

## 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&SYSU

ID=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/m $^2$  /month) for the period April 2024 to March 2025. Maximum annual increase in deposited dust levels is below the criteria limit of 2 g/m $^2$  /month. Depositional dust monitoring results are presented in **Table 1**.

## MONTHLY ENVIRONMENTAL MONITORING DATA March 2025



Table 1: Depositional Dust Monitoring Results: March 2025

Obtained: Published:	16/05/2025 22/05/2025	Premise: Licensee: EPL Number: xposure Period:	Cullen Valley Mine Shoalhaven Coal 10341 28 days	
Sampling Point	Start Date	End Date	Insoluble Solids (g/m²/month)	Rolling Annual Average (g/m²/month)
CDD1 (Railway)	6/03/2025	3/04/2025	1.1	0.76
CDD2 (Hillcroft)	6/03/2025	3/04/2025	0.4	0.56
CDD3 (Office)	6/03/2025	3/04/2025	0.5	1.05
CDD4 (Cranes)	6/03/2025	3/04/2025	0.5	0.92
CDD5 (Doble)	6/03/2025	3/04/2025	0.6	0.57
		Anr	nual Average Limit	4.0

Required Frequency: Monthly - exposure period 30 ± 2 days

Rolling annual average calculation period from April 2024 to March 2025

### 3.2 PM10 AND TSP

The 24-hour maximum  $PM_{10}$  particulate matter concentration less than 10 microns ( $PM_{10}$ ) criterion of 50  $\mu g/m^3$  was not exceeded during March 2025. The  $PM_{10}$  and total suspended particulate (TSP) annual average results were in compliance with the annual average limit for the period April 2024 to March 2025.

PM<sub>10</sub> and TSP results for March 2025 are presented in **Table 2**.

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

Obtained: Published:	16/05/2025 22/05/2025	Premise: Licensee: EPL Number:	Cullen Valley Mine Shoalhaven Coal 10341
Sampling Point	Run Date	PM10 (μg/m³)	TSP (µg/m³) ^
<u> </u>	01/03/2025	Invalid	-
	14/03/2025	14	
HVAS1	18/03/2025	19	
	24/03/2025	5	-
	30/03/2025	4	
	Rolling Annual Average od April 2024 to March 2025)	14.01	42.6
24 Hour Limit		50	
	<b>Annual Average Limit</b>	30	90

<sup>^</sup>TSP calculated from an estimate of PM<sub>10</sub>

Required Frequency: Weekly - High Volume Air Sample run events occur every six days for 24 hours.

-- No Limit

SNR- Sampled but Analysis Not Received by sampling company.

Invalid- Sample run was faulty. A rerun was made outside the month of March 2025.



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

Water quality results are presented in Table 3

Table 3: Discharge Water Quality Results - March 2025

Obtained:	16/05/2025	Premise:	Cullen Valley Mine			
Published:	22/05/2025	Licensee:	Shoalhaven Coal			
		EPL		10341		
		Number:				
Samp	oling Point	Frequency	Pollutant	Limit	Date	Measure
Fre	equency	riequency				ment
		N/A	pH (pH unit)	6.5 – 8.5	06/03/2025	6.6
			TSS (mg/L)		06/03/2025	12
			Conductivity	50	06/03/2025	230
	Dam 3		(μS/cm)			
_	Jan 3		Oil & Grease	10	06/03/2025	<5
Due Diligen	ce Sample (Non-		(mg/L)			
_	charge) <sup>1</sup>		Total Iron		06/03/2025	0.320
	01101807		(mg/L)			
			Total		06/03/2025	0.40
			Manganese			
			(mg/L)			
		Weekly	pH (pH unit)	6.5 – 8.5		N/A
		during	TSS (mg/L)			N/A
		discharge	Conductivity	50		N/A
			(μS/cm)			
Discharge	Point 1 (Dam 3)		Oil & Grease	10		N/A
_	A Point 1)		(mg/L)			
(217	(1011112)		Total Iron			N/A
			(mg/L)			
			Total			N/A
			Manganese			
			(mg/L)			
	*Weekly	pH (pH unit)	6.5 – 8.5	06/03/2025	7.2	
		during	TSS (mg/L)		06/03/2025	<5
		discharge	Conductivity	50	06/03/2025	580
			(μS/cm)			
	Dam 4		Oil & Grease	10	06/03/2025	<5
(EPA	A Point 4)		(mg/L)			
			Total Iron		06/03/2025	0.08
			(mg/L)			
			Total		06/03/2025	0.4
			Manganese			
			(mg/L)			





	pH (pH unit)	6.5 – 8.5	17/03/2025	6.5
	TSS (mg/L)		17/03/2025	16
	Conductivity	50	17/03/2025	540
	(μS/cm)			
	Oil & Grease	10	17/03/2025	<5
	(mg/L)			
	Total Iron		17/03/2025	0.22
	(mg/L)			
	Total		17/03/2025	0.258
	Manganese			
	(mg/L)			
	pH (pH unit)	6.5 – 8.5	19/03/2025	8.2
	TSS (mg/L)		19/03/2025	17
	Conductivity	50	19/03/2025	595
	(μS/cm)			
	Oil & Grease	10	19/03/2025	<5
	(mg/L)			
	Total Iron		19/03/2025	0.27
	(mg/L)			
	Total		19/03/2025	0.27
	Manganese			
	(mg/L)			
	pH (pH unit)	6.5 – 8.5	26/03/2025	6.8
	TSS (mg/L)		26/03/2025	<5
	Conductivity	50	26/03/2025	604
	(μS/cm)			
	Oil & Grease	10	26/03/2025	<5
	(mg/L)			
	Total Iron		26/03/2025	0.28
	(mg/L)			
	Total		26/03/2025	0.288
	Manganese			
1 – sample collected for due diligence purposes only	(mg/L)			

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

The pH, oil and grease concentrations at Dam 4 were compliant with the EPL 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: <a href="https://ccoal.com.au/environmental-reporting-compliance/">https://ccoal.com.au/environmental-reporting-compliance/</a>

### 6 BLASTING

<sup>--</sup>No limit provided in EPL 10341

# MONTHLY ENVIRONMENTAL MONITORING DATA March 2025



No blasting was undertaken during March 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**