



Report

Site:	Chain Valley Colliery
Department:	HSEC
Report Title:	Monthly Environmental Report - October 2016
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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 October 2016 to 31 October 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 October 2016 - Work Order: ES1623413

ALS Water - Report of Analysis – Work Order: WN1603609

Steel River Testing - Dust Deposition Report October 2016 (Report 12270-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

October 2016			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	18-Oct-16		
Date Obtained	21-Oct-16		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	69
Faecal Coliforms	CFU/100mL	200	7
pH	pH	6.5-8.5	7.8
Total Sus. Solids	mg/L	50	<5

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

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Water – Volume

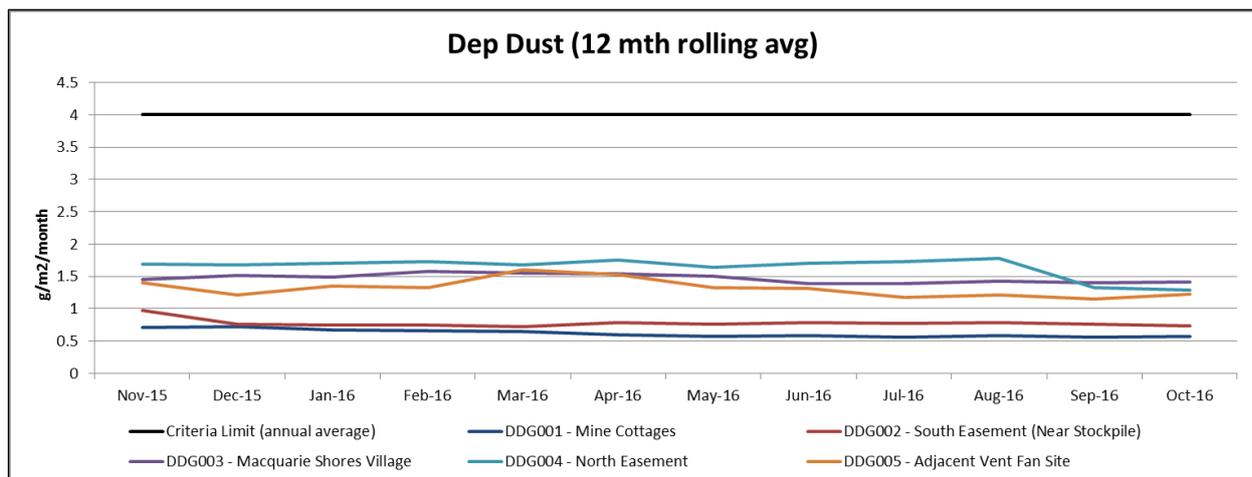
October 2016	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	Daily
Date Reported	Refer report date
Discharge volume limit	12161 kilolitres per day
Sampling Point	1

Date (24 hour period)	Unit	Volume
1/10/2016	kL	6816
2/10/2016	kL	6689
3/10/2016	kL	8029
4/10/2016	kL	6909
5/10/2016	kL	6709
6/10/2016	kL	6720
7/10/2016	kL	7908
8/10/2016	kL	7232
9/10/2016	kL	6806
10/10/2016	kL	6728
11/10/2016	kL	6750
12/10/2016	kL	6579
13/10/2016	kL	6931
14/10/2016	kL	6894
15/10/2016	kL	6712
16/10/2016	kL	6816
17/10/2016	kL	6893
18/10/2016	kL	6862
19/10/2016	kL	6823
20/10/2016	kL	6800
21/10/2016	kL	6773
22/10/2016	kL	7973
23/10/2016	kL	6849
24/10/2016	kL	6792
25/10/2016	kL	6733
26/10/2016	kL	5020
27/10/2016	kL	2997
28/10/2016	kL	6510
29/10/2016	kL	6808
30/10/2016	kL	6170
31/10/2016	kL	6731

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

Depositional Dust

October 2016		
Sampling Date	12/09/2016 to	13/10/2016
Site	Insoluble Matter (g/m ² /month)	
DDG001	0.6	
DDG002	0.4	
DDG003	0.7	
DDG004	0.5	
DDG005	-	
Notes:		
- For site locations refer to Air Quality Management Plan		
- DDG005 sample uncovered during bushfire hazard reduction nearby		



Operational Noise

Noise monitoring was undertaken in September. 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 December 2016.

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			
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	6/01/2016		
Month	Total Rainfall / Month (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
Jan-16	329	14.3	36
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