

# LDO GROUP Report



<b>SITE:</b>	Chain Valley Colliery
<b>Department:</b>	HSEC
<b>REPORT TITLE:</b>	Monthly Environmental Report – October 2012
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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.

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

## References

Monthly Water Monitoring Results from ALS Group (October 2012 - Work Order ES1224749)

Dust Deposition Report (October 2012 – Report 3596-0)

Project Approval 10\_0161 (as modified)

Environment Protection Licence 1770

## Monitoring Results

## Water – Quality

October 2012			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	19-Oct-12		
Date Obtained	26-Oct-12		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Aluminium (total)	µg/L		20
Aluminium (soluble)	µg/L		22
Ammonia as N	mg/L		<0.10
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		33200
Copper (total)	µg/L		<1
Copper (soluble)	µg/L		<1
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		2.4
Nickel (total)	µg/L		0.6
Nickel (soluble)	µg/L		<0.5
pH	pH	6.5-8.5	7.92
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	25	<5
Vanadium (total)	µg/L		<0.5
Vanadium (soluble)	µg/L		<0.5
Zinc (total)	µg/L		22
Zinc (soluble)	µg/L		16

## Water – Volume

October 2012	
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
01/10/2012	kL	7016
02/10/2012	kL	6361
03/10/2012	kL	6535
04/10/2012	kL	7432
05/10/2012	kL	8037
06/10/2012	kL	7411
07/10/2012	kL	6994
08/10/2012	kL	6028
09/10/2012	kL	8139
10/10/2012	kL	7709
11/10/2012	kL	5533
12/10/2012	kL	9615
13/10/2012	kL	6950
14/10/2012	kL	5657
15/10/2012	kL	6582
16/10/2012	kL	10010
17/10/2012	kL	5530
18/10/2012	kL	8975
19/10/2012	kL	7434
20/10/2012	kL	7535
21/10/2012	kL	7521
22/10/2012	kL	6865
23/10/2012	kL	5519
24/10/2012	kL	7397
25/10/2012	kL	7632
26/10/2012	kL	5716
27/10/2012	kL	6985
28/10/2012	kL	6387
29/10/2012	kL	6449
30/10/2012	kL	6822
31/10/2012	kL	10619

## Dispositional Dust

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October 2012			
Sampling Date	14/09/2012	to	15/10/2012
Site	Insoluble Matter (g/m <sup>2</sup> /month)		
DDG001	1.1		
DDG002	0.7		
DDG003	c6.9		
DDG004	0.4		
DDG005	NA		
<b>Notes:</b>			
- For site locations refer to Air Quality and Greenhouse Gas Management Plan			
- Access and installation of DDG005 is not yet completed			
- "c" refers to a contaminated result as DDG003 was contaminated with bird droppings.			