



# Chain Valley Colliery Monthly Website Report – August 2025

---

<b>Site:</b>	Chain Valley Colliery
<b>Department:</b>	Health Safety and Environment
<b>Report Title:</b>	Monthly Environmental Website Report – August 2025
<b>Report Date:</b>	5 <sup>th</sup> September 2025
<b>Distribution:</b>	Delta Coal Website

# Monthly Website Report

CVC Monthly Environmental Report – August 2025

## Table of Contents

Summary .....	3
Introduction .....	3
Scope .....	4
Definitions .....	4
References .....	5
Monitoring Results .....	5
Water – Quality .....	5
Water – Volume.....	6
Water – Groundwater Discharge.....	7
Air Quality - Depositional Dust .....	7
Air Quality – PM <sub>10</sub> .....	9
Air Quality – PM <sub>2.5</sub> .....	11
Weather Data .....	12

# Monthly Website Report

CVC Monthly Environmental Report – August 2025

## Summary

Environmental monitoring results are presented in this report for monitoring undertaken during the period of August 2025.

## Introduction

Great Southern Energy Pty Ltd (trading as Delta Coal) operates the Chain Valley Colliery, an underground coal mine at the southern end of Lake Macquarie.

Chain Valley Colliery operates under the following regulatory instruments:

- Section 66(6) of the *Protection of the Environment Operations Act 1997*, to make monitoring data related to an Environment Protection Licence (EPL) publicly available;
- Development Consent SSD-5465 (as modified), issued under the *Environmental Planning and Assessment Act 1979* to provide details of monitoring results and environmental performance;
- An Environment Protection Licence (EPL 1770) issued under the *Protection of the Environment Operations Act 1997*; and
- A Water Access Licence (WAL41508), Aquifer (Sydney Basin – North Coast Groundwater Source) for 4,443 unit shares (megalitres).

The above development consent and licences require various monitoring and reporting requirements to be undertaken by Delta Coal for Chain Valley Colliery.

This report provides environmental monitoring data from Chain Valley Colliery for the month of August 2025.

Details of the Chain Valley Colliery EPL 1770 are provided below.

Chain Valley Colliery Information	
Premises name	Chain Valley Colliery
Address	Construction Road, Chain Valley Bay, NSW, 2259
Licensee	Great Southern Energy Pty Ltd
EPL #	1770
EPL location	<a href="#">EPL 1770 – April 2025</a>

The overall purpose of this monthly report is to keep stakeholders informed of the environmental monitoring results at Chain Valley Colliery and maintain a transparent and accountable reporting system.

# Monthly Website Report

CVC Monthly Environmental Report – August 2025

## Scope

This report presents the results from the various environmental monitoring programs undertaken for Chain Valley Colliery. Results are presented monthly with annual data and averages.

Where applicable, the results of the monitoring programs are compared with the relevant criteria (from the EPL or Development Consent) to assess compliance. Monitoring results presented in this report include:

- Water – quality;
- Water – volume;
- Air Quality – Depositional Dust
- Air Quality – PM<sub>10</sub>
- Air Quality – PM<sub>2.5</sub>; and
- Meteorological data.

## Definitions

g/m<sup>2</sup>/month – grams per square metre per month;

kL – kilolitre;

ML – megalitre;

mg/L – milligrams per litre;

TSS – total suspended solids;

µg/L – micrograms per litre; and

µS/cm – microSiemens per centimetre.

# Monthly Website Report

## CVC Monthly Environmental Report – August 2025

### References

ALS Group - Monthly Water Monitoring Results **August 2025**

ALS Group - Dust Deposition Report **August 2025**

Development Consent SSD-5465 (as modified)

Environment Protection Licence (EPL) 1770 (Licence version date: 9 April 2025)

### Monitoring Results

#### Water – Quality

Water quality results for August 2025 monthly surface water and Spillway event sampling at Chain Valley Colliery, Licensed Discharge Points (LDP1 and LDP27) are presented below.

LDP1 August 2025			
EPL	1770		
Licensee	Great Southern Energy Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	22-08-2025		
Date Obtained	29-08-2025		
Sampling Point	LDP 1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
pH	pH	6.5-8.5	7.72
Total Sus. Solids (TSS)	mg/L	50	<5
Electrical Conductivity	µS/cm	-	32500

LDP27 August 2025			
EPL	1770		
Licensee	Great Southern Energy Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled			
Date Obtained			
Sampling Point	LDP 27		
Parameter	Units	Limit	Result
pH	pH	6.5-8.5	*
Total Sus. Solids (TSS)	mg/L	50	*
Electrical Conductivity	µS/cm	-	*
Oil & Grease	mg/L	10	*

**\*No discharge was recorded from LDP27 during the monitoring period.**

# Monthly Website Report

## CVC Monthly Environmental Report – August 2025

### Water – Volume

Monthly water volumes discharged from the site are summarised below. There was no exceedance of volumetric discharge recorded at CVC for the period of August 2025.

<b>EPL</b>	<b>1770</b>
<b>Licensee</b>	<b>Great Southern Energy Pty Ltd</b>
<b>Premises</b>	<b>Chain Valley Colliery</b>
<b>Date Sampled</b>	<b>Daily</b>
<b>Date Reported</b>	<b>Refer report date</b>
<b>Discharge volume limit</b>	<b>12,161 kilolitres per day</b>
<b>Sampling Point</b>	<b>1 and 27</b>

<b>Date (24 hour period)</b>	<b>LDP 1 Volume (kL)</b>	<b>LDP 27 Volume (kL)</b>	<b>Total Discharged</b>	<b>Rainfall (mm)</b>
01/08/2025	6392	0	6392	8.4
02/08/2025	3617	0	3617	46.2
03/08/2025	4390	0	4390	27.8
04/08/2025	8591	0	8591	1.6
05/08/2025	8171	0	8171	0.2
06/08/2025	6454	0	6454	0
07/08/2025	9236	0	9236	11.6
08/08/2025	7709	0	7709	16.2
09/08/2025	9376	0	9376	40.6
10/08/2025	9905	0	9905	5.4
11/08/2025	6787	0	6787	1.2
12/08/2025	6299	0	6299	0.2
13/08/2025	182	0	182	0
14/08/2025	5557	0	5557	19.4
15/08/2025	7819	0	7819	4.6
16/08/2025	9339	0	9339	0.6
17/08/2025	6697	0	6697	0
18/08/2025	2879	0	2879	30.6
19/08/2025	8928	0	8928	18
20/08/2025	8581	0	8581	18.8
21/08/2025	7371	0	7371	22.6
22/08/2025	8763	0	8763	11.4
23/08/2025	9102	0	9102	0
24/08/2025	9023	0	9023	0
25/08/2025	5864	0	5864	0
26/08/2025	7086	0	7086	0
27/08/2025	5681	0	5681	0
28/08/2025	6232	0	6232	0
29/08/2025	3793	0	3793	0
30/08/2025	7022	0	7022	0
31/08/2025	6208	0	6208	0

<b>Average</b>	6873	0	6873	9
<b>Minimum</b>	182	0	182	0
<b>Maximum</b>	9905	0	9905	46

# Monthly Website Report

## CVC Monthly Environmental Report – August 2025

### Water – Groundwater Discharge

Groundwater discharged from underground workings to the CVC sedimentation ponds within the surface operational area has been detailed below. Chain Valley Colliery operates Water Access License (WAL 41508) permitting the extraction of 4,443 megalitres per water year (financial year calendar) with a roll-over entitlement up to a maximum of 8,886 megalitres.

CVC Groundwater to Surface Totals FY2025-2026		
Date (month)	GW Discharge (ML/Month)	GW Discharge (Cumulative ML YTD)
July 2025	215	215
August 2025	203	417

### Air Quality - Depositional Dust

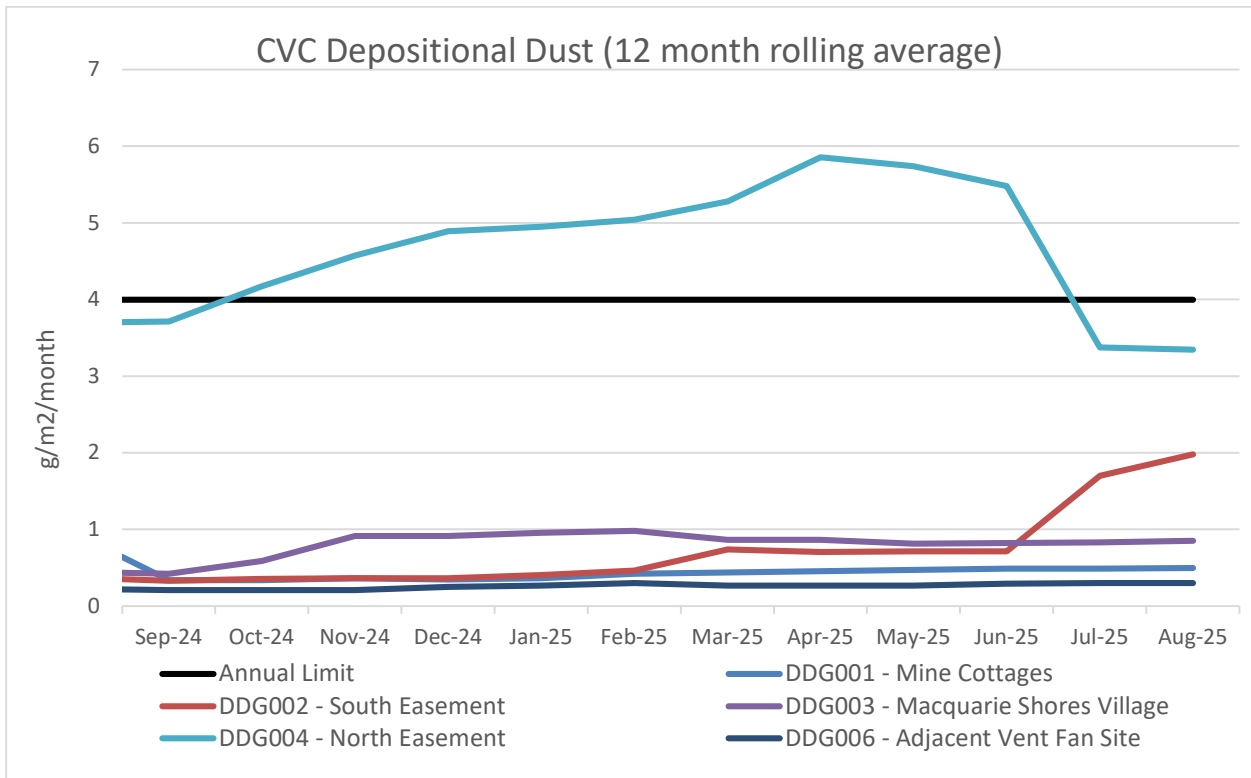
Monthly depositional dust results are shown below. Dust deposition gauges were sampled and analysed in accordance with Development Consent SSD-5465 (as modified), Delta Coal Air Quality and Greenhouse Gas Management Plan, and relevant Australian Standards.

August 2025	
<b>EPL</b>	1770
<b>Limit</b>	4g/m <sup>2</sup> /month / Annum 2g/m <sup>2</sup> /month increase from previous result
<b>Sampling Date</b>	7/07/2025 – 7/08/2025
<b>Site</b>	<b>Insoluble Matter (g/m<sup>2</sup>/month)</b>
DDG001	0.3
DDG002	3.8
DDG003	0.36
DDG004	0.69
DDG006	0.2
<b>Notes:</b> For site locations refer to the Delta Coal Air Quality and Greenhouse Gas Management Plan.	

The 12 month rolling average results for DDG001, DDG002, DDG003, DDG004 and DDG006 remain within the depositional dust limit of 4g/m<sup>2</sup>/month (annual average).

# Monthly Website Report

CVC Monthly Environmental Report – August 2025



A 12-month rolling average of depositional dust concentrations has been presented above. Dust Gauges DDG001, DDG002, DDG003 and DDG004 are located within a closer proximity to Chain Valley Colliery and DDG006 is positioned in a location representative of the Chain Valley Colliery ventilation fan site at Summerland Point.

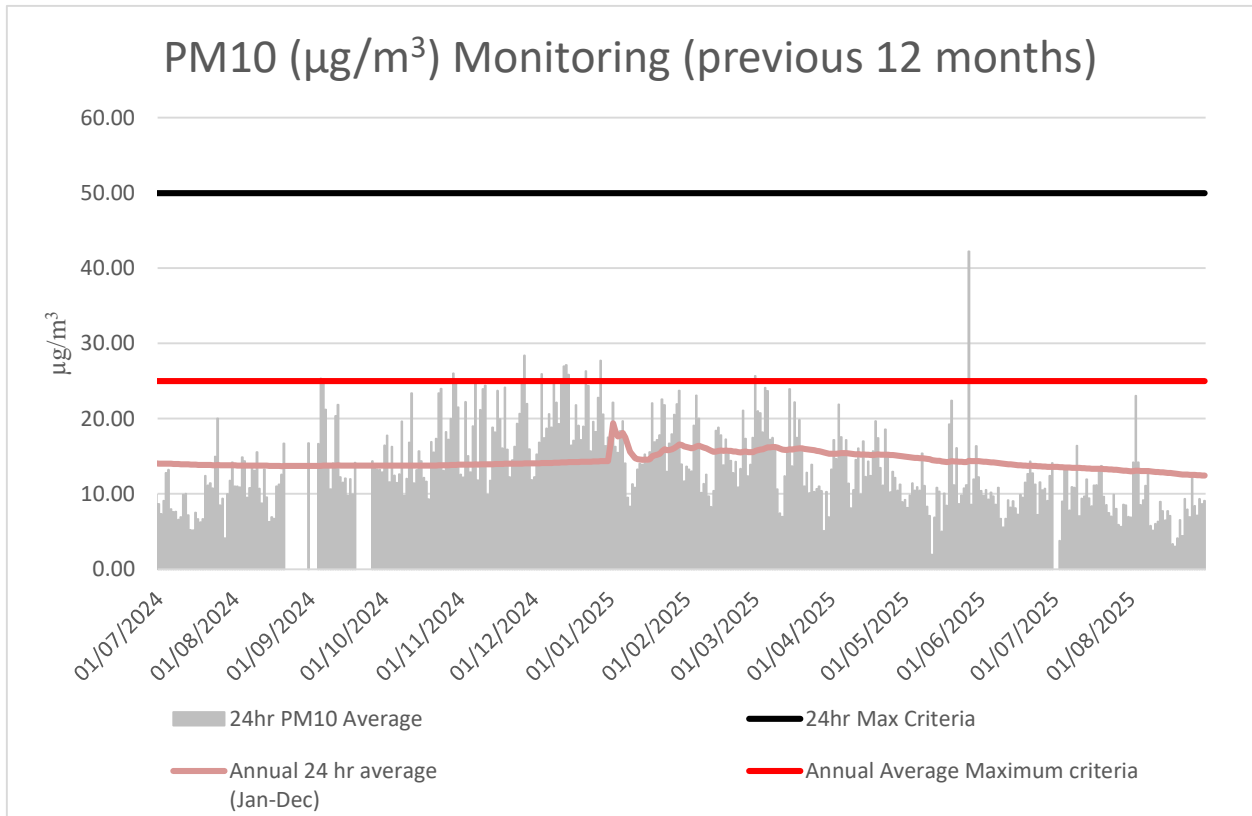


# Monthly Website Report

## CVC Monthly Environmental Report – August 2025

### Air Quality – PM<sub>10</sub>

The 24hr PM<sub>10</sub> average from Delta Coal's Tapered Element Oscillating Microbalance (TEOM), located at the Mannering Park Sewage Treatment Plant, is presented below for the previous 12 months.



Annual 24hr PM<sub>10</sub> average maximum criteria for August 2025 was below the annual average maximum criteria limit. A summary of data availability for Delta Coal's TEOM is presented below for the reporting period. Delta Coals TEOM had a data availability of 99.1% for the month of August 2025.

# Monthly Website Report

CVC Monthly Environmental Report – August 2025

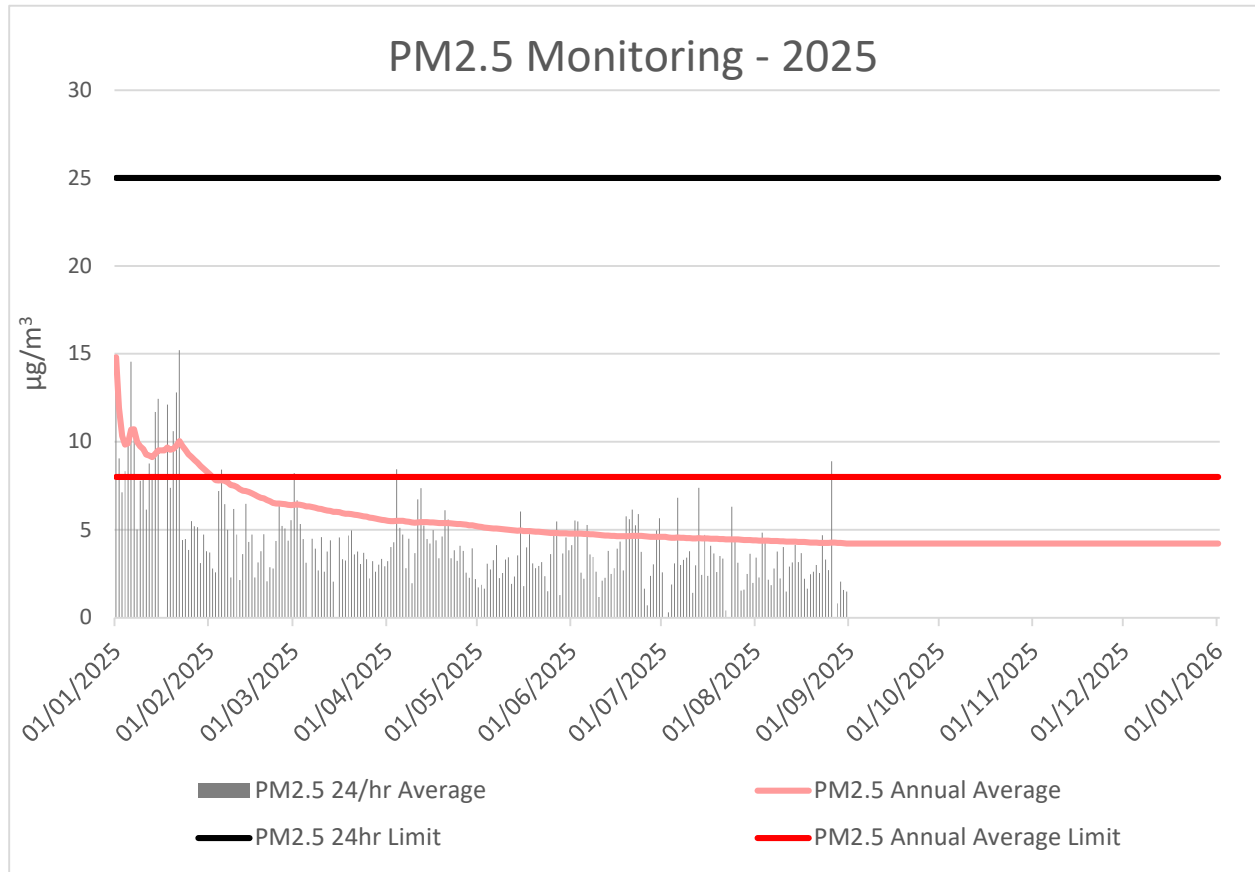
Variable	August	Total	Valid
A/C Temp	99.9%	8928	8922
A1_Scaled	99.9%	8928	8922
Band	99.9%	8928	8922
Bypass Flow	99.9%	8928	8922
Cap Temp	99.9%	8928	8922
Case Temp	99.9%	8928	8922
Config	99.9%	8928	8922
Dew Point	99.9%	8928	8922
Dig-In	99.9%	8928	8922
Dig-Latch	99.9%	8928	8922
ESN	99.9%	8928	8922
Filter Freq	99.9%	8928	8922
Filter Load	99.9%	8928	8922
Humidity	99.9%	8928	8922
MC	99.9%	8928	8922
MC 12Hr	99.9%	8928	8922
MC 1Hr	99.9%	8928	8922
MC 24Hr	99.9%	8928	8922
MC 30min	99.9%	8928	8922
MC 8Hr	99.9%	8928	8922
MC Total	99.9%	8928	8922
Mobile Signal	99.9%	8928	8922
Noise	99.9%	8928	8922
PM10 Flow	99.9%	8928	8922
Pressure	99.9%	8928	8922
Site	0.0%	8928	0
Temperature	99.9%	8928	8922
Tube Temp	99.9%	8928	8922
Vac Pressure	99.9%	8928	8922
Volts	99.9%	8928	8922

# Monthly Website Report

## CVC Monthly Environmental Report – August 2025

### Air Quality – PM<sub>2.5</sub>

Delta Coal utilises PM<sub>2.5</sub> data obtained from Delta Electricity owned and operated beta attenuation monitor (BAM). The PM<sub>2.5</sub> monitor is located on Tingley Road, Wyee.



There were no exceedances of the PM<sub>2.5</sub> daily average limit in August 2025. The 12-month rolling average PM<sub>2.5</sub> value on 31 August was 4.2 µg/m<sup>3</sup>. PM<sub>2.5</sub> data availability in August was 91.5%. The 2025 year to date PM<sub>2.5</sub> data availability is 92.6%.

# Monthly Website Report

## CVC Monthly Environmental Report – August 2025

### Weather Data

A summary of weather data recorded by a meteorological monitoring station at the adjacent Mannering Colliery is presented below for the year to date. (EPA ID no. 26).

Monthly Weather Data 2025			
Licensee	Great Southern Energy Pty Ltd		
Location	Mannering Colliery Meteorological station		
Date published	Refer report date		
Date sampled	Daily		
Date obtained	4 September 2025		
Month	Total Rainfall/Month (mm)	Min Temp	Max Temp
Jan-25	237	11.9	41.3
Feb-25	31	12.5	33.8
Mar-25	138	15.4	36.3
Apr-25	232	11	29.4
May-25	387	7.5	26
Jun-25	37.8	2.8	22.2
July-25	131	2.1	22.1
Aug-25	286	2.6	24.2

# Monthly Website Report

CVC Monthly Environmental Report – August 2025

Variable	August	Total	Valid
Baro (Corrected)	100%	2976	2976
10m Temp	100%	2976	2976
2m Temp	100%	2976	2976
A1	100%	2976	2976
A1_Scaled	100%	2976	2976
Assumed Temp	100%	2976	2976
Barometric	100%	2976	2976
Config	100%	2976	2976
Daily Evap	100%	2976	2976
Daily Rain	100%	2976	2976
Delta T	100%	2976	2976
Dew Point	100%	2976	2976
Dig-In	100%	2976	2976
Dig-Latch	100%	2976	2976
ESN	100%	2976	2976
FDI	100%	2976	2976
Heat Index	100%	2976	2976
Humidity	100%	2976	2976
Mobile Signal	100%	2976	2976
Rain	100%	2976	2976
Raw Evap	100%	2976	2976
S Class	100%	2976	2976
Scalar WS	100%	2976	2976
Sigma	100%	2976	2976
Site	0.0%	2976	0
Solar Radiation	100%	2976	2976
Vector WD	100%	2976	2976
Vector WS	100%	2976	2976
Volts	100%	2976	2976
Wind Chill	100%	2976	2976
Wind Direction	100%	2976	2976
Wind Speed	100%	2976	2976
WS Avg	100%	2976	2976
WS Gust	100%	2976	2976