



# Chain Valley Colliery Monthly Website Report

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<b>Site:</b>	<b>Chain Valley Colliery</b>
<b>Department:</b>	<b>Technical Services</b>
<b>Report Title:</b>	<b>Monthly Environmental Website Report - November 2019</b>
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### 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) publically available;
- Conditions 8 & 11, Schedule 6, of 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 to be undertaken by Delta Coal for Chain Valley Colliery.

This report provides environmental monitoring data from Chain Valley Colliery for the period 1 to 30 November 2019.

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="http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770">http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770</a>

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

### Scope

This report presents the results from the various environmental monitoring programs undertaken for Chain Valley Colliery. Results are presented monthly with annual data, averages and trends in data also shown where relevant.

Results in this report are typically only a single month of data, which is due to a legislative requirement introduced by the *Protection of the Environment Legislation Amendment Act 2011*, which requires publishing data publically within 14 days. As Delta Coal is required to undertake monitoring on a monthly basis, each report generally cover a single month of environmental monitoring data.

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;
- Depositional dust; and
- Weather data.

### Definitions

dB – decibels;

dB(A) – noise level measurement units are decibels (dB). The A-weighting scale is used to approximate human perception of noise;

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

kL – kilolitre;

L<sub>Aeq</sub> – the average A-weighted noise energy (in dB) for a measurement period;

ML – megalitre;

mg/L – milligrams per litre;

TSS – total suspended solids;

µg/L – micrograms per litre; and

µS/cm – microSiemens per centimetre.

# Report

## CVC Monthly Environmental Report

### References

ALS Group - Monthly Water Monitoring Results **November** 2019

ALS Water - Report of Analysis

Steel River Testing - Dust Deposition Report **November** 2019

Development Consent SSD-5465 (as modified)

Environment Protection Licence (EPL) 1770 (Licence version date: 2 April 2019)

### Monitoring Results

#### Water – Quality

Water quality results for October at Chain Valley Colliery are presented below.

<b>November 2019</b>	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	
Date Obtained	
Date Reported	November
Sampling Point	1

<b>Parameter</b>	<b>Units</b>	<b>Limit</b>	<b>Result</b>
Biochem. Oxygen Dem.	mg/L	-	2
Enterococci	col/100mL	-	220
Faecal Coliforms	CFU/100mL	200	~2
pH	pH	6.5-8.5	7.79
Total Sus. Solids	mg/L	50	7

There was no exceedance of water quality criteria during the month.

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### Water – Volume

Monthly water volumes are summarised below.

<b>November 2019</b>	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	Daily
Date Reported	Refer report date
Discharge volume limit	12161 kilolitres per day
Sampling Point	1

<b>Date (24 hour period)</b>	<b>Unit</b>	<b>Volume</b>
01/11/2019	kL	1887
02/11/2019	kL	2773
03/11/2019	kL	2638
04/11/2019	kL	932
05/11/2019	kL	1435
06/11/2019	kL	4182
07/11/2019	kL	5753
08/11/2019	kL	5234
09/11/2019	kL	2514
10/11/2019	kL	2976
11/11/2019	kL	5066
12/11/2019	kL	5724
13/11/2019	kL	5811
14/11/2019	kL	5834
15/11/2019	kL	5937
16/11/2019	kL	5765
17/11/2019	kL	5066
18/11/2019	kL	5898
19/11/2019	kL	5905
20/11/2019	kL	5286
21/11/2019	kL	5378
22/11/2019	kL	4669
23/11/2019	kL	5850
24/11/2019	kL	5594
25/11/2019	kL	4536
26/11/2019	kL	1371
27/11/2019	kL	331
28/11/2019	kL	1295
29/11/2019	kL	1356
30/11/2019	kL	1476

Average	kL	3949
Minimum	kL	331
Maximum	kL	5937

There were no exceedances of the volumetric limits at the Licenced Discharge Point during the month.

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### Depositional Dust

Monthly depositional dust results are shown below.

November 2019	
EPL	1770
Limit	4g/m <sup>2</sup> /month
Sampling	04/10/2019 to 05/11/2019
Site	Insoluble Matter (g/m <sup>2</sup> /month)
DDG001	1.7
DDG002	1.2
DDG003	1.9
DDG004	2.1
DDG005	3.9
Notes:	

There were 8 exceedances of the 24hr average PM10 air quality limits during November. The exceedances were caused by bushfire smoke and dust storms. An email was sent to the EPA and DPIE Compliance. DPIE consider this to be an extraordinary event as per Schedule 3, Condition 11, Tables 3 to 5, Note D of SSD 5465. No formal incident report was required.

### 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.

Monthly Weather Data			
2019			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Location	W1 (on-site weather station)		
Date published	Refer report date		
Date sampled	Daily		
Date obtained			
Month	Total Rainfall/Month mm	Min Temp	Max Temp
Jan-19	60.6	18.6	39.6
Feb-19	88.6	22.7	37.4
Mar-19	204	10.1	37.1
Apr-19	73.2	8.3	32.8
May-19	11.0	3.9	26.3
Jun-19	158.8	3.9	25.0
Jul-19	47.2	4.0	23.3
Aug-19	194.0	2.0	25.4
Sep-19	92	5.5	29.6
Oct-19	57	9.1	34.9
Nov-19	25	10.5	36.7
Dec-19			