



Report

Site:	Chain Valley Colliery
Department:	Technical Services
Report Title:	Monthly Environmental Report - May 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 May 2017 to 31 May 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 May 2017 - Work Order ES1709235)

ALS Water - Report of Analysis (WN1701631)

Steel River Testing - Dust Deposition Report May 2017 (Report 13398-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

May 2017			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	08-May-17		
Date Obtained	16-May-17		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	73
Faecal Coliforms	CFU/100mL	200	93
pH	pH	6.5-8.5	7.70
Total Sus. Solids	mg/L	50	<5

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

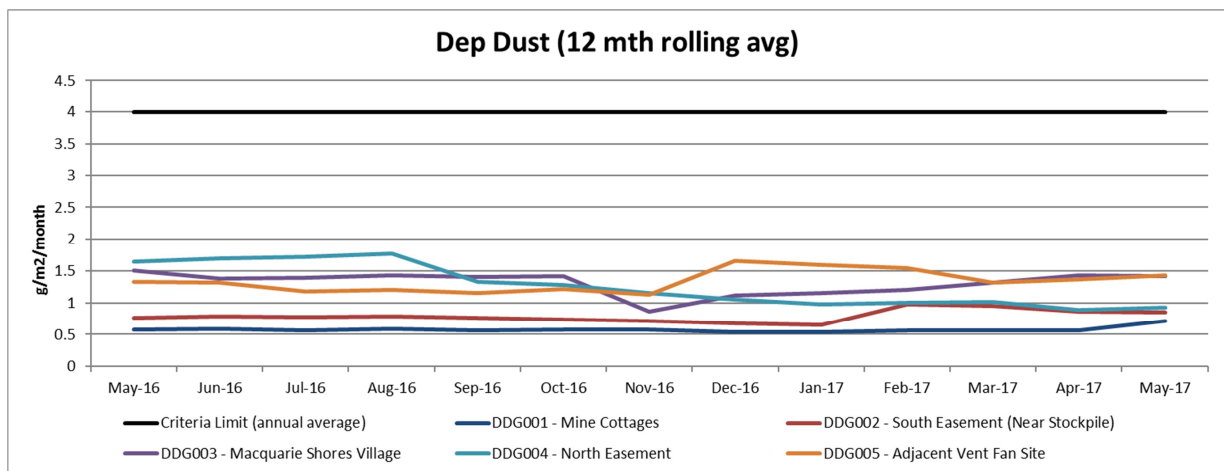
Water – Volume

May 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
01/05/2017	kL	6694
02/05/2017	kL	6650
03/05/2017	kL	6654
04/05/2017	kL	3761
05/05/2017	kL	786
06/05/2017	kL	8298
07/05/2017	kL	7726
08/05/2017	kL	4803
09/05/2017	kL	4037
10/05/2017	kL	5559
11/05/2017	kL	6881
12/05/2017	kL	5453
13/05/2017	kL	8377
14/05/2017	kL	4632
15/05/2017	kL	1016
16/05/2017	kL	6170
17/05/2017	kL	6004
18/05/2017	kL	5349
19/05/2017	kL	5681
20/05/2017	kL	6715
21/05/2017	kL	6503
22/05/2017	kL	6079
23/05/2017	kL	4516
24/05/2017	kL	5894
25/05/2017	kL	6367
26/05/2017	kL	6473
27/05/2017	kL	6647
28/05/2017	kL	6968
29/05/2017	kL	7073
30/05/2017	kL	7119
31/05/2017	kL	7208

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

Depositional Dust

May 2017		
Sampling Date	12/04/2017 to	12/05/2017
Site	Insoluble Matter (g/m ² /month)	
DDG001	2.1	
DDG002	0.4	
DDG003	0.3	
DDG004	0.8	
DDG005	1.3	
Notes: - For site locations refer to Air Quality Management Plan		



Operational Noise

There was no noise monitoring undertaken in May. The next round of monitoring is scheduled for June 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	Mannering Colliery		
Location	W1 (on-site weather station)		
Date publ	Refer report date		
Date sam	Daily		
Date obta	13/06/2017		
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