
	22/07/2024	2.0	5.0
	28/07/2024	2.0	5.0
Rolling Annual Average (Calculation period August 2023 to July 2024)		14.6	31.4
24 Hour Limit		50	--
Annual Average Limit		30	90

^TSP calculated from PM₁₀ (PM₁₀ representing 40% of TSP)

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 July 2024. Discharge was observed at Dam 4 (EPA Point 4) throughout July 2024.

Water quality results are presented in **Table 3**

Table 3: Discharge Water Quality Results – July 2024

Obtained: 08/09/2024 Published: 25/09/2024		Premise: Cullen Valley Mine Licensee: Shoalhaven Coal EPL Number: 10341			
Sampling Point Frequency	Frequency	Pollutant	Limit	Date	Measurement
Dam 3 (EPA Point 1) ¹	Weekly during discharge	pH (pH unit)	6.5 – 8.5	-	-
		Conductivity (µS/cm)	--	-	-
		TSS (mg/L)	50	-	-
		Oil & Grease (mg/L)	10	-	-
		Total Iron (mg/L)	--	-	-
		Total Manganese (mg/L)	--	-	-
Dam 4 (EPA Point 4)	Weekly during discharge	pH (pH unit)	6.5 – 8.5	*5/07/2024	7.0
		Conductivity (µS/cm)	--	*5/07/2024	656
		TSS (mg/L)	50	*5/07/2024	7
		Oil & Grease (mg/L)	10	*5/07/2024	<5
		Total Iron (mg/L)	--	*5/07/2024	0.110
		Total Manganese (mg/L)	--	*5/07/2024	0.110
		pH (pH unit)	6.5 – 8.5	10/07/2024	7.21
		Conductivity (µS/cm)	--	10/07/2024	667
		TSS (mg/L)	50	10/07/2024	6
		Oil & Grease (mg/L)	10	10/07/2024	<5
		Total Iron (mg/L)	--	10/07/2024	0.100
		Total Manganese (mg/L)	--	10/07/2024	0.180
		pH (pH unit)	6.5 – 8.5	*18/07/2024	7.52

		Conductivity (µS/cm)	--	*18/07/2024	697
		TSS (mg/L)	50	*18/07/2024	<5
		Oil & Grease (mg/L)	10	*18/07/2024	<5
		Total Iron (mg/L)	--	*18/07/2024	0.090
		Total Manganese (mg/L)	--	*18/07/2024	0.210
		pH (pH unit)	6.5 – 8.5	25/07/2024	7.71
		Conductivity (µS/cm)	--	25/07/2024	701
		TSS (mg/L)	50	25/07/2024	10
		Oil & Grease (mg/L)	10	25/07/2024	<5
		Total Iron (mg/L)	--	25/07/2024	0.160
		Total Manganese (mg/L)	--	25/07/2024	0.160
		pH (pH unit)	6.5 – 8.5	31/07/2024	7.42
		Conductivity (µS/cm)	--	31/07/2024	670
		TSS (mg/L)	50	31/07/2024	8
		Oil & Grease (mg/L)	10	31/07/2024	<5
		Total Iron (mg/L)	--	31/07/2024	0.200
		Total Manganese (mg/L)	--	31/07/2024	0.160

¹ – sample collected for due diligence purposes only. No discharge throughout the reporting period.

--No limit provided in EPL 10341

*Note samples were failed to be collected on the scheduled collection day (04/07/24 and 17/07/24,) and were taken in the following days

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.

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 July 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