



Chain Valley Colliery Monthly Website Report

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Department:	Technical Services
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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 29 February 2020.

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	http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&SYSUID=1&LICID=1770

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

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 **February 2020**

ALS Water - Report of Analysis

Steel River Testing - Dust Deposition Report **February 2020**

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 at EPA Discharge Point 1 are presented below.

February 2020	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	
Date Obtained	
Date Reported	February
Sampling Point	1

Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100ml	-	290
Faecal Coliforms	CFU/100n	200	<17
pH	pH	6.5-8.5	7.67
Total Sus. Solids	mg/L	50	16

As detailed above, results for monthly sampling were below the relevant limits.

Additional water sampling was undertaken at EPA Point 27. Between 6 and 9 February a total of 295 mm of rain fell, with the majority of rain falling on 9 February 2020. Point 27 is an overflow spillway designed for high rainfall events. In accordance with EPL requirements, water samples were taken on the 7 and 9 February 2020 from the spillway (EPA ID Point 27). There were two exceedances of water quality criteria at this point, being Faecal Coliforms and Total Suspended Solids. A formal incident report was sent to DPIE.

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Water – Volume

Monthly water volumes are summarised below.

February 2019	
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

Date (24 hour period)	Unit	Volume
01/02/2020	kL	8282
02/02/2020	kL	8986
03/02/2020	kL	8612
04/02/2020	kL	7131
05/02/2020	kL	8222
06/02/2020	kL	9872
07/02/2020	kL	11925
08/02/2020	kL	4109
09/02/2020	kL	13044
10/02/2020	kL	1629
11/02/2020	kL	9450
12/02/2020	kL	8480
13/02/2020	kL	8976
14/02/2020	kL	8695
15/02/2020	kL	8263
16/02/2020	kL	8548
17/02/2020	kL	8792
18/02/2020	kL	8143
19/02/2020	kL	5184
20/02/2020	kL	6840
21/02/2020	kL	9223
22/02/2020	kL	9019
23/02/2020	kL	8918
24/02/2020	kL	8100
25/02/2020	kL	8280
26/02/2020	kL	9349
27/02/2020	kL	8161
28/02/2020	kL	8045
29/02/2020	kL	7810

Average	kL	8279
Minimum	kL	1629
Maximum	kL	13044

There was one exceedance of the volumetric limits on 9 February 2020 and was a result of a significant rainfall event. A formal incident report was provided to DPIE.

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Depositional Dust

Monthly depositional dust results are shown below. Dust deposition gauges were sampled and analysed in accordance with the project approval, CVC Air Quality Management Plan and relevant Australian Standards.

February 2020	
EPL	1770
Limit	4g/m ² /month
Sampling	06/01/2020 to 06/02/2020
Site	Insoluble Matter (g/m ² /month)
DDG001	2.5
DDG002	3.2
DDG003	3.1
DDG004	3.9
DDG005	6.6
Notes:	

As detailed above, there was one exceedance of Insoluble Matter at EPL Sampling Site DDG005. No formal Incident report was required by DPIE as there was evidence of contamination.

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			
Licensee	Great Southern Energy Pty Ltd		
Location	Mannering Colliery Meteorological station		
Date published	Refer report date		
Date sampled	Daily		
Date obtained	06/03/2020		
Month	Total Rainfall/Month mm	Min Temp	Max Temp
Jan-20	28.2	18	43.7
Feb-20	350.2	15.7	37
Mar-20			
Apr-20			
May-20			
Jun-20			
Jul-20			
Aug-20			
Sep-20			
Oct-20			
Nov-20			
Dec-20			