



Report

Site:	Chain Valley Colliery
Department:	Technical Services
Report Title:	Monthly Environmental Report - November 2017
Prepared by:	Wade Covey
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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 November 2017 to 31 November 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 November 2017 - Work Order ES1728499

ALS Water - Report of Analysis (WN1705130)

Steel River Testing - Dust Deposition Report November 2017 (Report 14773-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

November 2017			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	14-Nov-17		
Date Obtained	21-Nov-17		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Dema	mg/L	-	<2
Enterococci	col/100mL	-	110
Faecal Coliforms	CFU/100mL	200	~16
pH	pH	6.5-8.5	7.68
Total Sus. Solids	mg/L	50	<5

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

Water – Volume

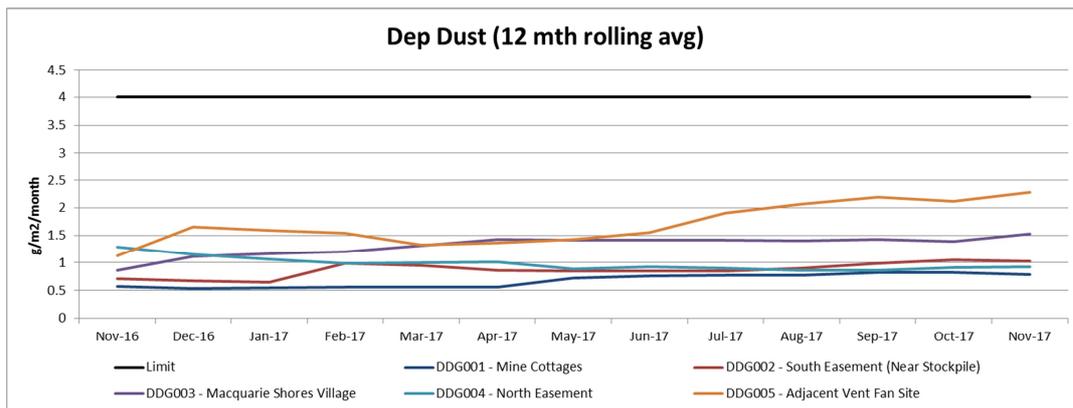
November 2017		
EPL	1770	
Licensee	LakeCoal Pty Ltd	
Premises	Chain Valley Colliery	
Date Sampled	Daily	
Date Reported	Refer report date	
Discharge volume limit	12161 kilolitres per day	
Sampling Point	1	
Date (24 hour period)	Unit	Volume
01/11/2017	kL	7486
02/11/2017	kL	7505
03/11/2017	kL	7527
04/11/2017	kL	7544
05/11/2017	kL	7901
06/11/2017	kL	3262
07/11/2017	kL	6102
08/11/2017	kL	7577
09/11/2017	kL	7405
10/11/2017	kL	7411
11/11/2017	kL	7546
12/11/2017	kL	7505
13/11/2017	kL	7408
14/11/2017	kL	7454
15/11/2017	kL	7318
16/11/2017	kL	7453
17/11/2017	kL	7279
18/11/2017	kL	7142
19/11/2017	kL	7227
20/11/2017	kL	7000
21/11/2017	kL	7039
22/11/2017	kL	7217
23/11/2017	kL	7204
24/11/2017	kL	6360
25/11/2017	kL	6369
26/11/2017	kL	6533
27/11/2017	kL	6956
28/11/2017	kL	6996
29/11/2017	kL	5707
30/11/2017	kL	6632

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

Depositional Dust

November 2017		
Sampling Date	13/10/2017 to	13/11/2017
Site	Insoluble Matter (g/m ² /month)	
DDG001	0.7	
DDG002	0.5	
DDG003	2.8	
DDG004	1.7	
DDG005	c27.7	
Notes: - For site locations refer to Air Quality Management Plan		

There was one elevated air quality result during the month at DDG005. Following an investigation it was determined that the elevated result was a direct result of earthworks undertaken in close proximity to the gauge by the landowner. LakeCoal is currently assessing whether to relocate the gauge to a more suitable location.



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

Operational Noise

There was no noise monitoring undertaken 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			
2017			
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:	18/12/2017		
Month	Total Rainfall / Month (mm)	Minimum Temperature (oC)	Maximum Temperature (oC)
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
Jul-17	5.6	3.9	24
Aug-17	14	4.7	28.2
Sep-17	12.6	4.9	33.6
Oct-17	92.4	12.6	36.4
Nov-17	46	10.3	30.1
Dec-17			