

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 November 2024 to October 2025. Maximum annual increase in deposited dust levels is below the criteria limit of 2 g/m² /month. Depositional dust monitoring results are presented in **Table 1**.

Table 1: Depositional Dust Monitoring Results: October 2025

Obtained: 04/11/2025		Premises: Cullen Valley Mine		
Published: 06/01/2026		Licensee: Shoalhaven Coal		
		EPL Number: 10341		
		Exposure		Period: 32 days
Sampling Point	Start Date	End Date	Insoluble Solids (g/m ² /month)	Rolling Annual Average (g/m ² /month)
CDD1 (Railway)	02/10/2025	03/11/2025	0.7	0.79
CDD2 (Hillcroft)	02/10/2025	03/11/2025	0.5	0.48
CDD3 (Office)	02/10/2025	03/11/2025	0.3	1.08
CDD4 (Cranes)	02/10/2025	03/11/2025	0.5	0.77
CDD5 (Doble)	02/10/2025	03/11/2025	0.5	0.48
Annual Average Limit				4.0

Required Frequency: Monthly - exposure period 30 ± 2 days

Rolling annual average calculation period from November 2024 to October 2025

3.2 PM₁₀, PM_{2.5} AND TSP

The 24-hour maximum PM₁₀ particulate matter concentration less than 10 microns (PM₁₀) criterion of 50 µg/m³ was not exceeded during October 2025. The PM₁₀, PM_{2.5} and total suspended particulate (TSP) annual average results were in compliance with the annual average limit for the period November 2024 to October 2025.

PM₁₀, PM_{2.5} and TSP results for October 2025 are presented in **Table 2**.

Table 2: High Volume Air Sampler Monitoring Results: October 2025

Obtained: 04/01/2026		Premises: Cullen Valley Mine		
Published: 06/01/2026		Licensee: Shoalhaven Coal		
		EPL Number: 10341		
Sampling Point	Run Date	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	TSP (µg/m ³) ^
HVAS1	03/10/2025	6	3	15.0
	08/10/2025	15	7.5	37.5
	14/10/2025	7	3.5	17.5
	20/10/2025	17	8.5	42.5
	27/10/2025	5	2.5	12.5
	31/10/2025	10	5.0	25.0
Rolling Annual Average (Calculation period November 2024 to October 2025)		11.1	5.6	27.8
24 Hour Limit		50	25	--
Annual Average Limit		25	8	90

^TSP calculated from an estimate of PM₁₀

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 October 2025, samples were collected from Dam 3 for due diligence purposes only. Discharge was observed at Dam 4 (EPA Point 4) throughout October 2025 and was sampled weekly.

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

Table 3: Discharge Water Quality Results – October 2025

Obtained: 15/12/25 Premises: Cullen Valley Mine Published: 06/01/26 Licensee: Shoalhaven Coal EPL Number: 10341					
Sampling Point Frequency	Frequency	Pollutant	Limit	Date	Measurement
Dam 3 Due Diligence Sample (Non-Discharge) ¹	Monthly	pH (pH unit)	6.5 – 8.5	02/10/2025	6.6
		Conductivity (µS/cm)	650	02/10/2025	120
		TSS (mg/L)	50	02/10/2025	10
		Oil & Grease (mg/L)	10	02/10/2025	<5
		Total Iron (mg/L)	0.3	02/10/2025	0.45
		Total Manganese (mg/L)	1.9	02/10/2025	0.02
Discharge Point 1 (Dam 3) (EPA Point 1)	Weekly during discharge	pH (pH unit)	6.5 – 8.5	--	N/A
		Conductivity (µS/cm)	650	--	N/A
		TSS (mg/L)	50	--	N/A
		Oil & Grease (mg/L)	10	--	N/A
		Total Boron (mg/L)	0.94	--	N/A
		Total Cobalt (mg/L)	0.0014	--	N/A
		Total Copper (mg/L)	0.0014	--	N/A
		Total Nickel (mg/L)	0.011	--	N/A

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October 2025



Sampling Point Frequency	Frequency	Pollutant	Limit	Date	Measurement
Discharge Point 1 (Dam 3) (EPA Point 1)	Weekly during discharge	Total Zinc (mg/L)	0.008	--	N/A
		Total Iron (mg/L)	0.3	--	N/A
		Total Manganese (mg/L)	1.9	--	N/A
Dam 4 (EPA Point 4)	Weekly during discharge	pH (pH unit)	6.5 – 8.5	01/10/2025	7.2
				08/10/2025	7.1
				15/10/2025	7.3
				22/10/2025	7.6
				29/10/2025	7.9
		Conductivity (µS/cm)	-- 650	01/10/2025	396
				08/10/2025	423
				15/10/2025	395
				22/10/2025	1,103
				29/10/2025	389
TSS (mg/L)	50	01/10/2025	36		
		08/10/2025	15		
		15/10/2025	22		
		22/10/2025	<5		
		29/10/2025	18		
Oil & Grease (mg/L)	10	01/10/2025	<5		
		08/10/2025	<5		
		15/10/2025	<5		
		22/10/2025	<5		
		29/10/2025	<5		
Total Boron (mg/L)	-- 0.94	01/10/2025	<0.05		
		08/10/2025	<0.05		
		15/10/2025	<0.05		
		22/10/2025	0.09		
		29/10/2025	<0.05		
Total Cobalt (mg/L)	- 0.0014	01/10/2025	0.003		
		08/10/2025	<0.004		
		15/10/2025	0.001		
		22/10/2025	<0.001		
		29/10/2025	0.003		
Total Copper (mg/L)	- 0.0014	01/10/2025	<0.001		
		08/10/2025	<0.001		
		15/10/2025	<0.001		
		22/10/2025	<0.001		
		29/10/2025	<0.001		
Total Nickel (mg/L)	- 0.011	01/10/2025	0.017		
		08/10/2025	0.015		
		15/10/2025	0.005		
		22/10/2025	0.005		
		29/10/2025	0.010		

Sampling Point Frequency	Frequency	Pollutant	Limit	Date	Measurement
Dam 4 (EPA Point 4)	Weekly during discharge	Total Zinc (mg/L)	- 0.008	01/10/2025	0.014
				08/10/2025	0.014
				15/10/2025	<0.005
				22/10/2025	<0.005
				29/10/2025	0.01
		Total Iron (mg/L)	- 0.3	01/10/2025	2.43
				08/10/2025	2.77
				15/10/2025	0.74
				22/10/2025	0.21
				29/10/2025	2.16
		Total Manganese (mg/L)	- 1.9	01/10/2025	0.582
				08/10/2025	0.639
				15/10/2025	0.393
				22/10/2025	0.212
				29/10/2025	0.615

1 – sample collected for due diligence purposes only.

A variation to analyte concentration limits was received by the EPA as part of the variation to EPL10341 on 8 August 2025. The concentrations for pH, TSS, oil and grease, copper, manganese and boron at Dam 4 were compliant for all weeks during discharge in October. Cobalt concentration limits were exceeded in three of the five weeks, nickel in two of the five weeks, zinc in three of the five weeks and iron in four of the five weeks under the revised limits.

Dam 3 was sampled for due diligence purposes only as there was no discharge conducted throughout the reporting period.

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 October 2025.

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