

LDO GROUP Report



SITE:	Chain Valley Colliery
Department:	HSEC
REPORT TITLE:	Monthly Environmental Report – December 2014
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Report Date:	09 / 01 / 2015
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 1st December 2014 to 31st December 2014.

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=36187&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 (December 2014 - Work Order ES1427201)

Hunter Water Laboratories - Report of Analysis (HWA-14/09715)

Steel River Testing - Dust Deposition Report December 2014 (Report 7855-0)

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 26 September 2014)

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Monitoring Results

Water – Quality

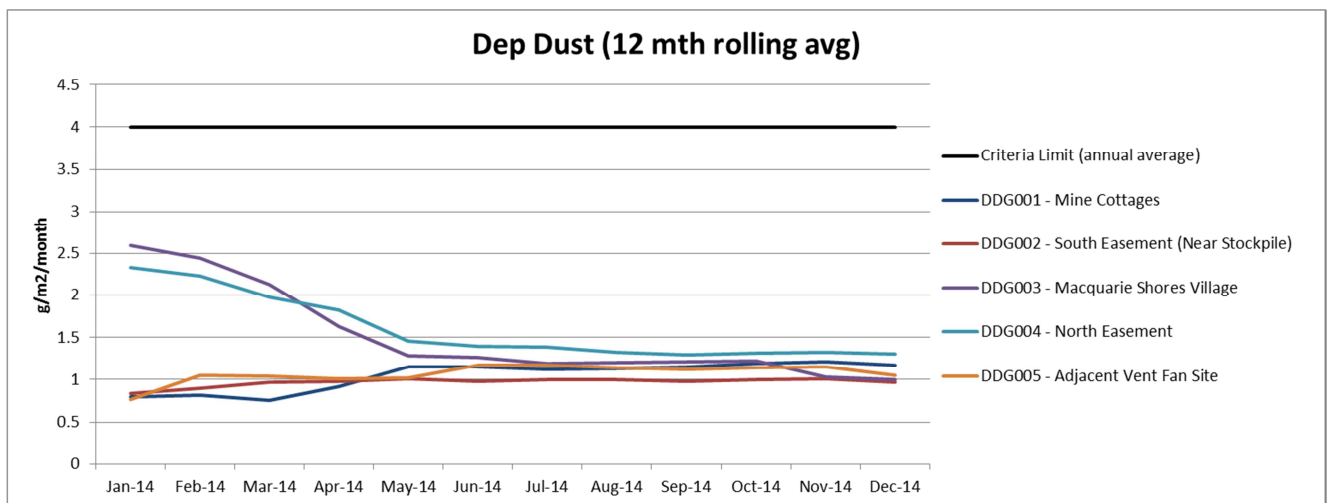
December 2014			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	10-Dec-14		
Date Obtained	06-Jan-15		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L		<2
Enterococci	CFU/100mL		84
Faecal Coliforms	CFU/100mL	200	<2
pH	pH	6.5-8.5	7.93
Total Sus. Solids	mg/L	50	<5

Water – Volume

December 2014		
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
01/12/2014	kL	6284
02/12/2014	kL	6290
03/12/2014	kL	6207
04/12/2014	kL	6518
05/12/2014	kL	6521
06/12/2014	kL	6535
07/12/2014	kL	8895
08/12/2014	kL	7208
09/12/2014	kL	6232
10/12/2014	kL	6181
11/12/2014	kL	6361
12/12/2014	kL	6956
13/12/2014	kL	4833
14/12/2014	kL	6434
15/12/2014	kL	6156
16/12/2014	kL	7853
17/12/2014	kL	6135
18/12/2014	kL	6137
19/12/2014	kL	6362
20/12/2014	kL	6369
21/12/2014	kL	6154
22/12/2014	kL	4964
23/12/2014	kL	4303
24/12/2014	kL	6657
25/12/2014	kL	8133
26/12/2014	kL	3852
27/12/2014	kL	5987
28/12/2014	kL	5979
29/12/2014	kL	3110
30/12/2014	kL	2147
31/12/2014	kL	6445

Depositional Dust

December 2014			
Sampling Date	21/11/2014	to	19/12/2014
Site	Insoluble Matter (g/m ² /month)		
DDG001	1.3		
DDG002	4.1		
DDG003	2.3		
DDG004	2.1		
DDG005	3.5		
Notes:			
- For site locations refer to Air Quality Management Plan			



Operational Noise

Quarter 4 2014 attended noise monitoring has been undertaken, with the results shown below.

There were no exceedances of noise criteria during the quarter.

LAeq (15 min) attended noise monitoring results – Quarter 4 2014			
Location	Date / Time	Criteria LAeq dB	LAeq dB (from Colliery)
Day			
ATN001	10/12/2014 12:28	35	Inaudible
ATN002	10/12/2014 16:14	49	Inaudible
ATN003	10/12/2014 15:34	36	Inaudible
ATN004	10/12/2014 15:11	35	Inaudible
ATN005	10/12/2014 14:43	35	Inaudible
ATN006	10/12/2014 14:20	37	Inaudible
ATN007	10/12/2014 13:47	46	41
Evening			
ATN001	10/12/2014 18:00	35	Inaudible
ATN002	10/12/2014 19:59	49	Inaudible
ATN003	10/12/2014 19:40	36	Inaudible
ATN004	15/12/2014 21:33	35	Inaudible
ATN005	15/12/2014 21:07	35	Inaudible
ATN006	15/12/2014 20:45	37	Inaudible
ATN007	15/12/2014 20:17	46	37
Night			
ATN001	16/12/2014 1:18	35	Inaudible
ATN002	16/12/2014 0:16	49	37
ATN003	16/12/2014 0:34	36	Inaudible
ATN004	15/12/2014 23:36	35	Inaudible
ATN005	15/12/2014 23:11	35	Inaudible
ATN006	15/12/2014 22:50	37	Inaudible
ATN007	15/12/2014 22:23	46	40
Notes: For monitoring locations refer to Noise Management Plan			

LA1 (1min) attended noise monitoring results – Quarter 4 2014			
Location	Date / Time	Criteria LA1 dB	LA1 dB (from Colliery)
Night			
ATN001	16/12/2014 1:18	45	Inaudible
ATN002	16/12/2014 0:16	54	39
ATN003	16/12/2014 0:34	45	Inaudible
ATN004	15/12/2014 23:36	45	Inaudible
ATN005	15/12/2014 23:11	45	Inaudible
ATN006	15/12/2014 22:50	45	Inaudible
ATN007	15/12/2014 22:23	46	40
Notes: For monitoring locations refer to Noise Management Plan			

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Weather Data

Month	Total Rainfall / Month (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
Jan-14	14.6	14	37
Feb-14	127	14	32
Mar-14	84.6	11.37	31.68
Apr-14	160.4	11	29
May-14	54	8	21
Jun-14	110	6	15
Jul-14	19.8	5	24
Aug-14	197	5	21
Sep-14	62.4	7	31
Oct-14	77.8	7	35
Nov-14	26	12	39
Dec-14	100.8	15	34

