

LDO GROUP Report



SITE:	Chain Valley Colliery
Department:	HSEC
REPORT TITLE:	Monthly Environmental Report – May 2013
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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 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 legislation, licence and approval require various monitoring and reporting to be undertaken by LakeCoal for Chain Valley Colliery.

This report covers the requirements of the above and attempts to make the data as understandable and easy to interpret as possible for the general public.

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 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 of receipt. 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 Project Approval) to determine compliance.

Monitoring results presented include;

- Water – quality
- Water – volume
- Depositional dust

Definitions

kL - kilolitres

mg/L – Milligrams per litre

µs/cm – microsiemens per centimetre

µg/L – Micrograms per litre

g/m²/month – grams per square metre per month

References

Monthly Water Monitoring Results from ALS Group (May 2013 - Work Order ES1311325)

Dust Deposition Report (May 2013 – Reports 4575-0 and 4580-0)

Project Approval 10_0161 (as modified)

Environment Protection Licence 1770 (Licence version date: 15 April 2013)

Monitoring Results

Water – Quality

May 2013			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	20-May-13		
Date Obtained	27-May-13		
Date Reported	Refer report date		
Sampling Point	1		

Parameter	Units	Limit	Result
Aluminium (total)	µg/L		22
Aluminium (soluble)	µg/L		<5
Ammonia as N	mg/L		0.04
Arsenic (total)	µg/L		<0.5
Arsenic (soluble)	µg/L		<0.5
Beryllium (total)	µg/L		<0.1
Beryllium (soluble)	µg/L		<0.1
Cadmium (total)	µg/L		<0.2
Cadmium (soluble)	µg/L		<0.2
Chromium (total)	µg/L		<0.5
Chromium (soluble)	µg/L		<0.5
Cobalt (total)	µg/L		<0.2
Cobalt (soluble)	µg/L		<0.2
Conductivity	µs/cm		32600
Copper (total)	µg/L		<1
Copper (soluble)	µg/L		<1
Faecal Coliforms	CFU/100mL	200	24
Lead (total)	µg/L		<0.2
Lead (soluble)	µg/L		<0.2
Mercury (total)	mg/L		<0.0001
Mercury (soluble)	mg/L		<0.0001
Molybdenum (total)	µg/L		2.5
Molybdenum (soluble)	µg/L		2.6
Nickel (total)	µg/L		1.3
Nickel (soluble)	µg/L		1.3
pH	pH	6.5-8.5	7.91
Selenium (total)	µg/L		<2
Selenium (soluble)	µg/L		<2
Silver (total)	µg/L		<0.1
Silver (soluble)	µg/L		<0.1
Total Sus. Solids	mg/L	50	<5
Vanadium (total)	µg/L		<0.5
Vanadium (soluble)	µg/L		<0.5
Zinc (total)	µg/L		23
Zinc (soluble)	µg/L		19

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Water – Volume

May 2013		
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
01/05/2013	kL	8281
02/05/2013	kL	2288
03/05/2013	kL	9079
04/05/2013	kL	9081
05/05/2013	kL	7006
06/05/2013	kL	6983
07/05/2013	kL	6975
08/05/2013	kL	6969
09/05/2013	kL	4996
10/05/2013	kL	4566
11/05/2013	kL	9021
12/05/2013	kL	5523
13/05/2013	kL	6556
14/05/2013	kL	6550
15/05/2013	kL	6969
16/05/2013	kL	6976
17/05/2013	kL	6969
18/05/2013	kL	6967
19/05/2013	kL	6964
20/05/2013	kL	6958
21/05/2013	kL	2404
22/05/2013	kL	5970
23/05/2013	kL	4864
24/05/2013	kL	8309
25/05/2013	kL	3869
26/05/2013	kL	6922
27/05/2013	kL	10683
28/05/2013	kL	7686
29/05/2013	kL	6922
30/05/2013	kL	6939
31/05/2013	kL	2732

Dispositional Dust

May 2013			
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Sampling Date	18/04/2013	to	17/05/2013
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Site	Insoluble Matter (g/m2/month)
DDG001	0.3
DDG002	0.4
DDG003	0.4
DDG004	1.3
DDG005	0.9

Notes:

- For site locations refer to Air Quality and Greenhouse Gas Management Plan
- Sampling date for DDG005 was 18/04/2013 to 20/05/2013