



Report

Site:	Chain Valley Colliery
Department:	Technical Services
Report Title:	Monthly Environmental Report - January 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 January 2016 to 31 January 2016.

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 January 2017 - Work Order ES1700418)

ALS Water - Report of Analysis (WN1700107)

Steel River Testing - Dust Deposition Report January 2017 (Report 12842-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

January 2017	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	10-Jan-17
Date Obtained	17-Jan-17
Date Reported	Refer report date
Sampling Point	1

Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	500
Faecal Coliforms	CFU/100mL	200	~2
pH	pH	6.5-8.5	7.85
Total Sus. Solids	mg/L	50	<5

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

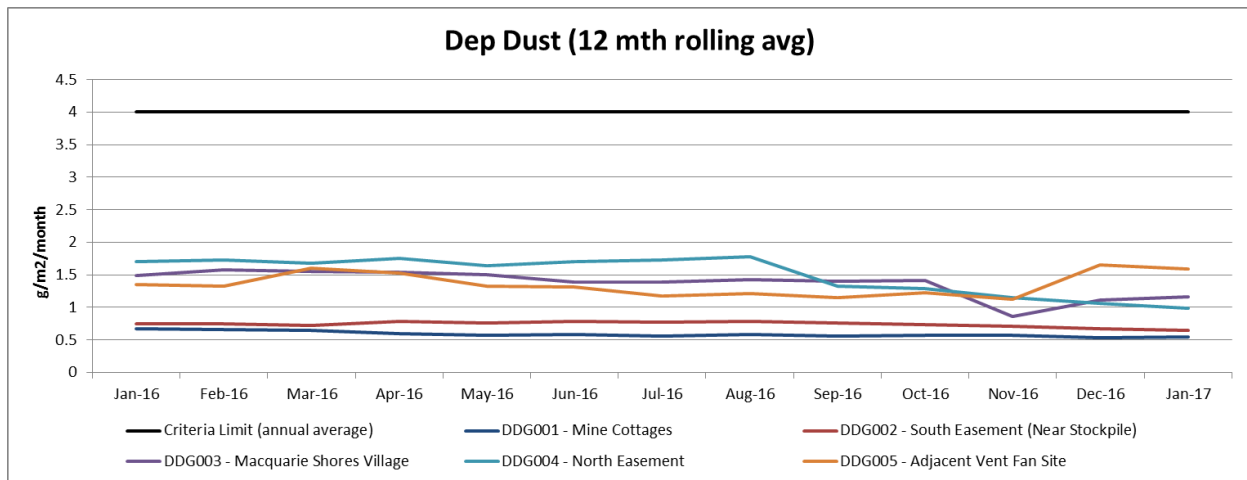
Water – Volume

January 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
1/01/2017	kL	6708
2/01/2017	kL	6739
3/01/2017	kL	6682
4/01/2017	kL	6671
5/01/2017	kL	6712
6/01/2017	kL	6846
7/01/2017	kL	6896
8/01/2017	kL	6911
9/01/2017	kL	6838
10/01/2017	kL	6271
11/01/2017	kL	6056
12/01/2017	kL	6269
13/01/2017	kL	6454
14/01/2017	kL	6471
15/01/2017	kL	6462
16/01/2017	kL	6531
17/01/2017	kL	6390
18/01/2017	kL	6389
19/01/2017	kL	3724
20/01/2017	kL	92
21/01/2017	kL	0
22/01/2017	kL	0
23/01/2017	kL	93
24/01/2017	kL	4189
25/01/2017	kL	4603
26/01/2017	kL	5990
27/01/2017	kL	3273
28/01/2017	kL	6288
29/01/2017	kL	4666
30/01/2017	kL	3517
31/01/2017	kL	7378

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

Depositional Dust

January 2017		
Sampling Date	12/12/2016 to	12/01/2017
Site	Insoluble Matter (g/m ² /month)	
DDG001	0.6	
DDG002	0.4	
DDG003	1.0	
DDG004	0.6	
DDG005	-	
Notes:		
- For site locations refer to Air Quality Management Plan		
- DDG005 recorded an invalid reading due to large amount of bird droppings		



Operational Noise

Noise monitoring was undertaken in December. No exceedances were recorded. Attended noise monitoring results will be made available in the next website report. The next round of monitoring is scheduled for March 2017.

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	Manning Colliery		
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	13/02/2016		
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