



Report

Site:	Chain Valley Colliery
Department:	Technical Services
Report Title:	Monthly Environmental Report - June 2017
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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 2017 to 30 June 2017.

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	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 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/m²/month – grams per square metre per month

kL– kilolitres

L_{Aeq}–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 2017 - Work Order ES1715081)

ALS Water - Report of Analysis (WN1702671)

Steel River Testing - Dust Deposition Report June 2017 (Report 13774-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

June 2017			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	07-Jun-17		
Date Obtained	10-Jun-17		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	3
Enterococci	col/100mL	-	17
Faecal Coliforms	CFU/100mL	200	170
pH	pH	6.5-8.5	7.69
Total Sus. Solids	mg/L	50	14

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

Water – Volume

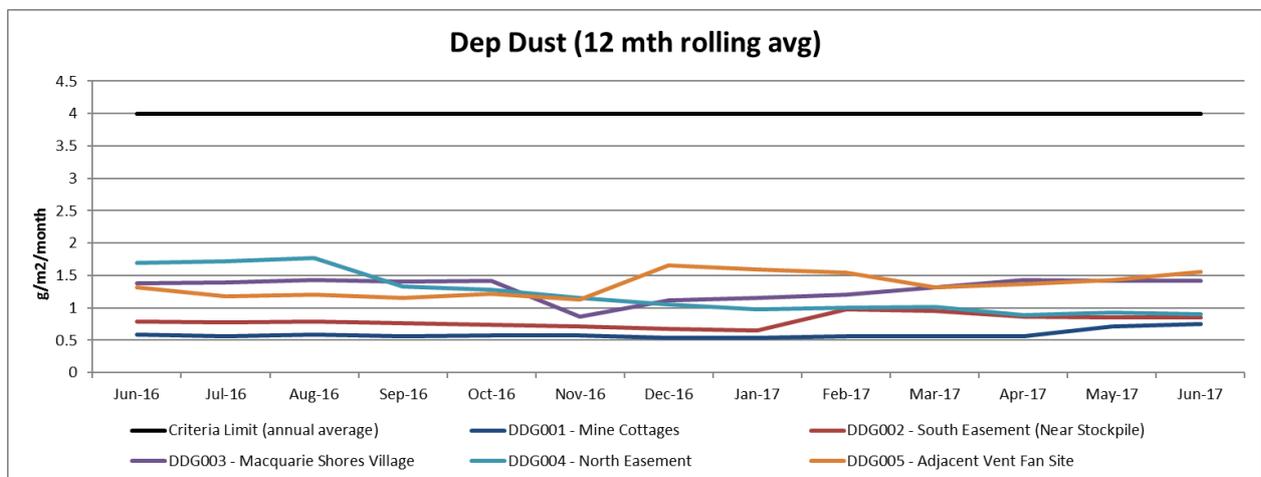
June 2017	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	Daily
Date Reported	Refer report date
Discharge volume limit	12161 kilolitres per day
Sampling Point	1

Date (24 hour period)	Unit	Volume
01/06/2017	kL	7275
02/06/2017	kL	7316
03/06/2017	kL	7097
04/06/2017	kL	6190
05/06/2017	kL	6981
06/06/2017	kL	7123
07/06/2017	kL	9176
08/06/2017	kL	2384
09/06/2017	kL	1736
10/06/2017	kL	6330
11/06/2017	kL	6067
12/06/2017	kL	489
13/06/2017	kL	4257
14/06/2017	kL	6581
15/06/2017	kL	6454
16/06/2017	kL	6491
17/06/2017	kL	6330
18/06/2017	kL	7430
19/06/2017	kL	6960
20/06/2017	kL	6514
21/06/2017	kL	5038
22/06/2017	kL	5113
23/06/2017	kL	5416
24/06/2017	kL	5776
25/06/2017	kL	6681
26/06/2017	kL	6927
27/06/2017	kL	6989
28/06/2017	kL	6990
29/06/2017	kL	6927
30/06/2017	kL	4079

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

Depositional Dust

June 2017			
Sampling Date	13/05/2017	to	12/06/2017
Site	Insoluble Matter (g/m ² /month)		
DDG001	0.8		
DDG002	0.6		
DDG003	0.6		
DDG004	1.0		
DDG005	1.9		
Notes: - For site locations refer to Air Quality Management Plan			



Operational Noise

Attended noise monitoring has been completed in June, however the reports are yet to be finalised. The results will be published in the next monthly report.

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			
2016/17			
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:	11/07/2017		
Month	Total Rainfall / Month (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
Feb-16	17.4	16.4	37.7
Mar-16	92.2	14.3	30.1
Apr-16	36.2	12.1	33.5
May-16	46.6	5.3	27.8
Jun-16	248.2	3.4	21.4
Jul-16	73.2	2.5	25
Aug-16	115	4.5	24.3
Sep-16	68	7.4	24.2
Oct-16	61	7.3	33.3
Nov-16	46.8	10.9	35.2
Dec-16	85.2	14.5	38.9
Jan-17	68.6	17.4	40.1
Feb-17	141.2	13.1	39
Mar-17	404	14.5	31.9
Apr-17	85.6	17.4	24.8
May-17	34.8	11.5	24.8
Jun-17	169.2	5.1	19.9