

# LDO GROUP Report



<b>SITE:</b>	<b>Chain Valley Colliery</b>
<b>Department:</b>	<b>HSEC</b>
<b>REPORT TITLE:</b>	<b>Monthly Environmental Report – July 2015</b>
<b>Prepared by:</b>	<b>Chris Ellis</b>
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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 July 2015 to 31 July 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	<a href="http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770">http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50980&amp;SYSUID=1&amp;LICID=1770</a>

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/m<sup>2</sup>/month – grams per square metre per month

kL– kilolitres

L<sub>Aeq</sub>–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 (July 2015 - Work Order ES1526071)

ALS Water - Report of Analysis (HWA-15/05324)

Steel River Testing - Dust Deposition Report July 2015 (Report 9289-0)

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 15 May 2015)

## Monitoring Results

### Water – Quality

July 2015			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	14-Jul-15		
Date Obtained	21-Jul-15		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L		<2
Enterococci	CFU/100mL		5
Faecal Coliforms	CFU/100mL	200	<2
pH	pH	6.5-8.5	8.05
Total Sus. Solids	mg/L	50	<5

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

## Water – Volume

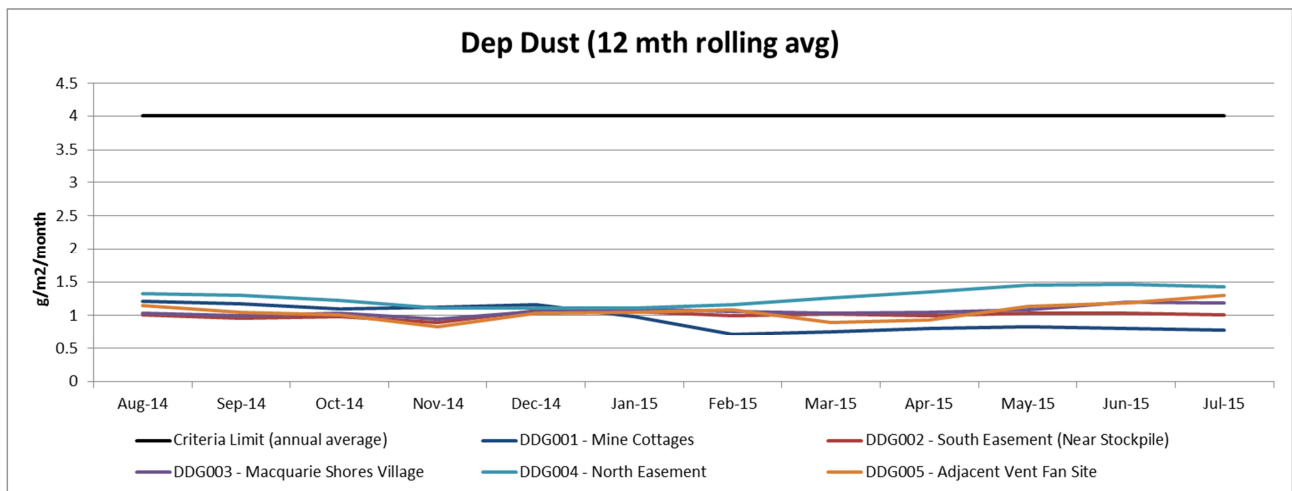
July 2015		
EPL	1770	
Licensee	LakeCoal Pty Ltd	
Premises	Chain Valley Colliery	
Date Sampled	Daily	
Date Reported	Refer report date	
Discharge volume limit	12161 kilolitres per day	
Sampling Point	1	
Date (24 hour period)	Unit	Volume
01/07/2015	kL	3512
02/07/2015	kL	1438
03/07/2015	kL	1116
04/07/2015	kL	5741
05/07/2015	kL	2742
06/07/2015	kL	5507
07/07/2015	kL	5679
08/07/2015	kL	5704
09/07/2015	kL	5583
10/07/2015	kL	5577
11/07/2015	kL	5632
12/07/2015	kL	5681
13/07/2015	kL	3666
14/07/2015	kL	2046
15/07/2015	kL	5626
16/07/2015	kL	6604
17/07/2015	kL	5965
18/07/2015	kL	5655
19/07/2015	kL	5688
20/07/2015	kL	5290
21/07/2015	kL	3452
22/07/2015	kL	5091
23/07/2015	kL	5921
24/07/2015	kL	773
25/07/2015	kL	5538
26/07/2015	kL	4366
27/07/2015	kL	4789
28/07/2015	kL	3888
29/07/2015	kL	750
30/07/2015	kL	7612
31/07/2015	kL	3311

There was no exceedance of the 12,161 kL/day volumetric discharge limit during the month.

## Depositional Dust

July 2015	
Sampling Date	17/06/2015 to 17/07/2015
Site	Insoluble Matter (g/m <sup>2</sup> /month)
DDG001	0.5
DDG002	0.4
DDG003	0.3
DDG004	0.6
DDG005	1.9

**Notes:**  
 - For site locations refer to Air Quality Management Plan



## Operational Noise

Quarter 2 2015 attended noise monitoring results are presented below. There were no exceedances of the relevant noise criteria.

<b>L<sub>Aeq</sub> (15 min) attended noise monitoring results – Quarter 2 2015</b>			
Location	Date / Time	Criteria L <sub>Aeq</sub> dB	L <sub>Aeq</sub> dB (from Colliery)
<b>Day</b>			
ATN001	22/06/2015 12:29	35	Inaudible
ATN002	22/06/2015 16:11	49	Inaudible
ATN003	22/06/2015 15:29	36	Inaudible
ATN004	22/06/2015 14:58	35	Inaudible
ATN005	22/06/2015 14:29	35	Inaudible
ATN006	22/06/2015 14:06	37	Inaudible
ATN007	22/06/2015 13:36	46	40
R12	22/06/2015 16:11	49	Inaudible
R13	22/06/2015 16:35	43	Inaudible
<b>Evening</b>			
ATN001	23/06/2015 18:49	35	Inaudible
ATN002	23/06/2015 20:19	49	45
ATN003	23/06/2015 19:36	36	35
ATN004	22/06/2015 19:24	35	26
ATN005	22/06/2015 18:57	35	Inaudible
ATN006	22/06/2015 18:34	37	35
ATN007	22/06/2015 18:00	46	45
R12	23/06/2015 20:19	49	45
R13	23/06/2015 20:01	43	37
<b>Night</b>			
ATN001	25/06/2015 2:09	35	Inaudible
ATN002	25/06/2015 1:42	49	43
ATN003	25/06/2015 1:00	36	Inaudible
ATN004	24/06/2015 2:21	35	Inaudible
ATN005	24/06/2015 1:54	35	Inaudible
ATN006	24/06/2015 1:30	37	36
ATN007	24/06/2015 1:00	46	43
R12	25/06/2015 1:42	49	43
R13	25/06/2015 1:23	43	Inaudible
Notes: For monitoring locations refer to Noise Management Plan and Appendix 6 of the Development Consent.			



LA1 (1min) attended noise monitoring results – Quarter 2 2015			
Location	Date / Time	Criteria LA1 dB	LA1 dB (from Colliery)
Night			
ATN001	25/06/2015 2:09	45	Inaudible
ATN002	25/06/2015 1:42	54	45
ATN003	25/06/2015 1:00	45	Inaudible
ATN004	24/06/2015 2:21	45	Inaudible
ATN005	24/06/2015 1:54	45	Inaudible
ATN006	24/06/2015 1:30	45	44
ATN007	24/06/2015 1:00	46	45
R12	25/06/2015 1:42	53	45
R13	25/06/2015 1:23	49	Inaudible

Notes:  
For monitoring locations refer to Noise Management Plan and Appendix 6 of the Development Consent.

## Weather Data

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

