Monthly Website Report



SITE:	Mannering Colliery
Department:	Technical Services
REPORT TITLE:	Monthly Environmental Report – August 2017
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Title:

Mannering Colliery Monthly Environmental Report

Summary

Monitoring was undertaken in August 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 August 2017 to 31 August 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=5078 1&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.

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Mannering Colliery Monthly Environmental Report

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_{Aea} – 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 - August 2017

Steel River Testing – Water Analysis Report – August 2017

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Mannering Colliery Monthly Environmental Report

Monitoring Results

Water – Quality

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

	August 204	17	
EPL	August 201	1	
Licensee			
Premises	LakeCoal Pty Ltd		
Period Period	Mannering Colliery		21 A 17
	01-Aug-17	to	31-Aug-17
Location	LDP001 (EPA ID # 1)		
Date sampled Date reported	Weekly		
•	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 R		
		TSS	Oil and grease
Date	pH	(mg/L)	(mg/L)
01/08/2017	7.0	_	
02/08/2017	7.8	5	<5
03/08/2017			
04/08/2017			
05/08/2017			
06/08/2017			
07/08/2017			
08/08/2017			
09/08/2017	7.6	<1	<5
10/08/2017			
11/08/2017			
12/08/2017			
13/08/2017			
14/08/2017			
15/08/2017			
16/08/2017	7.5	3	<5
17/08/2017			
18/08/2017			
19/08/2017			
20/08/2017			
21/08/2017			
22/08/2017			
23/08/2017	7.3	1	<5
24/08/2017			
25/08/2017			
26/08/2017			
27/08/2017			
28/08/2017			
29/08/2017			
30/08/2017			
31/08/2017			

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Mannering Colliery Monthly Environmental Report

Water - Volume

	August 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
01/08/2017	kL	1329
02/08/2017	kL	1444
03/08/2017	kL	1205
04/08/2017	kL	1041
05/08/2017		
	kL	1220
06/08/2017	kL	1754
07/08/2017	kL	1245
08/08/2017	kL	2035
09/08/2017	kL	1099
10/08/2017	kL	1153
11/08/2017	kL	875
12/08/2017	kL	545
13/08/2017	kL	1368
14/08/2017	kL	1095
15/08/2017	kL	333
16/08/2017	kL	990
17/08/2017	kL	1486
18/08/2017	kL	1250
19/08/2017	kL	527
20/08/2017	kL	673
21/08/2017	kL	819
22/08/2017	kL	1623
23/08/2017	kL	53
24/08/2017	kL	978
25/08/2017	kL	506
26/08/2017	kL	1731
27/08/2017	kL	269
28/08/2017	kL	1011
29/08/2017	kL	872
30/08/2017	kL	948
31/08/2017	kL	1204

Title:

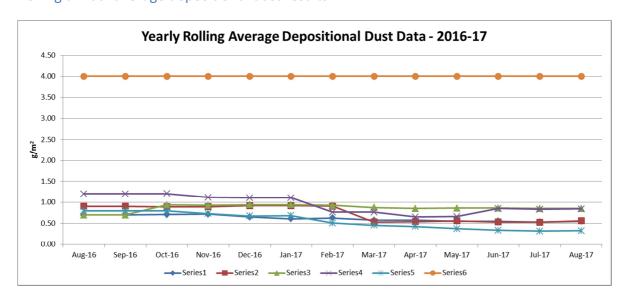
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Air Quality

Monthly depositional dust results

M	onthly Depositio	nal Dust Data				
	August 2	017				
EPL 191						
Licensee	LakeCoal Pt	y Ltd				
Premises	Mannering	Colliery				
Date Sampled	14-Jul-17	to	14-Aug-17			
Date Obtained	06-Sep-17					
Date Reported	Refer repor	t date				
Sampling Point	As per site	below				
Site	Insoluble N	/latter (g/m/	2/month)			
DG1 (EPA ID # 3)	0.5	0.5				
DG2 (EPA ID # 4)	0.7	0.7				
DG3 (EPA ID # 5)	0.6	0.6				
DG4 (EPA ID # 6)	0.5	0.5				
DG5 (EPA ID # 7) 0.4						
Notes:						
	fer to Air Quality		. 51			

Rolling annual average depositional dust results



Operational Noise

The August noise reports have been finalised. No exceedances of noise levels for the month.

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

Start Date and Time	Wind Speed (m/s)	VTG (°C/100m) ¹	L _{Aeq} Criteria (dB)	Criteria Applies? ²	MC LAeq (dB) ³	Exceedance (dB) ^{4,5}
22/08/2017 23:26	0.1	3.0	49	Yes	NM	Nil
23/08/2017 01:50	0.2	3.0	47	Yes	39	Nil
22/08/2017 22:57	0.1	3.0	49	Yes	NM	Nil
	and Time 22/08/2017 23:26 23/08/2017 01:50	and Time (m/s) 22/08/2017 23:26 0.1 23/08/2017 01:50 0.2	and Time (m/s) (°C/100m)¹ 22/08/2017 23:26 0.1 3.0 23/08/2017 01:50 0.2 3.0	and Time (m/s) (°C/100m)¹ Req (dB) 22/08/2017 23:26 0.1 3.0 49 23/08/2017 01:50 0.2 3.0 47	and Time (m/s) (°C/100m)¹ Req (dB) Applies?² 22/08/2017 23:26 0.1 3.0 49 Yes 23/08/2017 01:50 0.2 3.0 47 Yes	and Time (m/s) (°C/100m)¹ (dB) Applies?² (dB)³ 22/08/2017 23:26 0.1 3.0 49 Yes NM 23/08/2017 01:50 0.2 3.0 47 Yes 39

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 LAeq (dB) ³	Exceedance (dB) ^{4,5}
			Day	ii.			
RA1	29/08/2017 14:46	1.6	-2.0	42	Yes	IA	Nil
RA2	29/08/2017 15:08	2.1	-2.0	39	Yes	IA	Nil
RA3	29/08/2017 15:28	1.3	-2.0	39	Yes	IA	Nil
			Eveni	ng			
RA1	22/08/2017 21:03	0.4	0.5	42	Yes	IA	Nil
RA2	22/08/2017 18:57	0.4	3.0	39	Yes	NM	Nil
RA3	22/08/2017 19:21	0.4	0.5	39	Yes	IA	Nil
			Nigh	t			
RA1	22/08/2017 23:26	0.1	3.0	41	Yes	NM	Nil
RA2	23/08/2017 01:50	0.2	3.0	39	Yes	31	Nil
RA3	22/08/2017 22:57	0.1	3.0	39	Yes	NM	Nil

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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Mannering Colliery Monthly Environmental Report

Monthly Weather Data			
2017			
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:	11/09/2017		
Month	Total Rainfall / Month (mm)	Minimum Temperature (oC)	Maximum Temperature (oC)
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
Aug-17	14	4.7	28.2
Sep-17			
Oct-17			
Nov-17			
Dec-17			