

Chain Valley Colliery Monthly Website Report – October 2025

Site:	Chain Valley Colliery
Department:	Health Safety and Environment
Report Title:	Monthly Environmental Website Report – October 2025
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CVC Monthly Environmental Report – October 2025

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Summary

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

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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

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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.
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References

ALS Group - Monthly Water Monitoring Results October 2025

ALS Group - Dust Deposition Report October 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 October 2025 monthly surface water and Spillway event sampling at Chain Valley Colliery, Licensed Discharge Points (LDP1 and LDP27) are presented below.

	LDP1 October	· 2025	
EPL	1770		
Licensee	Great Southern E	nergy Pty Ltd	
Premises	Chain Valley Coll	iery	
Date Sampled	14-10-2025		
Date Obtained	21-10-2025		
Sampling Point	LDP 1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
pН	рН	6.5-8.5	7.77
Total Sus. Solids (TSS)	mg/L	50	13
Electrical Conductivity	μS/cm	-	30600

LDP27 October 2025				
EPL	1770			
Licensee	Great Southe	ern Energy Pty Ltd		
Premises	Chain Valley	Colliery		
Date Sampled				
Date Obtained				
Sampling Point	LDP 27			
Parameter	Units	Limit	Result	
рН	рН	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.

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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 October 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)
01/10/2025	4243	0	4243	0
02/10/2025	10519	0	10519	0
03/10/2025	5787	0	5787	0
04/10/2025	6122	0	6122	0
05/10/2025	6201	0	6201	0
06/10/2025	6014	0	6014	0.2
07/10/2025	6097	0	6097	6
08/10/2025	6953	0	6953	0
09/10/2025	10527	0	10527	0
10/10/2025	5727	0	5727	0
11/10/2025	9323	0	9323	0
12/10/2025	9329	0	9329	0
13/10/2025	6142	0	6142	0
14/10/2025	6000	0	6000	0
15/10/2025	6195	0	6195	0
16/10/2025	6325	0	6325	0
17/10/2025	6698	0	6698	1.4
18/10/2025	9681	0	9681	0
19/10/2025	10121	0	10121	0
20/10/2025	8136	0	8136	0
21/10/2025	6637	0	6637	0
22/10/2025	6117	0	6117	0
23/10/2025	6139	0	6139	0
24/10/2025	6058	0	6058	0
25/10/2025	6206	0	6206	0
26/10/2025	6254	0	6254	0
27/10/2025	6368	0	6368	1.8
28/10/2025	10557	0	10557	14.8
29/10/2025	8327	0	8327	4.2
30/10/2025	9457	0	9457	0.6
31/10/2025	8665	0	8665	1.8
· ·	1			
Average	7320	0	7320	1

0

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Minimum

Maximum

4243

10557

0

4243

10557

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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		
September 2025	223	640		
October 2025	247	887		

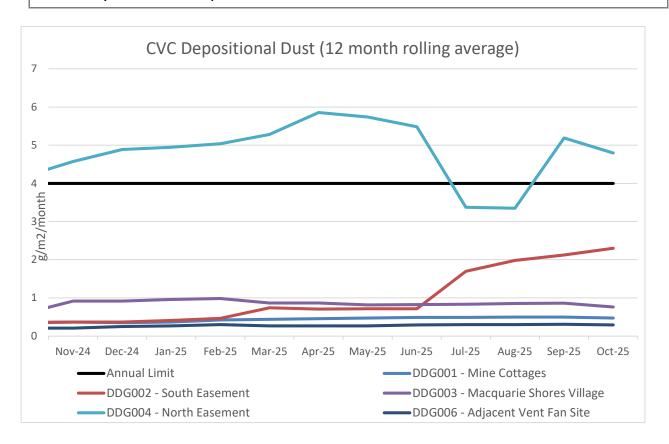
Air Quality - Depositional Dust

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.

EPL	1770
Limit	4g/m² /month / Annum 2g/m² /month increase from previous result
Sampling Date 5/09/2025 - 7/10/2025	
Site	Insoluble Matter (g/m2/month)
DDG001	0.5
DDG002	2.3
DDG003	0.76
DDG004	1.5
DDG006	0.3
Notes:	
For site locations refer to the	Pelta Coal Air Quality and Greenhouse Gas Management Plan.

The 12 month rolling average results for DDG001, DDG002, DDG003 and DDG006 remain within the depositional dust limit of 4g/m2/month (annual average). The 12 month rolling average result for DDG004 was 4.8g/m2/month against the limit of 4g/m2/month.

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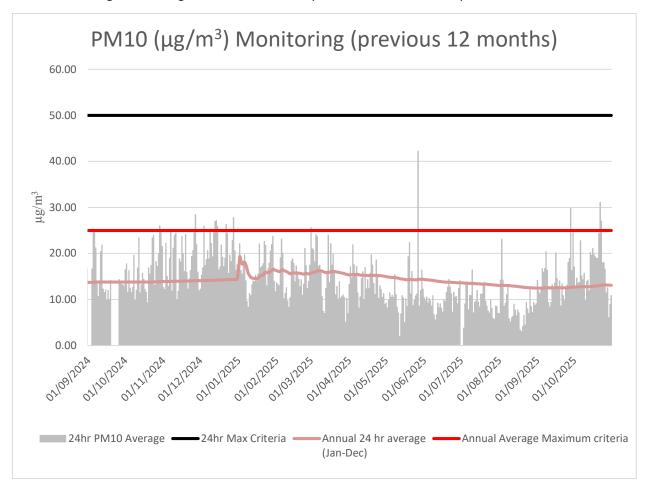


A 12-month rolling average of depositional dust concentrations has been presented above. Dust Gauges DDG001, DDG002, DDG003 and DDG004 are located within a closer proximity to Chain Valley Colliery and DDG006 is positioned in a location representative of the Chain Valley Colliery ventilation fan site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

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Air Quality - PM₁₀

The 24hr PM₁₀ average from Delta Coal's Tapered Element Osciliating Microbalance (TEOM), located at the Mannering Park Sewage Treatment Plant, is presented below for the previous 12 months.



Annual 24hr PM_{10} average maximum criteria for October 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 99.3% for the month of October 2025.

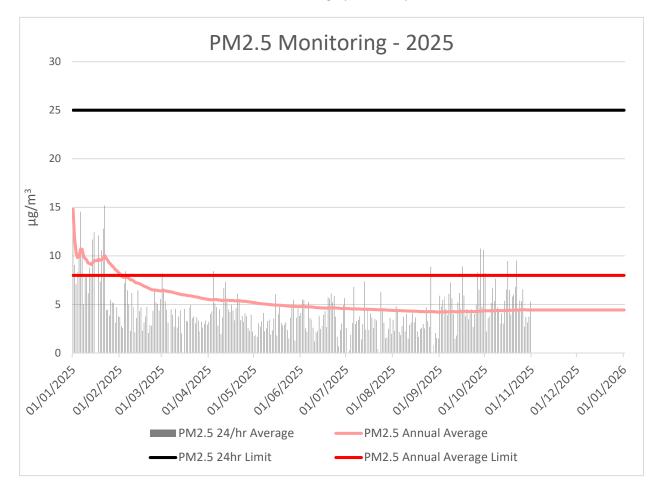
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Variable	October	Total	Valid
A/C Temp	99.8%	8928	8909
A1_Scaled	99.8%	8928	8909
Band	99.8%	8928	8909
Bypass Flow	99.8%	8928	8909
Cap Temp	99.8%	8928	8909
Case Temp	99.8%	8928	8909
Config	99.8%	8928	8909
Dew Point	99.8%	8928	8909
Dig-In	99.8%	8928	8909
Dig-Latch	99.8%	8928	8909
ESN	99.8%	8928	8909
Filter Freq	99.8%	8928	8909
Filter Load	99.8%	8928	8909
Humidity	99.8%	8928	8909
MC	99.8%	8928	8909
MC 12Hr	99.8%	8928	8909
MC 1Hr	99.8%	8928	8909
MC 24Hr	99.8%	8928	8909
MC 30min	99.8%	8928	8909
MC 8Hr	99.8%	8928	8909
MC Total	99.8%	8928	8909
Mobile Signal	99.8%	8928	8909
Noise	99.8%	8928	8909
PM10 Flow	99.8%	8928	8909
Pressure	99.8%	8928	8909
Site	0.0%	8928	0
Temperature	99.8%	8928	8909
Tube Temp	99.8%	8928	8909
Vac Pressure	99.8%	8928	8909
Volts	99.8%	8928	8909

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Air Quality - PM2.5

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 October 2025. The 12-month rolling average $PM_{2.5}$ value on 31 October was 4.4 $\mu g/m^3$. $PM_{2.5}$ data availability in October was 99.3%. The 2025 year to date $PM_{2.5}$ data availability is 94%.

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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 202	5	
Licensee	Great Southern Energy Pty Ltd		
Location	Mannering Colliery Meteorological station		
Date published	Refer report date		
Date sampled	Daily		
Date obtained	4 November 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
Sep-25	109	5.4	28.6
Oct-25	31	7.3	37.7

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Variable	October	Total	Valid
Baro (Corrected)	99.6%	2976	2963
10m Temp	99.6%	2976	2963
2m Temp	99.6%	2976	2963
A1	99.6%	2976	2963
A1_Scaled	99.6%	2976	2963
Assumed Temp	99.6%	2976	2963
Barometric	99.6%	2976	2963
Config	99.6%	2976	2963
Daily Evap	99.6%	2976	2963
Daily Rain	99.6%	2976	2963
Delta T	99.6%	2976	2963
Dew Point	99.6%	2976	2963
Dig-In	99.6%	2976	2963
Dig-Latch	99.6%	2976	2963
ESN	99.6%	2976	2963
FDI	99.6%	2976	2963
Heat Index	99.6%	2976	2963
Humidity	99.6%	2976	2963
Mobile Signal	99.6%	2976	2963
Rain	99.6%	2976	2963
Raw Evap	99.6%	2976	2963
S Class	99.6%	2976	2963
Scalar WS	99.6%	2976	2963
Sigma	99.6%	2976	2963
Site	0.0%	2976	0
Solar Radiation	99.6%	2976	2963
Vector WD	99.6%	2976	2963
Vector WS	99.6%	2976	2963
Volts	99.6%	2976	2963
Wind Chill	99.6%	2976	2963
Wind Direction	99.6%	2976	2963
Wind Speed	99.6%	2976	2963
WS Avg	99.6%	2976	2963
WS Gust	99.6%	2976	2963