



Report

Site:	Chain Valley Colliery
Department:	Technical Services
Report Title:	Monthly Environmental Report - September 2017
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Report Date:	11/10/17
Distribution:	Chain Valley Colliery website

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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 September 2017 to 30 September 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 September 2017 - Work Order ES1722768

ALS Water - Report of Analysis (WN1704130)

Steel River Testing - Dust Deposition Report September 2017 (Report 14383-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

September 2017			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	12-Sep-17		
Date Obtained	19-Sep-17		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	~16
Faecal Coliforms	CFU/100mL	200	~2
pH	pH	6.5-8.5	7.66
Total Sus. Solids	mg/L	50	7

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

Water – Volume

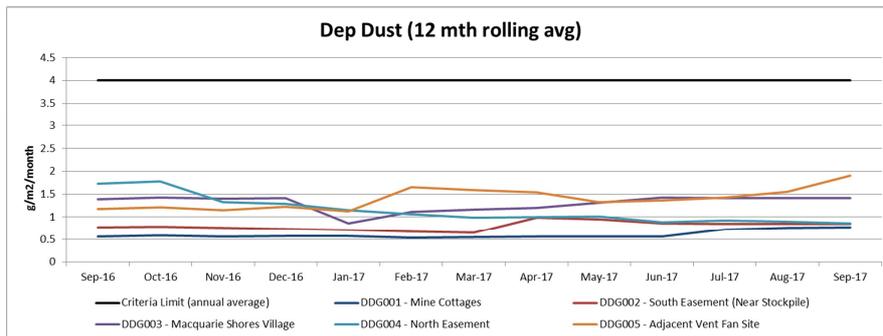
September 2017		
EPL	1770	
Licensee	LakeCoal Pty Ltd	
Premises	Chain Valley Colliery	
Date Sampled	Daily	
Date Reported	Refer report date	
Discharge volume limit	12161 kilolitres per day	
Sampling Point	1	
Date (24 hour period)	Unit	Volume
01/09/2017	kL	5910
02/09/2017	kL	6286
03/09/2017	kL	2207
04/09/2017	kL	5955
05/09/2017	kL	6676
06/09/2017	kL	6795
07/09/2017	kL	6784
08/09/2017	kL	6819
09/09/2017	kL	6786
10/09/2017	kL	6646
11/09/2017	kL	5702
12/09/2017	kL	6635
13/09/2017	kL	6677
14/09/2017	kL	7117
15/09/2017	kL	6138
16/09/2017	kL	4883
17/09/2017	kL	6361
18/09/2017	kL	6748
19/09/2017	kL	6772
20/09/2017	kL	6734
21/09/2017	kL	4863
22/09/2017	kL	5912
23/09/2017	kL	6122
24/09/2017	kL	6080
25/09/2017	kL	6062
26/09/2017	kL	6075
27/09/2017	kL	6094
28/09/2017	kL	6144
29/09/2017	kL	6131
30/09/2017	kL	7032

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

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Depositional Dust

September 2017	
Sampling Date	14/08/2017 to 14/09/2017
Site	Insoluble Matter (g/m ² /month)
DDG001	0.9
DDG002	1.4
DDG003	0.7
DDG004	0.9
DDG005	1.6
Notes: - For site locations refer to Air Quality Management Plan	



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

Operational Noise

There was no noise monitoring undertaken during the month. Next round of monitoring is scheduled for October.

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	Mannering Colliery		
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	11/10/2017		
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			
Nov-17			
Dec-17			