



# Report

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<b>Site:</b>	<b>Chain Valley Colliery</b>
<b>Department:</b>	<b>HSEC</b>
<b>Report Title:</b>	<b>Monthly Environmental Report - October 2015</b>
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<b>Distribution:</b>	<b>Chain Valley Colliery website</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 October 2015 to 31 October 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 (October 2015 - Work Order ES1533578)

ALS Water - Report of Analysis (HWA-15/07716)

Steel River Testing - Dust Deposition Report October 2015 (Report 9824-0)

Development Consent SSD-5465 (as modified)

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

## Monitoring Results

Water – Quality

October 2015			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	14-Oct-15		
Date Obtained	21-Oct-15		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Biochem. Oxygen Demand	mg/L		<2
Enterococci	CFU/100mL		13
Faecal Coliforms	CFU/100mL	200	<20
pH	pH	6.5-8.5	7.78
Total Sus. Solids	mg/L	50	<5

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

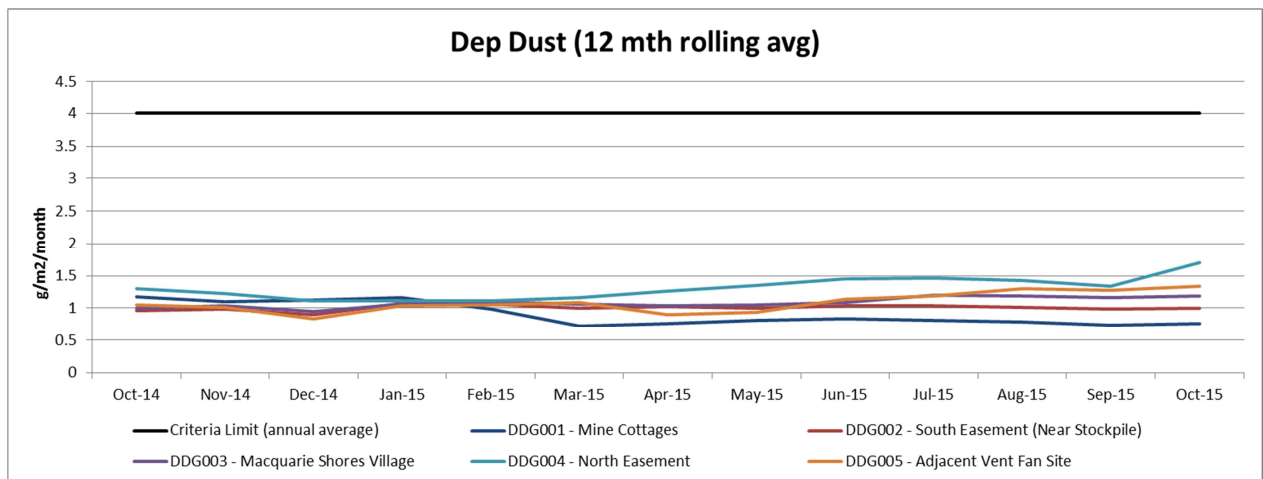
## Water – Volume

October 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
01/10/2015	kL	3482
02/10/2015	kL	1583
03/10/2015	kL	6186
04/10/2015	kL	10492
05/10/2015	kL	9374
06/10/2015	kL	8102
07/10/2015	kL	6696
08/10/2015	kL	8493
09/10/2015	kL	5259
10/10/2015	kL	9952
11/10/2015	kL	7740
12/10/2015	kL	8849
13/10/2015	kL	7686
14/10/2015	kL	7821
15/10/2015	kL	7620
16/10/2015	kL	7267
17/10/2015	kL	8632
18/10/2015	kL	10081
19/10/2015	kL	9302
20/10/2015	kL	8667
21/10/2015	kL	7785
22/10/2015	kL	5520
23/10/2015	kL	4072
24/10/2015	kL	4659
25/10/2015	kL	7849
26/10/2015	kL	8746
27/10/2015	kL	8384
28/10/2015	kL	5507
29/10/2015	kL	5815
30/10/2015	kL	8391
31/10/2015	kL	7862

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

## Depositional Dust

October 2015			
Sampling Date	11/09/2015	to	09/10/2015
Site	Insoluble Matter (g/m <sup>2</sup> /month)		
DDG001	0.4		
DDG002	0.6		
DDG003	0.5		
DDG004	1.0		
DDG005	0.5		
Notes:			
- For site locations refer to Air Quality Management Plan			



## Operational Noise

The noise monitoring for Quarter 3 2015 has been undertaken and results now completed in draft form.

Results will be published in the next reporting period.

## Weather Data

Monthly Weather Data			
Oct-15			
<b>EPL</b>	191		
<b>Licensee</b>	LakeCoal Pty Ltd		
<b>Premises</b>	Chain Valley Colliery		
	W1 (on-site weather station)		
<b>Location</b>			
<b>Date published:</b>	Refer report date		
<b>Date sampled:</b>	Daily		
<b>Date obtained:</b>	09/10/2015		
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

