



Report

Site:	Chain Valley Colliery
Department:	HSEC
Report Title:	Monthly Environmental Report - February 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 February 2016 to 29 February 2016.

Details of the Chain Valley Colliery and 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 (February 2016 - Work Order ES1603424)

ALS Water - Report of Analysis (HWA-16/01357)

Steel River Testing - Dust Deposition Report February 2016 (Report 10664-0)

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 30 October 2015)

Monitoring Results

Water – Quality

February 2016	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	16-Feb-16
Date Obtained	23-Feb-16
Date Reported	Refer report date
Sampling Point	1

Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L		<2
Enterococci	col/100mL		58
Faecal Coliforms	CFU/100mL	200	2
pH	pH	6.5-8.5	7.8
Total Sus. Solids	mg/L	50	10

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

Water – Volume

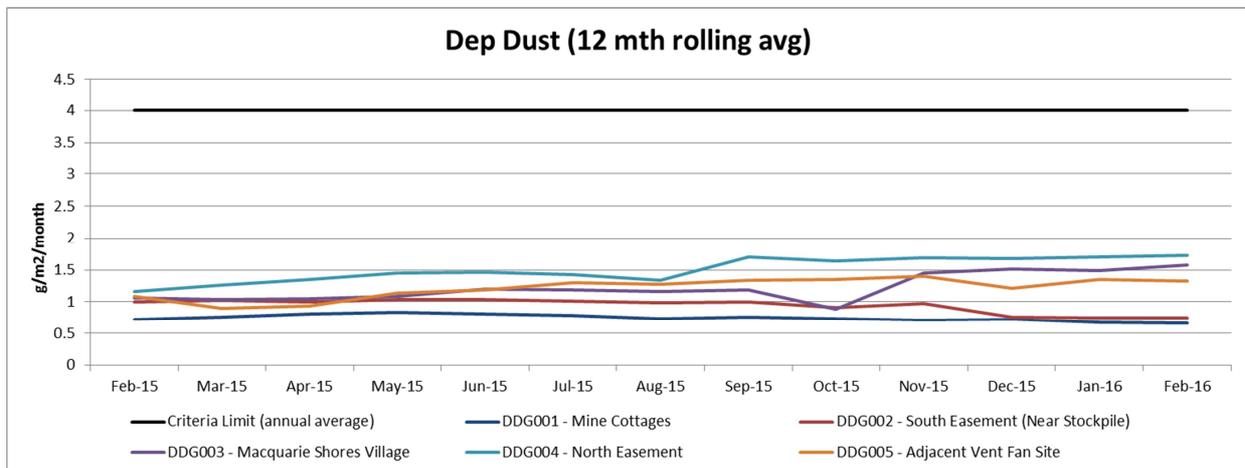
February 2016		
EPL	1770	
Licensee	LakeCoal Pty Ltd	
Premises	Chain Valley Colliery	
Date Sampled	Daily	
Date Reported	Refer report date	
Discharge volume limit	12161 kilolitres per day	
Sampling Point	1	
Date (24 hour period)	Unit	Volume
01/02/2016	kL	4331
02/02/2016	kL	5037
03/02/2016	kL	4921
04/02/2016	kL	5102
05/02/2016	kL	4313
06/02/2016	kL	2238
07/02/2016	kL	0
08/02/2016	kL	204
09/02/2016	kL	4527
10/02/2016	kL	4903
11/02/2016	kL	4849
12/02/2016	kL	4001
13/02/2016	kL	4777
14/02/2016	kL	4937
15/02/2016	kL	4889
16/02/2016	kL	4971
17/02/2016	kL	4882
18/02/2016	kL	3723
19/02/2016	kL	4876
20/02/2016	kL	2847
21/02/2016	kL	1506
22/02/2016	kL	1410
23/02/2016	kL	4127
24/02/2016	kL	4404
25/02/2016	kL	4778
26/02/2016	kL	5439
27/02/2016	kL	5206
28/02/2016	kL	4970
29/02/2016	kL	5082

Depositional Dust

February 2016			
Sampling Date	12/01/2016	to	12/02/2016
Site	Insoluble Matter (g/m2/month)		
DDG001	0.3		
DDG002	0.7		
DDG003	1.7		
DDG004	1.3		
DDG005	1.3		

Notes:

- For site locations refer to Air Quality Management Plan



Operational Noise

Chain Valley Colliery Q4 noise monitoring undertaken in December 2015. Results to be published in the next reporting period once report is finalised.

No non-compliances identified from the attended monitoring.

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			
Feb-16			
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:	14/03/2016		
Month	Total Rainfall / Month (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
Jan-15	235.4	13	35
Feb-15	54.2	16	33
Mar-15	122.4	11	35
Apr-15	422.2	12	27
May-15	138.4	8	26
Jun-15	90	6	23
Jul-15	20	3	20
Aug-15	32.6	3	27
Sep-15	112.8	7	28
Oct-15	52.4	11	36
Nov-15	110.4	12	41
Dec-15	166.8	12.8	37
Jan-16	329	14.3	36
Feb-16	17.4	16.4	37.7