



# 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 - July 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 July 2018 to 31 July 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 July 2018

ALS Water - Report of Analysis

Steel River Testing - Dust Deposition Report July 2018

Development Consent SSD-5465 (as modified)

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

### Monitoring Results

Water – Quality

July 2018	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	23-Jul-18
Date Obtained	31-Jul-18
Date Reported	Refer report date
Sampling Point	1

Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	13
Faecal Coliforms	CFU/100mL	200	4
pH	pH	8.5-8.5	7.71
Total Sus. Solids	mg/L	50	<5

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

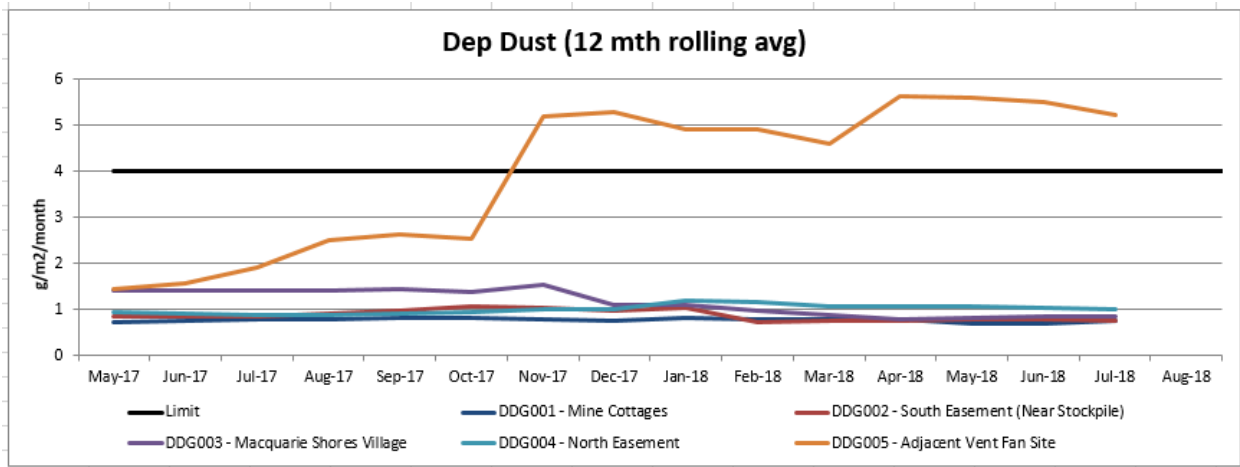
### Water – Volume

July 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
01/07/2018	kL	6371.81
02/07/2018	kL	5116.71
03/07/2018	kL	5766.24
04/07/2018	kL	4190.12
05/07/2018	kL	5602.61
06/07/2018	kL	6619.78
07/07/2018	kL	6498.87
08/07/2018	kL	6787.17
09/07/2018	kL	6796.42
10/07/2018	kL	6803.61
11/07/2018	kL	6514.83
12/07/2018	kL	6821.45
13/07/2018	kL	6729.13
14/07/2018	kL	6756.38
15/07/2018	kL	6741.85
16/07/2018	kL	6498.96
17/07/2018	kL	4687.09
18/07/2018	kL	3397.38
19/07/2018	kL	4336.33
20/07/2018	kL	6003.33
21/07/2018	kL	5740.22
22/07/2018	kL	6612.66
23/07/2018	kL	7010.73
24/07/2018	kL	6957.06
25/07/2018	kL	6046.76
26/07/2018	kL	6916.31
27/07/2018	kL	6964.14
28/07/2018	kL	6369.8
29/07/2018	kL	5790.68
30/07/2018	kL	6607.4
31/07/2018	kL	3940.17
Average	kL	6064
Minimum	kL	3397
Maximum	kL	7011

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

### Depositional Dust

July 2018		
Sampling Date	13/06/2018 to	13/07/2018
Site	Insoluble Matter (g/m <sup>2</sup> /month)	
DDG001	1.0	
DDG002	<0.1	
DDG003	0.1	
DDG004	0.1	
DDG005	0.1	
Notes:		



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	6.4	2.3	24.7
Aug-18			
Sep-18			
Oct-18			
Nov-18			
Dec-18			