

LDO GROUP Report



SITE:	Chain Valley Colliery
Department:	HSEC
REPORT TITLE:	Monthly Environmental Report – July 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 July 2014 to 31st July 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 (July 2014 - Work Order ES1415950)

Hunter Water Laboratories - Report of Analysis (HWA-14/05490 & 14/05634)

Steel River Testing - Dust Deposition Report July 2014 (Report 6891-0)

Development Consent SSD-5465

Project Approval 10_0161 (as modified)

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

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Monitoring Results

Water – Quality

July 2014	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	22-Jul-14
Date Obtained	29-Jul-14
Date Reported	Refer report date
Sampling Point	1

Parameter	Units	Limit	Result
Aluminium (total)	µg/L		340
Aluminium (dissolved)	µg/L		50
Ammonia as N	mg/L		<0.01
Arsenic (total)	µg/L		1
Arsenic (dissolved)	µg/L		<1
Beryllium (total)	µg/L		<1
Beryllium (dissolved)	µg/L		<1
Cadmium (total)	µg/L		<0.1
Cadmium (dissolved)	µg/L		<0.1
Chromium (total)	µg/L		1
Chromium (dissolved)	µg/L		<1
Cobalt (total)	µg/L		<1
Cobalt (dissolved)	µg/L		<1
Conductivity	µs/cm		18100
Copper (total)	µg/L		<1
Copper (dissolved)	µg/L		<1
Faecal Coliforms	CFU/100mL	200	440
Lead (total)	µg/L		<1
Lead (dissolved)	µg/L		<1
Mercury (total)	µg/L		<0.1
Mercury (dissolved)	µg/L		<0.1
Molybdenum (total)	µg/L		11
Molybdenum (dissolved)	µg/L		10
Nickel (total)	µg/L		3
Nickel (dissolved)	µg/L		3
pH	pH	6.5-8.5	7.73
Selenium (total)	µg/L		<10
Selenium (dissolved)	µg/L		20
Silver (total)	µg/L		<1
Silver (dissolved)	µg/L		<1
Total Sus. Solids	µg/L	50	<5
Vanadium (total)	µg/L		<10
Vanadium (dissolved)	µg/L		<10
Zinc (total)	µg/L		7
Zinc (dissolved)	µg/L		7

Note: Following receipt of the faecal coliform result over the EPL limit of 200 CFU/100mL, a resample was conducted on the 28/7/14, this subsequent result (36 CFU/100mL) was below the EPL limit.

Water – Volume

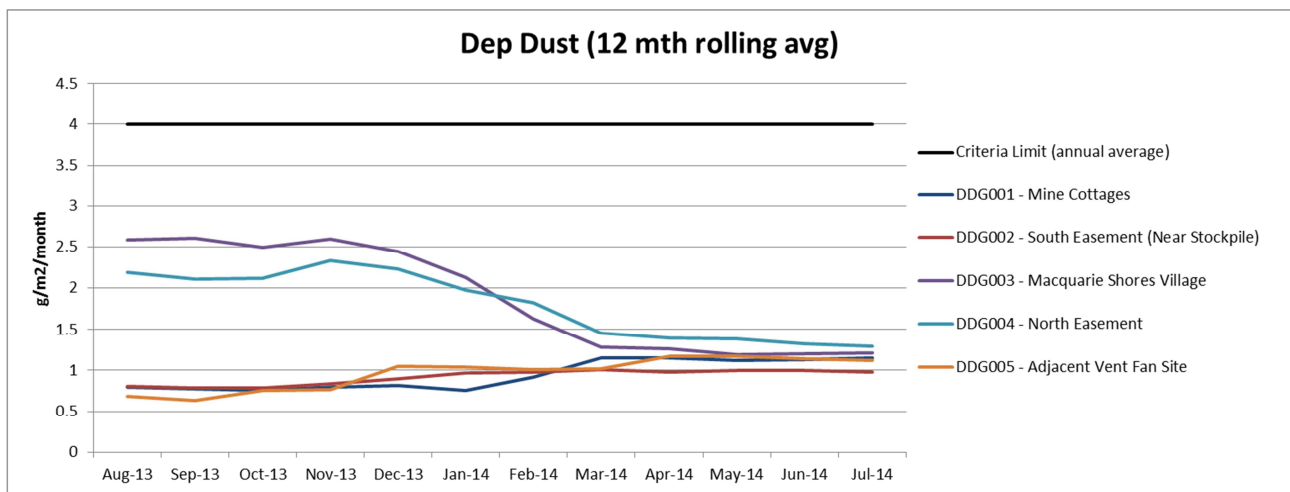
July 2014	
EPL	1770
Licensee	LakeCoal Pty Ltd
Premises	Chain Valley Colliery
Date Sampled	Daily
Date Reported	Refer report date
Discharge volume limit	12161 kilolitres per day
Sampling Point	1

Date (24 hour period)	Unit	Volume
01/07/2014	kL	11266
02/07/2014	kL	11516
03/07/2014	kL	6930
04/07/2014	kL	11759
05/07/2014	kL	8354
06/07/2014	kL	5347
07/07/2014	kL	5509
08/07/2014	kL	10392
09/07/2014	kL	11704
10/07/2014	kL	10859
11/07/2014	kL	11695
12/07/2014	kL	7536
13/07/2014	kL	10053
14/07/2014	kL	5353
15/07/2014	kL	3766
16/07/2014	kL	5331
17/07/2014	kL	5448
18/07/2014	kL	5394
19/07/2014	kL	5398
20/07/2014	kL	5415
21/07/2014	kL	5433
22/07/2014	kL	5412
23/07/2014	kL	3757
24/07/2014	kL	10030
25/07/2014	kL	11726
26/07/2014	kL	9326
27/07/2014	kL	8454
28/07/2014	kL	11739
29/07/2014	kL	9722
30/07/2014	kL	6639
31/07/2014	kL	6637

Depositional Dust

July 2014	
Sampling Date	17/06/2014 to 18/07/2014
Site	Insoluble Matter (g/m ² /month)
DDG001	0.8
DDG002	0.7
DDG003	0.4
DDG004	1.0
DDG005	0.6

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



Operational Noise

The Q2 2014 noise monitoring was undertaken and reported in the May 2014 monthly report. No noise criteria exceedances were recorded during Q2 2014. Q3 monitoring results will be reported when it is completed and results have been provided to LakeCoal.