



# 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 - June 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 June 2018 to 30 June 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 June 2018

ALS Water - Report of Analysis

Steel River Testing - Dust Deposition Report June 2018

Development Consent SSD-5465 (as modified)

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

### Monitoring Results

Water – Quality

June 2018			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	26-Jun-18		
Date Obtained	02-Jul-18		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	78
Faecal Coliforms	CFU/100mL	200	15
pH	pH	6.5-8.5	7.71
Total Sus. Solids	mg/L	50	8

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

### Water – Volume

June 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

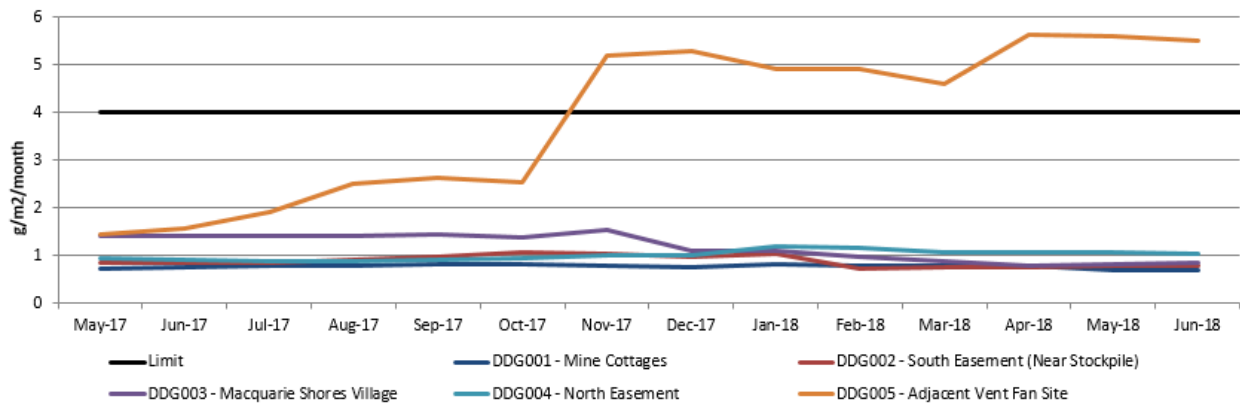
Date (24 hour period)	Unit	Volume
01/06/2018	kL	3426
02/06/2018	kL	5564
03/06/2018	kL	7460
04/06/2018	kL	6098
05/06/2018	kL	7242
06/06/2018	kL	3625
07/06/2018	kL	9864
08/06/2018	kL	7795
09/06/2018	kL	6273
10/06/2018	kL	11142
11/06/2018	kL	7242
12/06/2018	kL	5510
13/06/2018	kL	5271
14/06/2018	kL	4533
15/06/2018	kL	4519
16/06/2018	kL	6742
17/06/2018	kL	6007
18/06/2018	kL	3978
19/06/2018	kL	9113
20/06/2018	kL	8492
21/06/2018	kL	5767
22/06/2018	kL	5448
23/06/2018	kL	5380
24/06/2018	kL	8207
25/06/2018	kL	5987
26/06/2018	kL	6404
27/06/2018	kL	6836
28/06/2018	kL	6077
29/06/2018	kL	5835
30/06/2018	kL	6782

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

### Depositional Dust

June 2018		
Sampling Date	14/05/2018 to	13/06/2018
Site	Insoluble Matter (g/m <sup>2</sup> /month)	
DDG001	1.2	
DDG002	0.4	
DDG003	0.3	
DDG004	0.6	
DDG005	0.6	
Notes:		

### Dep Dust (12 mth rolling avg)



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

### Operational Noise

There were no exceedances of the sites noise monitoring criteria 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			
2018			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Manning Colliery		
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	02/07/2018		
Month	Total Rainfall / Month (mm)	Minimum Temperature (oC)	Maximum Temperature
Jan-18	23.4	13.8	42.5
Feb-18	124.2	14.1	38.0
Mar-18	55.6	10.5	38.1
Apr-18	70.6	11.7	33.8
May-18	18.6	7.3	27.6
Jun-18	289.0	5.1	19.7
Jul-18			
Aug-18			
Sep-18			
Oct-18			
Nov-18			
Dec-18			