



Chain Valley Colliery Monthly Website Report – July 2025

Site:	Chain Valley Colliery
Department:	Health Safety and Environment
Report Title:	Monthly Environmental Website Report – July 2025
Report Date:	8 th August 2025
Distribution:	Delta Coal Website

Monthly Website Report

CVC Monthly Environmental Report – July 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 ₁₀	9
Air Quality – PM _{2.5}	11
Weather Data	12

Monthly Website Report

CVC Monthly Environmental Report – July 2025

Summary

Environmental monitoring results are presented in this report for monitoring undertaken during the period of July 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 July 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	EPL 1770 – April 2025

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 – July 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 – PM₁₀
- Air Quality – PM_{2.5}; and
- Meteorological data.

Definitions

g/m²/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 – July 2025

References

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

ALS Group - Dust Deposition Report **July 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 July 2025 monthly surface water and Spillway event sampling at Chain Valley Colliery, Licensed Discharge Points (LDP 1 and LDP27) are presented below.

LDP1 July 2025			
EPL	1770		
Licensee	Great Southern Energy Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	22-07-2025		
Date Obtained	29-07-2025		
Sampling Point	LDP 1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	3
pH	pH	6.5-8.5	7.72
Total Sus. Solids (TSS)	mg/L	50	<5
Electrical Conductivity	µS/cm	-	32200

LDP27 July 2025			
EPL	1770		
Licensee	Great Southern Energy Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled			
Date Obtained			
Sampling Point	LDP 27		
Parameter	Units	Limit	No discharge during July 2025
pH	pH	6.5-8.5	
Total Sus. Solids (TSS)	mg/L	50	
Electrical Conductivity	µS/cm	-	
Oil & Grease	mg/L	10	

Monthly Website Report

CVC Monthly Environmental Report – July 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 July 2025.

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

Date (24 hour period)	LDP 1 Volume (kL)	LDP 27 Volume (kL)	Total Discharged	Rainfall (mm)
01/07/2025	4258	0	4258	31.2
02/07/2025	4358	0	4358	22.2
03/07/2025	5647	0	5647	1
04/07/2025	9343	0	9343	0
05/07/2025	9772	0	9772	0
06/07/2025	8954	0	8954	0.4
07/07/2025	6523	0	6523	0
08/07/2025	6147	0	6147	0
09/07/2025	6212	0	6212	0
10/07/2025	6330	0	6330	0
11/07/2025	6383	0	6383	0
12/07/2025	6375	0	6375	0
13/07/2025	6233	0	6233	0
14/07/2025	6221	0	6221	0
15/07/2025	6388	0	6388	2.6
16/07/2025	6457	0	6457	0
17/07/2025	6361	0	6361	0
18/07/2025	6504	0	6504	9.6
19/07/2025	6124	0	6124	0
20/07/2025	6382	0	6382	0.2
21/07/2025	6436	0	6436	0
22/07/2025	6384	0	6384	0
23/07/2025	5709	0	5709	7
24/07/2025	6763	0	6763	0
25/07/2025	5551	0	5551	0
26/07/2025	6089	0	6089	3
27/07/2025	6181	0	6181	0
28/07/2025	9583	0	9583	0
29/07/2025	9005	0	9005	0
30/07/2025	8690	0	8690	28.8
31/07/2025	10025	0	10025	26

Average	6819	0	6819	4
Minimum	4258	0	4258	0
Maximum	10025	0	10025	31

Monthly Website Report

CVC Monthly Environmental Report – July 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

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.

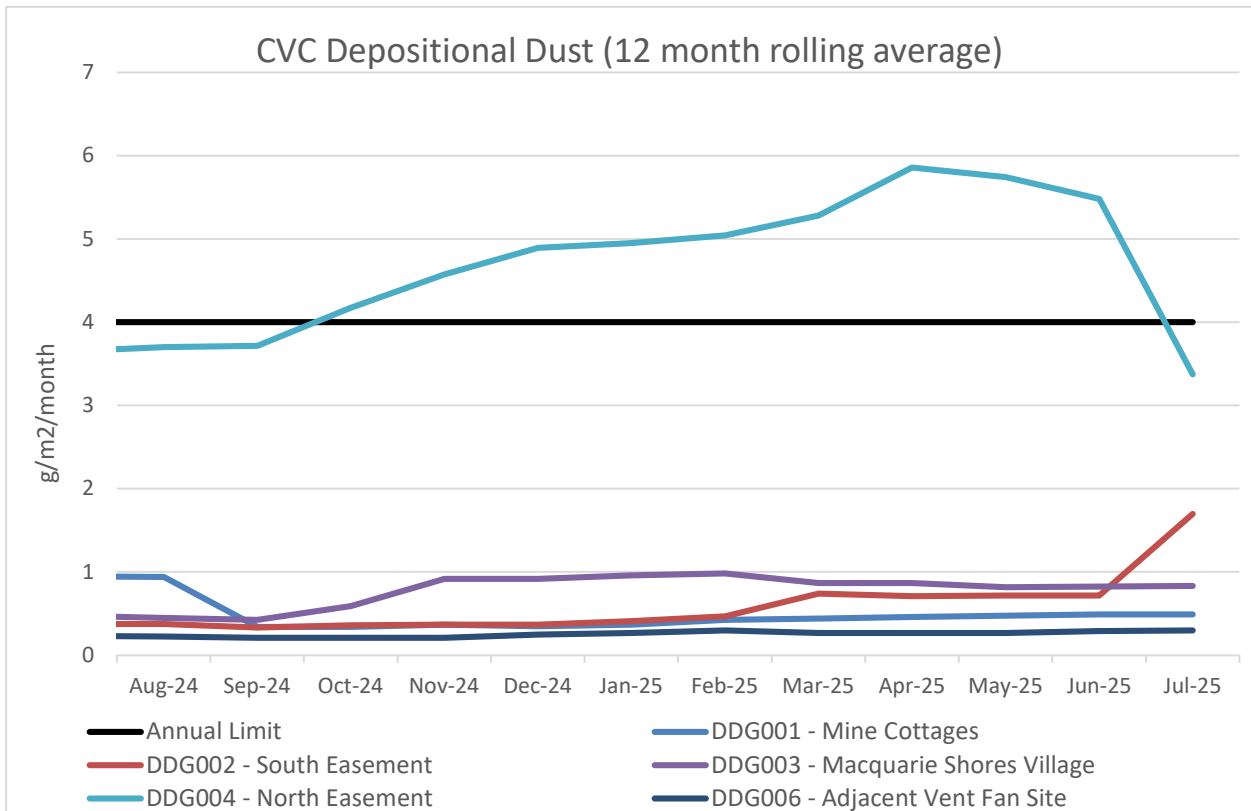
July 2025	
EPL	1770
Limit	4g/m ² /month / Annum 2g/m ² /month increase from previous result
Sampling Date	5/06/2025 – 7/07/2025
Site	Insoluble Matter (g/m ² /month)
DDG001	0.3
DDG002	12.0
DDG003	0.2
DDG004	0.6
DDG006	0.3
Notes: For site locations refer to the Delta Coal Air Quality and Greenhouse Gas Management Plan.	

The July DDG002 result increased by more than 2g/m²/month from the previous month. DDG002 was 12g/m²/month, compared to 0.2g/m²/month the previous month.

The 12 month rolling average results for DDG001, DDG002, DDG003, DDG004 and DDG006 remain within the depositional dust limit of 4g/m²/month (annual average).

Monthly Website Report

CVC Monthly Environmental Report – July 2025



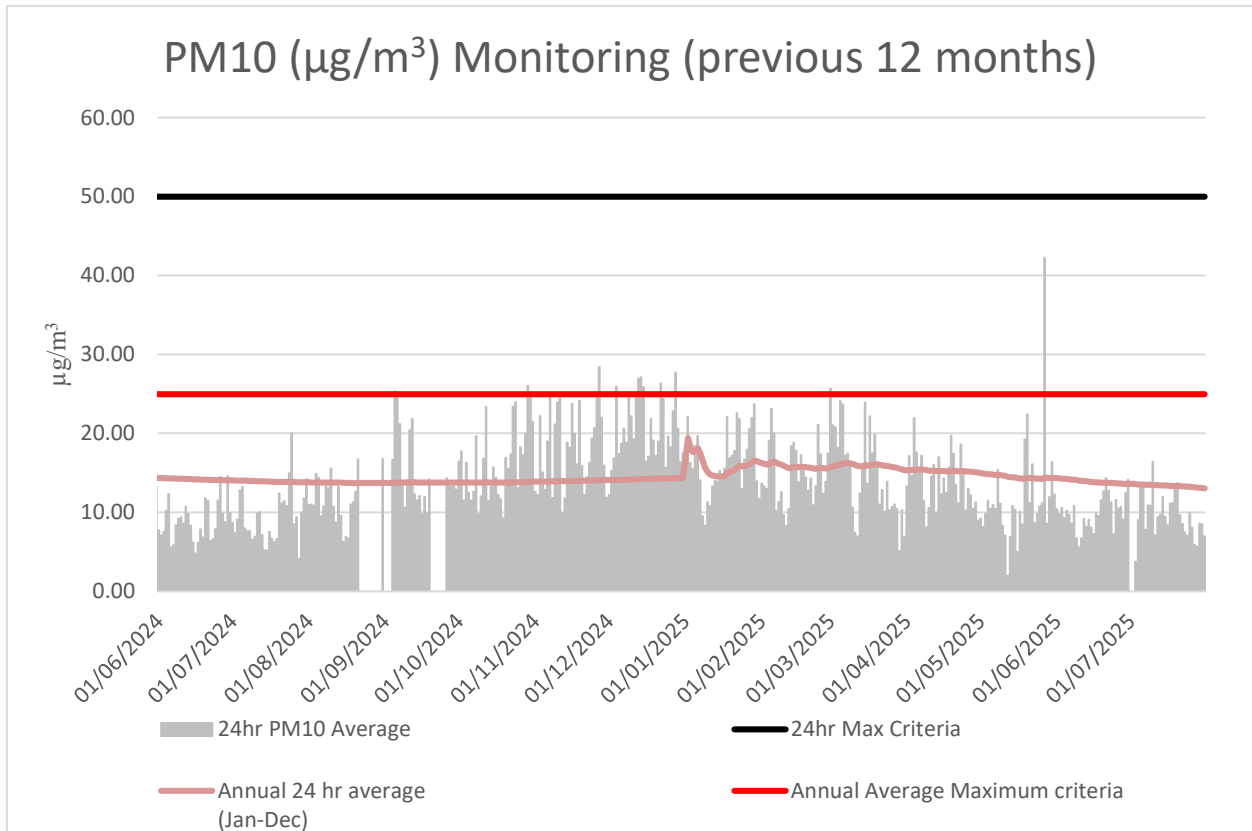
A 12-month rolling average of depositional dust concentrations has been presented above. Dust Gauges DDG001, DDG002, DDG003 and DDG004 are located within a closer proximity to Chain Valley Colliery and DDG006 is positioned in a location representative of the Chain Valley Colliery ventilation fan site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

Monthly Website Report

CVC Monthly Environmental Report – July 2025

Air Quality – PM₁₀

The 24hr PM₁₀ 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 PM₁₀ average maximum criteria for July 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% for the month of July 2025.

Monthly Website Report

CVC Monthly Environmental Report – July 2025

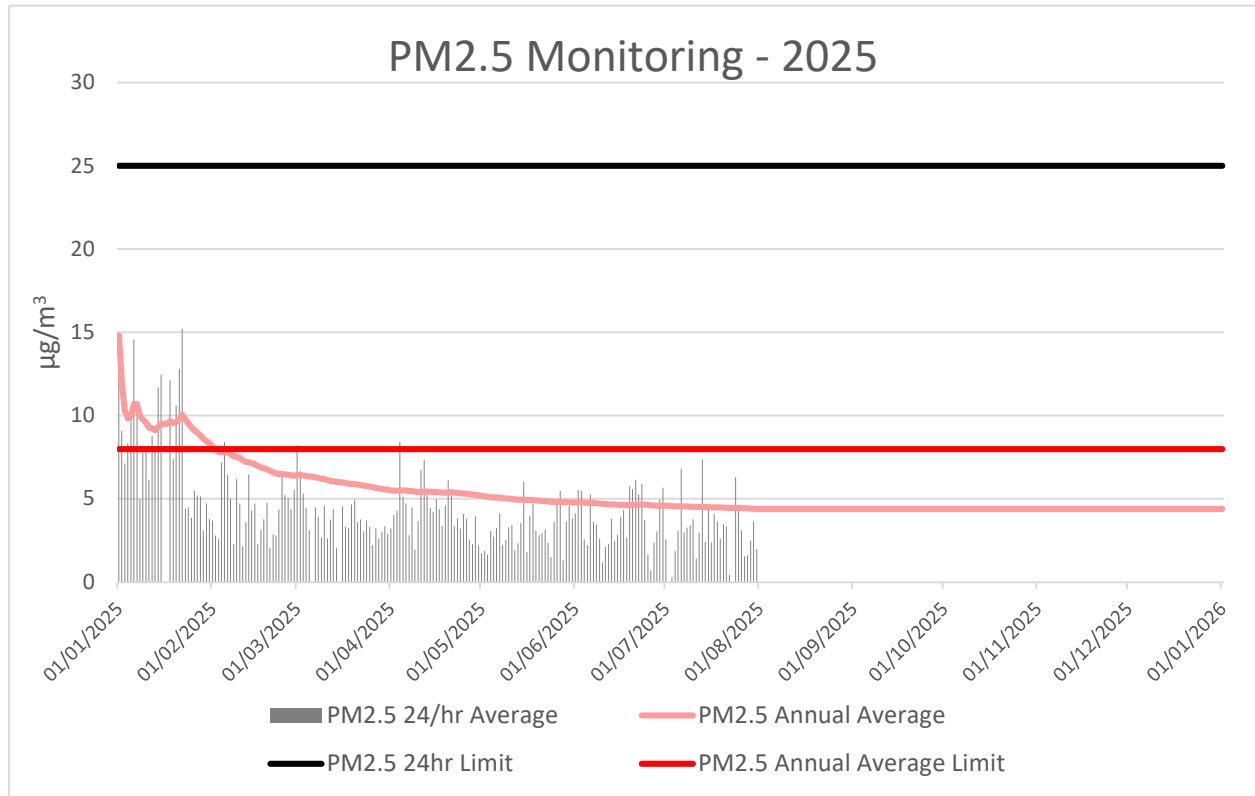
Variable	July	Total	Valid
A/C Temp	96.6%	8928	8628
A1_Scaled	96.7%	8928	8629
Band	96.7%	8928	8629
Bypass Flow	96.6%	8928	8627
Cap Temp	96.6%	8928	8627
Case Temp	96.6%	8928	8627
Config	96.7%	8928	8629
Dew Point	96.6%	8928	8627
Dig-In	96.7%	8928	8629
Dig-Latch	96.7%	8928	8629
ESN	96.7%	8928	8629
Filter Freq	96.6%	8928	8627
Filter Load	96.6%	8928	8627
Humidity	96.6%	8928	8627
MC	96.6%	8928	8627
MC 12Hr	96.6%	8928	8627
MC 1Hr	96.6%	8928	8627
MC 24Hr	96.6%	8928	8627
MC 30min	96.6%	8928	8627
MC 8Hr	96.6%	8928	8627
MC Total	96.6%	8928	8627
Mobile Signal	96.7%	8928	8629
Noise	96.6%	8928	8627
PM10 Flow	96.6%	8928	8627
Pressure	96.6%	8928	8627
Site	0.0%	8928	0
Temperature	96.6%	8928	8627
Tube Temp	96.6%	8928	8627
Vac Pressure	96.6%	8928	8627
Volts	96.7%	8928	8629

Monthly Website Report

CVC Monthly Environmental Report – July 2025

Air Quality – PM_{2.5}

Delta Coal utilises PM_{2.5} data obtained from Delta Electricity owned and operated beta attenuation monitor (BAM). The PM_{2.5} monitor is located on Tingley Road, Wyee.



There were no exceedances of the PM_{2.5} daily average limit in July 2025. The 12-month rolling average PM_{2.5} value on 31 July was 4.4 $\mu\text{g}/\text{m}^3$. PM_{2.5} data availability in July was 85.5%. The 2025 year to date PM_{2.5} data availability is 92.8%.

Monthly Website Report

CVC Monthly Environmental Report – July 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	11 July 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

Monthly Website Report

CVC Monthly Environmental Report – July 2025

Variable	July	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