

Monthly Website Report



SITE:	Mannering Colliery
Department:	Technical Services
REPORT TITLE:	Monthly Environmental Report – July 2017
Prepared by:	Wade Covey
Report Date:	14/08/2017
Distribution:	Mannering Colliery Website

Report

Title: **Mannering Colliery Monthly Environmental Report**

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Summary

Monitoring was undertaken in July 2017 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 Environmental 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 July 2017 to 31 July 2017.

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.

Report

Title:

Manning Colliery Monthly Environmental Report

Scope

This report presents the results from the various environmental monitoring undertaken for Manning 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 – July 2017 Report

Steel River Testing – Water Analysis Report – July 2017 Report No: 14060-0

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Monitoring Results

Water – Quality

Water Quality Results (reverted to weekly as per EPL PRP requirements)

July 2017			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Period	01-Jul-17	to	31-Jul-17
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		
Water Quality Results			
Date	pH	TSS (mg/L)	Oil and grease (mg/L)
01/07/2017			
02/07/2017			
03/07/2017			
04/07/2017	8.0	1	<5
05/07/2017			
06/07/2017			
07/07/2017			
08/07/2017			
09/07/2017			
10/07/2017			
11/07/2017			
12/07/2017	7.6	2	<5
13/07/2017			
14/07/2017			
15/07/2017			
16/07/2017			
17/07/2017			
18/07/2017			
19/07/2017			
20/07/2017	7.4	1	<5
21/07/2017			
22/07/2017			
23/07/2017			
24/07/2017			
25/07/2017			
26/07/2017			
27/07/2017			
28/07/2017	8.1	3	<5
29/07/2017			
30/07/2017			
31/07/2017			

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Water – Volume

July 2017		
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
01/07/2017	kL	0
02/07/2017	kL	0
03/07/2017	kL	989
04/07/2017	kL	1264
05/07/2017	kL	1296
06/07/2017	kL	1151
07/07/2017	kL	997
08/07/2017	kL	0
09/07/2017	kL	0
10/07/2017	kL	1121
11/07/2017	kL	1763
12/07/2017	kL	1761
13/07/2017	kL	1706
14/07/2017	kL	207
15/07/2017	kL	0
16/07/2017	kL	0
17/07/2017	kL	1132
18/07/2017	kL	1758
19/07/2017	kL	1708
20/07/2017	kL	1338
21/07/2017	kL	796
22/07/2017	kL	0
23/07/2017	kL	0
24/07/2017	kL	1082
25/07/2017	kL	1725
26/07/2017	kL	1648
27/07/2017	kL	1024
28/07/2017	kL	1707
29/07/2017	kL	1769
30/07/2017	kL	1766
31/07/2017	kL	702

Report

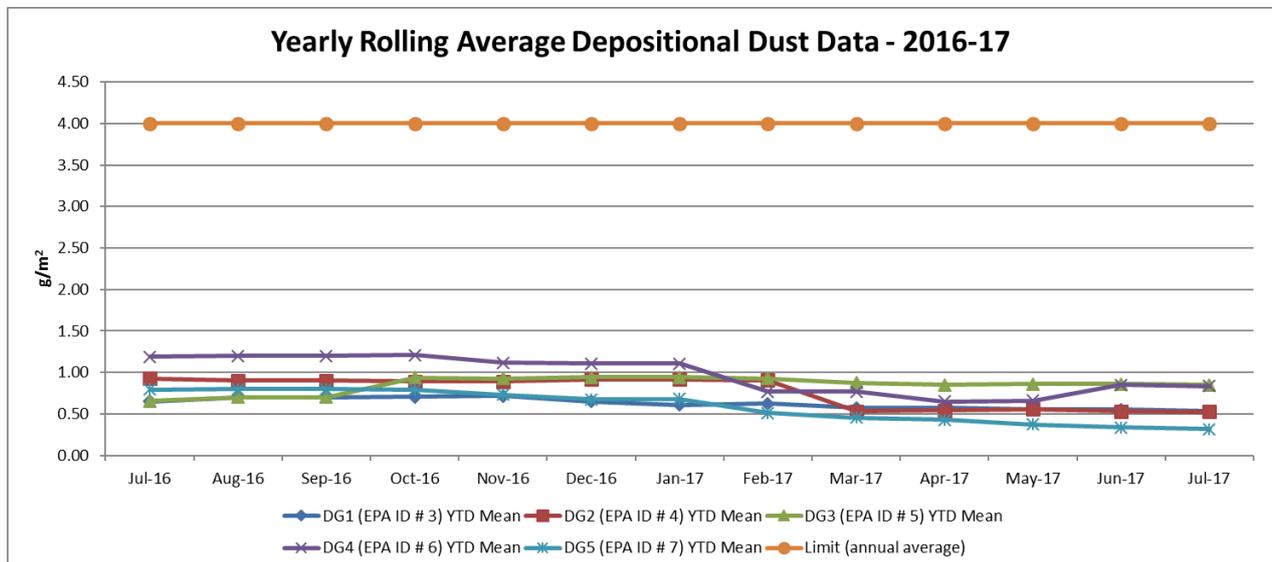
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Air Quality

Monthly depositional dust results

Monthly Depositional Dust Data			
July 2017			
EPL	191		
Licensee	LakeCoal Pty Ltd		
Premises	Mannering Colliery		
Date Sampled	13-Jun-17	to	14-Jul-17
Date Obtained	18-Jul-17		
Date Reported	Refer report date		
Sampling Point	As per site below		
Site	Insoluble Matter (g/m2/month)		
DG1 (EPA ID # 3)	0.2		
DG2 (EPA ID # 4)	0.2		
DG3 (EPA ID # 5)	0.3		
DG4 (EPA ID # 6)	0.3		
DG5 (EPA ID # 7)	0.2		
Notes:			
- For site locations refer to Air Quality Management Plan			

Rolling annual average depositional dust results



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Operational Noise

The July noise reports have been finalised. Find below the July noise monitoring report excerpts regarding noise levels against noise impact criteria.

L_{A1}^{1m} – Generated by MC Against Operational Noise Impact Assessment Criteria

Location	Start Date and Time	Wind Speed (m/s)	VTG (°C / 100m) ¹	L_{Aeq} Criteria (dB)	Criteria Applies? ²	MC L_{Aeq} (dB) ³	Exceedance (dB) ^{4,5}
RA1	24/07/2017 22:00	2.8	-2.0	49	Yes	IA	Nil
RA2	24/07/2017 22:22	2.2	-2.0	47	Yes	NM	Nil
RA3	24/07/2017 22:43	3.5	-2.0	49	No	IA	NA

Notes:

1. *Sigma theta data is used to calculate Vertical Temperature Gradient (VTG) in accordance with procedures detailed in the INP;*
2. *In accordance with Appendix 4A of the Approval, noise emission limits do not apply for wind speeds greater than 3m/s at 10 metres above ground level; stability category F temperature inversion conditions and wind speeds greater than 2m/s at 10m above ground level; or stability category G temperature inversion conditions;*
3. *These are results for MC in the absence of all other noise sources;*
4. *Bold results in red are those greater than the relevant criterion (if applicable); and*
5. *NA in exceedance column means atmospheric conditions outside conditions specified in Approval and so criterion is not applicable.*

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L_{Aeq}^{15m} – Generated by MC Against Operational Noise Impact Criteria

Location	Start Date and Time	Wind Speed (m/s)	VTG (°C / 100m) ¹	L_{Aeq} Criteria (dB)	Criteria Applies? ²	MC L_{Aeq} (dB) ³	Exceedance (dB) ^{4,5}
Day							
RA1	25/07/2017 11:08	0.8	3.0	42	Yes	IA	Nil
RA2	25/07/2017 11:32	0.4	3.0	39	Yes	IA	Nil
RA3	25/07/2017 11:54	0.2	3.0	39	Yes	IA	Nil
Evening							
RA1	24/07/2017 20:17	3.0	-2.0	42	Yes	IA	Nil
RA2	24/07/2017 20:41	3.0	-2.0	39	Yes	IA	Nil
RA3	24/07/2017 21:03	2.4	-1.8	39	Yes	IA	Nil
Night							
RA1	24/07/2017 22:00	2.8	-2.0	41	Yes	IA	Nil
RA2	24/07/2017 22:22	2.2	-2.0	39	Yes	NM	Nil
RA3	24/07/2017 22:43	3.5	-2.0	39	No	IA	NA

Notes:

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3. *These are results for MC in the absence of all other noise sources;*
4. *Bold results in red are those greater than the relevant criterion (if applicable); and*
5. *NA in exceedance column means atmospheric conditions outside conditions specified in Approval and so criterion is not applicable.*

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.

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Monthly Weather Data			
2016/17			
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:	11/07/2017		
Month	Total Rainfall / Month (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
Feb-16	17.4	16.4	37.7
Mar-16	92.2	14.3	30.1
Apr-16	36.2	12.1	33.5
May-16	46.6	5.3	27.8
Jun-16	248.2	3.4	21.4
Jul-16	73.2	2.5	25
Aug-16	115	4.5	24.3
Sep-16	68	7.4	24.2
Oct-16	61	7.3	33.3
Nov-16	46.8	10.9	35.2
Dec-16	85.2	14.5	38.9
Jan-17	68.6	17.4	40.1
Feb-17	141.2	13.1	39
Mar-17	404	14.5	31.9
Apr-17	85.6	17.4	24.8
May-17	34.8	11.5	24.8
Jun-17	169.2	5.1	19.9
Jul-17	5.6	3.9	24