



# 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 Report - February 2018</b>
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<b>Distribution:</b>	<b>Chain Valley Colliery website</b>

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### Introduction

LakeCoal Pty Ltd (LakeCoal) 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;

- A Development Consent, SSD-5465 (as modified) issued under the Environmental Planning and Assessment Act, 1979.
- An Environment Protection Licence (1770) issued under the Protection of the Environment Operations Act, 1997.
- A groundwater bore licence (20BL173107) issued under the Water Act, 1912.

The above development consent/approval and licences require various monitoring and reporting to be undertaken by LakeCoal for Chain Valley Colliery.

This report provides environmental monitoring data from Chain Valley Colliery for the period 1 February 2018 to 28 February 2018.

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	LakeCoal 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 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 LakeCoal 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 determine compliance.

Monitoring results presented include;

- Water – quality
- Water – volume
- Depositional dust
- Operational noise
- 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– kilolitres

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

mg/L – milligrams per litre

µg/L – micrograms per litre

µS/cm – microSiemens per centimetre

## References

ALS Group - Monthly Water Monitoring Results February 2018 – (Work Order ES1804686)

ALS Water - Report of Analysis (WN1800643)

Steel River Testing - Dust Deposition Report February 2018 (Report 15397-0)

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 8 June 2016)

## Monitoring Results

Water – Quality

February 2018			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	13-Feb-18		
Date Obtained	19-Feb-18		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	110
Faecal Coliforms	CFU/100mL	200	~16
pH	pH	6.5-8.5	7.31
Total Sus. Solids	mg/L	50	11

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

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### Water – Volume

February 2018	
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

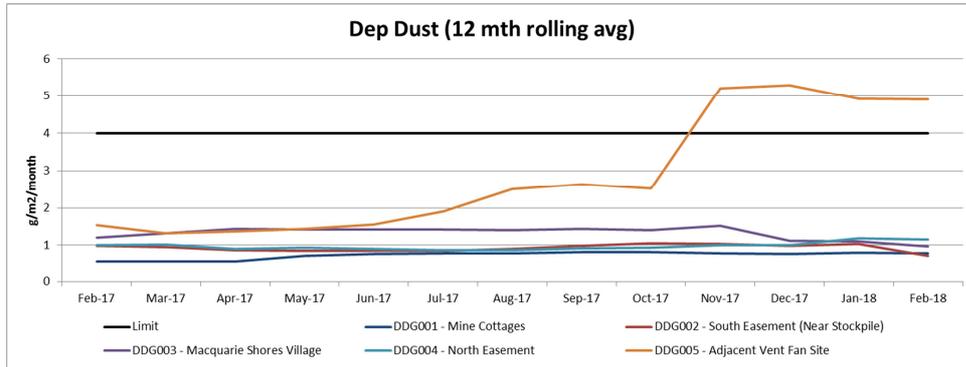
Date (24 hour period)	Unit	Volume
01/02/2017	kL	6276
02/02/2017	kL	6139
03/02/2017	kL	8367
04/02/2017	kL	5502
05/02/2017	kL	5368
06/02/2017	kL	3872
07/02/2017	kL	3216
08/02/2017	kL	3128
09/02/2017	kL	3424
10/02/2017	kL	3670
11/02/2017	kL	5095
12/02/2017	kL	5620
13/02/2017	kL	5713
14/02/2017	kL	6014
15/02/2017	kL	6170
16/02/2017	kL	6094
17/02/2017	kL	7461
18/02/2017	kL	7591
19/02/2017	kL	6216
20/02/2017	kL	4826
21/02/2017	kL	4894
22/02/2017	kL	6311
23/02/2017	kL	6241
24/02/2017	kL	6224
25/02/2017	kL	5666
26/02/2017	kL	6473
27/02/2017	kL	6125
28/02/2017	kL	6189

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

### Depositional Dust

February 2018			
Sampling Date	15/01/2018	to	14/02/2018
Site	Insoluble Matter (g/m2/month)		
DDG001	0.6		
DDG002	0.8		
DDG003	0.6		
DDG004	1.0		
DDG005	0.7		
Notes:			

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There were no exceedances of the annual average air quality limits during the reporting period.

### Operational Noise

There was no noise monitoring undertaken during the month.

### Weather Data

A summary of weather data recorded by an adjacent site meteorological monitoring station at the Colliery is presented below for the year to date.

Monthly Weather Data			
<b>2018</b>			
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:	15/02/2018		
Month	Total Rainfall / Month (mm)	Minimum Temperature (oC)	Maximum Temperature (oC)
Jan-18	23.4	13.8	42.5
Feb-18	124.2	14.1	38
Mar-18			
Apr-18			
May-18			
Jun-18			
Jul-18			
Aug-18			
Sep-18			
Oct-18			
Nov-18			
Dec-18			