

LDO GROUP Report



SITE:	Chain Valley Colliery
Department:	HSEC
REPORT TITLE:	Monthly Environmental Report - December 2012
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Report Date:	09 / 01 / 2013
Distribution:	LakeCoal Website

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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/m²/month – grams per square metre per month

References

Monthly Water Monitoring Results from ALS Group (December 2012 - Work Order ES1230170)

Dust Deposition Report (December 2012 – Report 3866-0)

Project Approval 10_0161 (as modified)

Environment Protection Licence 1770

Monitoring Results

Water – Quality

December 2012			
EPL	1770		
Licensee	LakeCoal Pty Ltd		
Premises	Chain Valley Colliery		
Date Sampled	20-Dec-12		
Date Obtained	02-Jan-12		
Date Reported	Refer report date		
Sampling Point	1		
Parameter	Units	Limit	Result
Aluminium (total)	µg/L		16
Aluminium (soluble)	µg/L		<5
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		33000
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		1.8
Molybdenum (soluble)	µg/L		0.9
Nickel (total)	µg/L		0.6
Nickel (soluble)	µg/L		<0.5
pH	pH	6.5-8.5	8.03
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	23
Vanadium (total)	µg/L		<0.5
Vanadium (soluble)	µg/L		<0.5
Zinc (total)	µg/L		6
Zinc (soluble)	µg/L		<5

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Water – Volume

December 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
01/12/2012	kL	6306
02/12/2012	kL	4354
03/12/2012	kL	2630
04/12/2012	kL	4857
05/12/2012	kL	6729
06/12/2012	kL	5970
07/12/2012	kL	4761
08/12/2012	kL	8483
09/12/2012	kL	10996
10/12/2012	kL	10975
11/12/2012	kL	10994
12/12/2012	kL	8517
13/12/2012	kL	8729
14/12/2012	kL	11008
15/12/2012	kL	7268
16/12/2012	kL	7491
17/12/2012	kL	7442
18/12/2012	kL	5015
19/12/2012	kL	8678
20/12/2012	kL	5899
21/12/2012	kL	8501
22/12/2012	kL	5972
23/12/2012	kL	5765
24/12/2012	kL	6725
25/12/2012	kL	4323
26/12/2012	kL	4072
27/12/2012	kL	3385
28/12/2012	kL	6828
29/12/2012	kL	5972
30/12/2012	kL	6900
31/12/2012	kL	6701

Dispositional Dust

December 2012			
Sampling Date	16/11/2012	to	18/12/2012
Site	Insoluble Matter (g/m2/month)		
DDG001	1.6		
DDG002	1.2		
DDG003	4.7		
DDG004	4.9		
DDG005	NA		
Notes: - For site locations refer to Air Quality and Greenhouse Gas Management Plan - Access and installation of DDG005 is not yet completed			