

Monthly Website Report



SITE:	Mannering Colliery
Department:	Technical Services
REPORT TITLE:	Monthly Environmental Report – January 2016
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Summary

Monitoring was undertaken in January 2016 with all results in compliance with the required limits.

Introduction

LakeCoal Pty Ltd (LakeCoal) operates the Mannering Colliery, an underground coal mine at the southern end of Lake Macquarie.

This monthly report is to satisfy the requirements of;

- section 66(6) of the Protection of the Environment Operations Act, 1997, to make monitoring data related to an Environment Protection Licence publically available and
- condition 7 & 10, schedule 5, of Development Approval 06_0311 (as modified) to provide details of monitoring results and environmental performance.

This report provides environmental monitoring data from Mannering Colliery for the period 1 January 2016 to 31 January 2016.

Environmental monitoring data is collected as required under Environment Protection Licence 191 (EPL 191).

Details of the Mannering Colliery and EPL 191 are provided below.

Mannering Colliery Information	
Premises name	Mannering Colliery
Address	Rutleys Road, Doyalson, NSW, 2262
Licensee	LakeCoal Pty Ltd
EPL #	191
EPL location	http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=50781&SYSUID=1&LICID=191

The overall purpose of this report is to keep stakeholders informed of the environmental monitoring results at Mannering Colliery and maintain a transparent and accountable reporting system.

Scope

This report presents the results from the various environmental monitoring undertaken for Mannering Colliery.

Results are presented for each specific month and annual data, averages and trends in data are shown to where relevant.

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;
- Air quality;
- Operational noise; and
- Weather data

Definitions

°C – degrees celsius

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

mm – millimetre

µS/cm – microsiemens per centimetre

References

Project Approval 06_0311 (as modified)

Environment Protection Licence 191 (Licence version date: 13 May 2015)

Steel River Testing - Dust Deposition Report – January 2016 (Ref 10431-0)

ALS Environmental - Monthly Water Monitoring Results – January 2016

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Monitoring Results

Water – Quality

Weekly Water Quality Results

Jan-16			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Period	01-Jan-16	to	31-Jan-16
Location	LDP001 (EPA ID # 1)		
Date sampled	Weekly		
Date reported	Refer report date		
Monitoring requirement	Weekly		
pH limit	6.5 - 8.5		
TSS limit (mg/L)	50		
Oil and grease limit (mg/L)	10		
Exceedance (Yes/No)	No		
Weekly Water Quality Results			
Date	pH	TSS (mg/L)	Oil and grease (mg/L)
07/01/2016	7.9	2	<5
13/01/2016	8.0	<1	<5
20/01/2016	8.0	4	<5
28/01/2016	8.0	4	<5
Notes: Monitoring undertaken weekly in accordance with EPL 191 requirements			

Monthly Water Quality Results

January 2016			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Date Sampled			
Date Obtained	21-Jan-16		
Date Reported	Refer report date		
Sampling Point	1		

Parameter	Units	Limit	Result
Aluminium (Dissolved)	µg/L		<100
Aluminium (Total)	µg/L		<100
Antimony	µg/L		<10
Arsenic (Dissolved)	µg/L		<10
Arsenic (Total)	µg/L		<10
Barium	µg/L		246
Beryllium (Dissolved)	µg/L		<10
Beryllium (Total)	µg/L		<10
Boron	µg/L		<500
Cadmium (Dissolved)	µg/L		<1.0
Cadmium (Total)	µg/L		<1.0
Calcium	mg/L		249
Chromium (Dissolved)	µg/L		<10
Chromium (Total)	µg/L		<10
Cobalt (Dissolved)	µg/L		<10
Cobalt (Total)	µg/L		<10
Conductivity	µs/cm		27600
Copper (Dissolved)	µg/L		<10
Copper (Total)	µg/L		<10
Iron	µg/L		<500
Lead (Total)	µg/L		<10
Lead (dissolved)	µg/L		<10
Lithium	µg/L		706
Magnesium	mg/L		286
Manganese (dissolved)	µg/L		26
Mercury (Total)	µg/L		<0.1
Mercury (dissolved)	µg/L		<0.1
Molybdenum (Dissolved)	µg/L		12
Molybdenum (Total)	µg/L		15
Nickel (Dissolved)	µg/L		<10
Nickel (Total)	µg/L		<10
Nitrogen (Ammonia)	mg/L		0.78
Phosphorous (Total)	mg/L		<0.01
Potassium	mg/L		31
Selenium (Dissolved)	µg/L		<100
Selenium (Total)	µg/L		<100
Silica	mg/L		12.3
Silver (Total)	µg/L		<10
Silver (dissolved)	µg/L		<10
Sulfur	mg/L		555
Tin (Total)	µg/L		<10
Titanium (Total)	µg/L		<100
Vanadium (Dissolved)	µg/L		<100
Vanadium (Total)	µg/L		<100
Zinc (Dissolved)	µg/L		<50
Zinc (Total)	µg/L		<50

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Water – Volume

January 2016		
EPL	191	
Licensee	LakeCoal Pty Ltd	
Premises	Mannering Colliery	
Date Sampled	Daily	
Date Reported	Refer report date	
Discharge volume limit	4000 kilolitres per day	
Sampling Point	LDP001 (EPA ID # 1)	
Date (24 hour period)	Unit	Volume
01/01/2016	kL	264
02/01/2016	kL	0
03/01/2016	kL	0
04/01/2016	kL	1010
05/01/2016	kL	2031
06/01/2016	kL	4214
07/01/2016	kL	2546
08/01/2016	kL	2069
09/01/2016	kL	0
10/01/2016	kL	0
11/01/2016	kL	1003
12/01/2016	kL	2190
13/01/2016	kL	1576
14/01/2016	kL	2376
15/01/2016	kL	676
16/01/2016	kL	0
17/01/2016	kL	0
18/01/2016	kL	2025
19/01/2016	kL	2355
20/01/2016	kL	1621
21/01/2016	kL	1361
22/01/2016	kL	312
23/01/2016	kL	0
24/01/2016	kL	0
25/01/2016	kL	0
26/01/2016	kL	0
27/01/2016	kL	909
28/01/2016	kL	17
29/01/2016	kL	245
30/01/2016	kL	0
31/01/2016	kL	0

Note: Value of 4214kl discharged on 06/01/16 is not a non compliance as the rainfall exemption has been applied in accordance with the EPL.

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Air Quality

Monthly depositional dust results

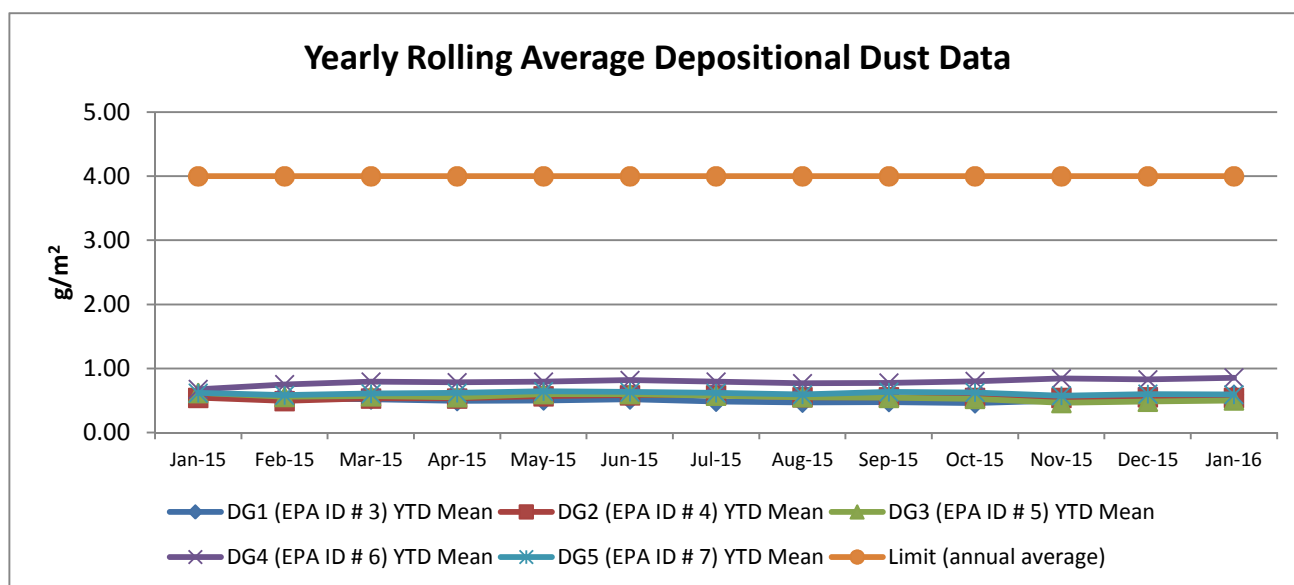
Monthly Depositional Dust Data			
January 2016			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Date Sampled	11-Dec-15	to	12-Jan-16
Date Obtained	21-Jan-16		
Date Reported	Refer report date		
Sampling Point	As per site below		

Site	Insoluble Matter (g/m2/month)
DG1 (EPA ID # 3)	1.2
DG2 (EPA ID # 4)	0.6
DG3 (EPA ID # 5)	0.7
DG4 (EPA ID # 6)	1.0
DG5 (EPA ID # 7)	0.6

Notes:

- For site locations refer to Air Quality Management Plan
- DG4 contaminated with bird droppings as identified on field

Rolling annual average depositional dust results



Operational Noise

Q4 noise monitoring undertaken in December 2015. No non compliances identified from the attended monitoring. Results will be published once report has been finalised.

Weather

A summary of weather data recorded by an on-site meteorological monitoring station at the Colliery is presented below for the year to date.

Monthly Weather Data			
Jan-16			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Location	W1 (on-site weather station)		
Date published:	Refer report date		
Date sampled:	Daily		
Date obtained:	09/02/2016		
Month	Total Rainfall / Month (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
Jan-15	235.4	13	35
Feb-15	54.2	16	33
Mar-15	122.4	11	35
Apr-15	422.2	12	27
May-15	138.4	8	26
Jun-15	90	6	23
Jul-15	20	3	20
Aug-15	32.6	3	27
Sep-15	112.8	7	28
Oct-15	52.4	19.6	36
Nov-15	110.4	24.8	41
Dec-15	166.8	12.8	37
Jan-16	329	14.3	39.5

