



Chain Valley Colliery Monthly Website Report

Site:	Chain Valley Colliery
Department:	Technical Services
Report Title:	Monthly Environmental Website Report - March 2020
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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 requirements 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 31 March 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 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;
- Depositional dust; and
- Weather data.

Definitions

$g/m^2/month$ – grams per square metre per month;

kL – kilolitre;

ML – megalitre;

mg/L – milligrams per litre;

TSS – total suspended solids;

$\mu g/L$ – micrograms per litre; and

$\mu S/cm$ – microSiemens per centimetre.

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References

ALS Group - Monthly Water Monitoring Results **March 2020**

ALS Water - Report of Analysis

Steel River Testing - Dust Deposition Report **March 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 March at Chain Valley Colliery at EPA Discharge Point 1 are presented below.

March 2020	
EPL	1770
Licensee	Great Southern Energy Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	17-Mar-20
Date Obtained	19-Mar-20
Date Reported	March
Sampling Point	1

Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	3
Enterococci	col/100mL	-	320
Faecal Coliforms	CFU/100mL	200	~100
pH	pH	6.5-8.5	7.59
Total Sus. Solids	mg/L	50	<5

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

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Water – Volume

Monthly water volumes are summarised below.

March 2020	
EPL	1770
Licensee	Great Southern Energy 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
01/03/2020	kL	7653
02/03/2020	kL	7120
03/03/2020	kL	5650
04/03/2020	kL	7459
05/03/2020	kL	5887
06/03/2020	kL	6096
07/03/2020	kL	5608
08/03/2020	kL	6781
09/03/2020	kL	7153
10/03/2020	kL	6755
11/03/2020	kL	6875
12/03/2020	kL	5515
13/03/2020	kL	6878
14/03/2020	kL	4426
15/03/2020	kL	3560
16/03/2020	kL	4933
17/03/2020	kL	7554
18/03/2020	kL	5234
19/03/2020	kL	7676
20/03/2020	kL	6109
21/03/2020	kL	7440
22/03/2020	kL	7991
23/03/2020	kL	6634
24/03/2020	kL	6920
25/03/2020	kL	6888
26/03/2020	kL	8105
27/03/2020	kL	7127
28/03/2020	kL	7552
29/03/2020	kL	5321
30/03/2020	kL	5389
31/03/2020	kL	5332

Average	kL	6439
Minimum	kL	3560
Maximum	kL	8105

The daily water volumes at Sampling Point 1 during March 2020 were below the relevant limits.

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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.

March 2020	
EPL	1770
Limit	4g/m ² /month
Sampling Date	06/02/2020 to 09/03/2020
Site	Insoluble Matter (g/m ² /month)
DDG001	0.7
DDG002	1.4
DDG003	0.8
DDG004	2.4
DDG005	0.7
Notes:	

The annual average air quality limits during the reporting period were below the relevant limits.

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	18	44
Feb-20	350	16	37
Mar-20	159	12	38
Apr-20			
May-20			
Jun-20			
Jul-20			
Aug-20			
Sep-20			
Oct-20			
Nov-20			
Dec-20			