

LDO GROUP Report



SITE:	Chain Valley Colliery
Department:	HSEC
REPORT TITLE:	Monthly Environmental Report – September 2014
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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) and a Project Approval (MP 10_0161) 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 September 2014 to 30th September 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=32911&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/Project Approval) to determine compliance.

Monitoring results presented include;

- Water – quality
- Water – volume
- Depositional dust
- Operational noise

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 (September 2014 - Work Order ES1420987)

Hunter Water Laboratories - Report of Analysis (HWA-14/07020)

Steel River Testing - Dust Deposition Report September 2014 (Report 7260-0)

Development Consent SSD-5465

Project Approval 10_0161 (as modified)

Environment Protection Licence 1770 (Licence version date: 20 August 2013)

Monitoring Results

Water – Quality

September 2014			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	17-Sep-14		
Date Obtained	24-Sep-14		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Aluminium (total)	µg/L		<100
Aluminium (dissolved)	µg/L		<100
Ammonia as N	mg/L		0.06
Arsenic (total)	µg/L		<10
Arsenic (dissolved)	µg/L		<10
Beryllium (total)	µg/L		<10
Beryllium (dissolved)	µg/L		<10
Cadmium (total)	µg/L		<1.0
Cadmium (dissolved)	µg/L		<1.0
Chromium (total)	µg/L		<10
Chromium (dissolved)	µg/L		<10
Cobalt (total)	µg/L		<10
Cobalt (dissolved)	µg/L		<10
Conductivity	µs/cm		33200
Copper (total)	µg/L		<10
Copper (dissolved)	µg/L		<10
Faecal Coliforms	CFU/100mL	200	48
Lead (total)	µg/L		<10
Lead (dissolved)	µg/L		<10
Mercury (total)	µg/L		<0.1
Mercury (dissolved)	µg/L		<0.1
Molybdenum (total)	µg/L		<10
Molybdenum (dissolved)	µg/L		<10
Nickel (total)	µg/L		<10
Nickel (dissolved)	µg/L		<10
pH	pH	6.5-8.5	7.93
Selenium (total)	µg/L		<100
Selenium (dissolved)	µg/L		<100
Silver (total)	µg/L		<10
Silver (dissolved)	µg/L		<10
Total Sus. Solids	µg/L	50	<5
Vanadium (total)	µg/L		<100
Vanadium (dissolved)	µg/L		<100
Zinc (total)	µg/L		<50
Zinc (dissolved)	µg/L		<50

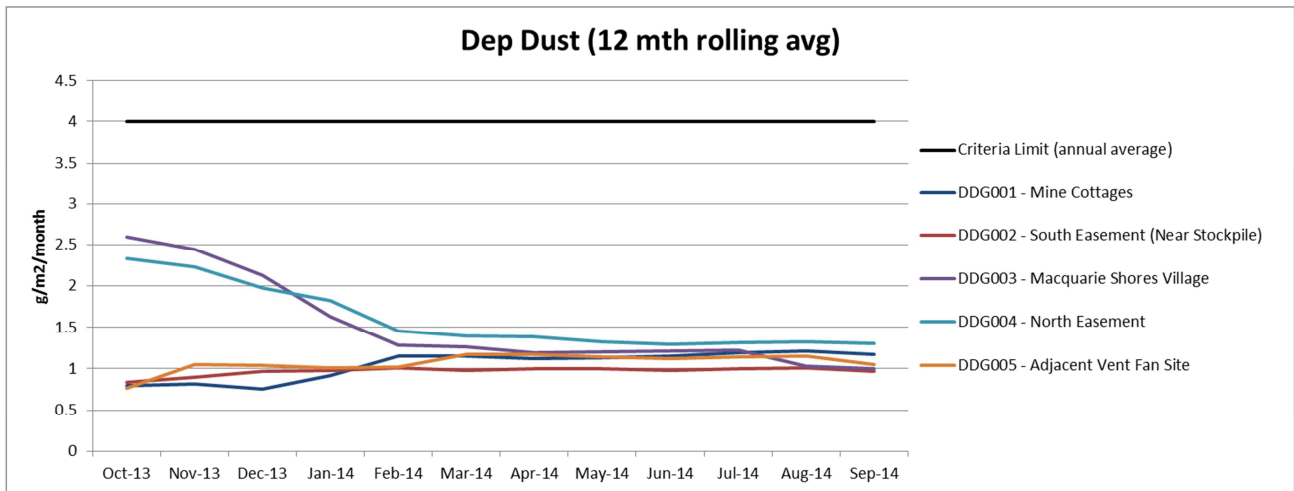
Water – Volume

September 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
01/09/2014	kL	11654
02/09/2014	kL	9321
03/09/2014	kL	11678
04/09/2014	kL	7310
05/09/2014	kL	6068
06/09/2014	kL	1570
07/09/2014	kL	9919
08/09/2014	kL	8756
09/09/2014	kL	7704
10/09/2014	kL	6347
11/09/2014	kL	0
12/09/2014	kL	7121
13/09/2014	kL	10500
14/09/2014	kL	10172
15/09/2014	kL	4724
16/09/2014	kL	2892
17/09/2014	kL	6047
18/09/2014	kL	5395
19/09/2014	kL	5414
20/09/2014	kL	10087
21/09/2014	kL	8036
22/09/2014	kL	10500
23/09/2014	kL	7620
24/09/2014	kL	5762
25/09/2014	kL	10500
26/09/2014	kL	8700
27/09/2014	kL	6657
28/09/2014	kL	6651
29/09/2014	kL	7226
30/09/2014	kL	6648

Depositional Dust

September 2014			
Sampling Date	18/08/2014	to	19/09/2014
Site	Insoluble Matter (g/m ² /month)		
DDG001	0.4		
DDG002	0.5		
DDG003	0.4		
DDG004	1.3		
DDG005	0.3		
Notes:			
- For site locations refer to Air Quality Management Plan			



Operational Noise

Q3 noise monitoring was undertaken in September, however no results had been provided to LakeCoal at the time of finalising this report, accordingly results will be published when they become available, which should be within the October report.