# Lake Coal

## Report

Site:	Chain Valley Colliery
Department:	HSEC
Report Title:	Monthly Environmental Report - November 2015
Prepared by:	Wade Covey
Report Date:	11/12/2015
Distribution:	Chain Valley Colliery website



**CVC Monthly Environmental Report** 

#### **Table of Contents**

Introduction	3
Scope	
Definitions	
References	5
Monitoring Results	5
Water - Quality	5
Water – Volume	
Depositional Dust	
Operational Noise	
Weather Data	8



**CVC Monthly Environmental Report** 

#### 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 (as modified) 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 1 November 2015 to 30 November 2015.

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=50980&SYS UID=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.



**CVC Monthly Environmental Report** 

#### 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) to determine compliance.

Monitoring results presented include;

- Water quality
- Water volume
- Depositional dust
- Operational noise
- Weather data

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

kL- kilolitres

L<sub>Aeq</sub>-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



**CVC Monthly Environmental Report** 

#### **References**

ALS Group - Monthly Water Monitoring Results (November 2015 - Work Order ES 1536426)

ALS Water - Report of Analysis (HWA-15/08672)

Steel River Testing - Dust Deposition Report November 2015 (Report 10032-0)

Development Consent SSD-5465 (as modified)

Environment Protection Licence 1770 (Licence version date: 15 May 2015)

#### **Monitoring Results**

Water - Quality

November 2015				
EPL	1770			
Licensee	LakeCoal Pty Ltd			
Premises	Chain Valley Colliery			
Date Sampled	21-Oct-15			
Date Obtained	24-Nov-15			
Date Reported	Refer report date			
Sampling Point	1			
Parameter	Units	Limit	Result	
Biochem. Oxygen Demand	mg/L		<2	
Enterococci	CFU/100mL		9	
Faecal Coliforms	CFU/100mL	200	9	
рН	рН	6.5-8.5	7.9	
Total Sus. Solids	mg/L	50	<5	

There was no exceedance of water quality criteria during the month.



#### **CVC Monthly Environmental Report**

#### Water - Volume

November 2015			
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
01/11/2015	kL	8046
02/11/2015	kL	5018
03/11/2015	kL	4258
04/11/2015	kL	4226
05/11/2015	kL	4161
06/11/2015	kL	6137
07/11/2015	kL	6329
08/11/2015	kL	7028
09/11/2015	kL	7464
10/11/2015	kL	2402
11/11/2015	kL	3216
12/11/2015	kL	5237
13/11/2015	kL	5491
14/11/2015	kL	6751
15/11/2015	kL	8295
16/11/2015	kL	5887
17/11/2015	kL	5389
18/11/2015	kL	5290
19/11/2015	kL	5280
20/11/2015	kL	6859
21/11/2015	kL	6770
22/11/2015	kL	9128
23/11/2015	kL	9248
24/11/2015	kL	4808
25/11/2015	kL	8113
26/11/2015	kL	1898
27/11/2015	kL	2528
28/11/2015	kL	3447
29/11/2015	kL	4803
30/11/2015	kL	5219

There was no exceedance of the 12,161 kL/day volumetric discharge limit during the month.



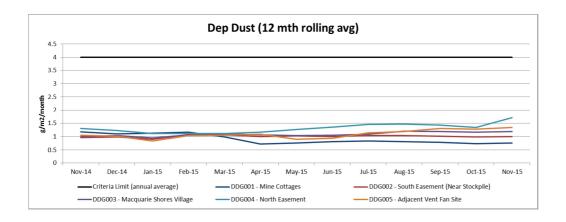
**CVC Monthly Environmental Report** 

#### **Depositional Dust**

November 2015				
Sampling Date	09/10/2015	to	10/11/2015	
	I		· / · · · · · ·	
Site	Insoluble Mat	Insoluble Matter (g/m2/month)		
DDG001	1.1			
DDG002	1.2			
DDG003	7.8			
DDG004	2.4			
DDG005	1.7			

#### Notes:

- For site locations refer to Air Quality Management Plan



#### **Operational Noise**

The noise monitoring for Quarter 3 2015 has been undertaken and results now completed in draft form. No non compliances were recorded.

Results will be published in the next reporting period.



**CVC Monthly Environmental Report** 

#### Weather Data

Monthly Weather Data			
Nov-15			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Collier	у	
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	07/12/2015		
Month	Total Rainfall /	Minimum	Maximu
	Month (mm)	Temperature (°C)	m
			Tempera
			ture (°C)
Jan-15	235.4	13	35
Feb-15	54.2	16	33
Mar-15	122.4	11	35
Mar-15 Apr-15	122.4 422.2	11 12	35 27
Apr-15	422.2	12	27
Apr-15 May-15	422.2 138.4	12	27 26
Apr-15 May-15 Jun-15	422.2 138.4 90	12 8 6	27 26 23
Apr-15 May-15 Jun-15 Jul-15	422.2 138.4 90 20	12 8 6	27 26 23 20
Apr-15 May-15 Jun-15 Jul-15 Aug-15	422.2 138.4 90 20 32.6	12 8 6 3 3	27 26 23 20 27

