



Report

Site:	Chain Valley Colliery
Department:	HSEC
Report Title:	Monthly Environmental Report - August 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 August 2016 to 31 August 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 August 2016 - Work Order ES1619028)

ALS Water - Report of Analysis (WN1602838)

Steel River Testing - Dust Deposition Report August 2016 (Report 11873-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

August 2016			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	29-Aug-16		
Date Obtained	31-Aug-16		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L	-	<2
Enterococci	col/100mL	-	62
Faecal Coliforms	CFU/100mL	200	est 5
pH	pH	6.5-8.5	7.73
Total Sus. Solids	mg/L	50	11

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

Water – Volume

August 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
1/08/2016	kL	6160
2/08/2016	kL	7795
3/08/2016	kL	7801
4/08/2016	kL	7568
5/08/2016	kL	7313
6/08/2016	kL	7165
7/08/2016	kL	7296
8/08/2016	kL	7364
9/08/2016	kL	5048
10/08/2016	kL	6413
11/08/2016	kL	7144
12/08/2016	kL	7049
13/08/2016	kL	8003
14/08/2016	kL	7765
15/08/2016	kL	6881
16/08/2016	kL	5444
17/08/2016	kL	2311
18/08/2016	kL	4956
19/08/2016	kL	6594
20/08/2016	kL	6878
21/08/2016	kL	6883
22/08/2016	kL	6990
23/08/2016	kL	7085
24/08/2016	kL	6018
25/08/2016	kL	5784
26/08/2016	kL	8434
27/08/2016	kL	7501
28/08/2016	kL	7399
29/08/2016	kL	7843
30/08/2016	kL	7061
31/08/2016	kL	7252

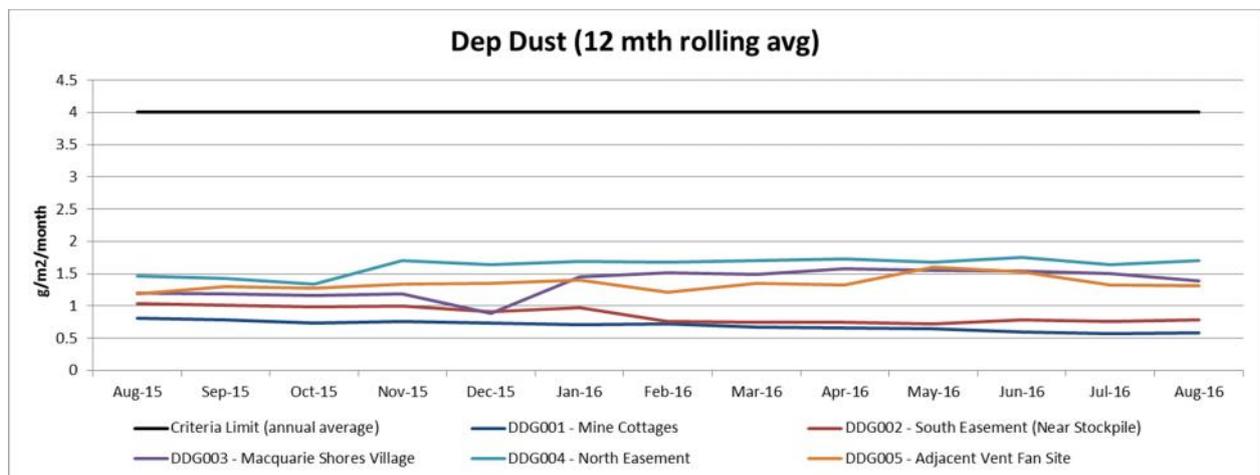
There were no exceedances of the volumetric limits at the Licenced Discharge Point during the month.

Depositional Dust

August 2016			
Sampling Date	15/07/2016	to	15/08/2016
Site	Insoluble Matter (g/m ² /month)		
DDG001	0.6		
DDG002	0.3		
DDG003	0.7		
DDG004	0.8		
DDG005	0.6		

Notes:

- For site locations refer to Air Quality Management Plan



Operational Noise

There was no noise monitoring undertaken in August. The next round of monitoring is scheduled for September 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	Manning Colliery		
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	14/09/2016		
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			
Oct-16			
Nov-16			
Dec-16			