



Report

Site:	Chain Valley Colliery
Department:	HSEC
Report Title:	Monthly Environmental Report - January 2016
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Report Date:	17/02/2016
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 December 2015 to 31 December 2015.

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 (January 2016 - Work Order ES1601140)

ALS Water - Report of Analysis (HWA-16/00579)

Steel River Testing - Dust Deposition Report January 2016 (Report 10432-0)

Development Consent SSD-5465 (as modified)

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

Monitoring Results

Water – Quality

January 2016			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	18-Jan-16		
Date Obtained	02-Feb-16		
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	<20
pH	pH	6.5-8.5	7.81
Total Sus. Solids	mg/L	50	10

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

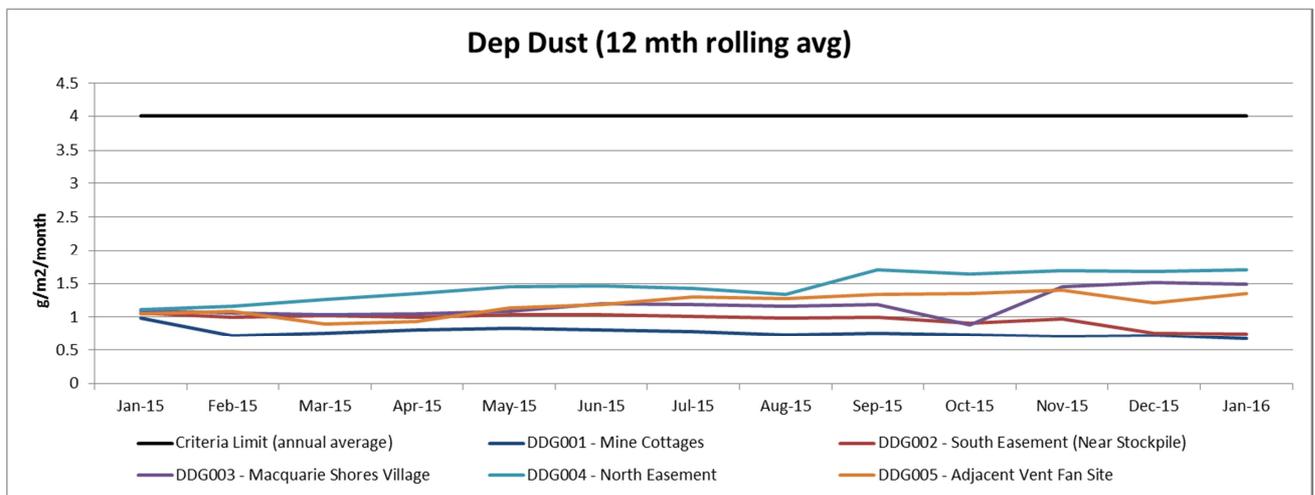
Water – Volume

January 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
01/01/2016	kL	125
02/01/2016	kL	3040
03/01/2016	kL	1282
04/01/2016	kL	4404
05/01/2016	kL	9407
06/01/2016	kL	14152
07/01/2016	kL	2594
08/01/2016	kL	5146
09/01/2016	kL	5184
10/01/2016	kL	5198
11/01/2016	kL	5102
12/01/2016	kL	5024
13/01/2016	kL	5112
14/01/2016	kL	4815
15/01/2016	kL	4318
16/01/2016	kL	5096
17/01/2016	kL	5332
18/01/2016	kL	5141
19/01/2016	kL	5080
20/01/2016	kL	4918
21/01/2016	kL	4934
22/01/2016	kL	5537
23/01/2016	kL	6085
24/01/2016	kL	3793
25/01/2016	kL	4651
26/01/2016	kL	1839
27/01/2016	kL	2058
28/01/2016	kL	4778
29/01/2016	kL	3171
30/01/2016	kL	4600
31/01/2016	kL	2810

There was one exceedance of the 12,161 kL/day volumetric discharge limit during the month, this occurred on the 6/1/16 due to a significant rainfall event.

Depositional Dust

January 2016			
Sampling Date	11/12/2015	to	12/01/2016
Site	Insoluble Matter (g/m ² /month)		
DDG001	0.5		
DDG002	0.7		
DDG003	0.5		
DDG004	1.5		
DDG005	2.3		
Notes:			
- For site locations refer to Air Quality Management Plan			



Operational Noise

The noise monitoring for Quarter 4 2015 was undertaken in December 2015. There were no non compliances were recorded during the monitoring. Results will be uploaded once the report has been finalised.

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			
Jan-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:	09/02/2016		
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	19.6	36
Nov-15	110.4	24.8	41
Dec-15	166.8	12.8	37
Jan-16	329	14.3	39.5

