MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: [January 2015]
Publication Date: [April 2015]

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 23rd December 2014 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	1	28/01/2015	6/02/2015				122
	Conductivity	µs/cm		1	28/01/2015	6/02/2015				328
	Oil & Grease	mg/L		1	28/01/2015	6/02/2015				<5
	pH	pH		1	28/01/2015	6/02/2015				7.7
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	28/01/2015	6/02/2015				82
	Conductivity	µs/cm		0	28/01/2015	6/02/2015				904
	Oil & Grease	mg/L		0	28/01/2015	6/02/2015				<5
	pH	pH		0	28/01/2015	6/02/2015				7.67
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
12 (Mine Void)	TSS	mg/L	Every 2 months	Next sample event due February 2015					
	Conductivity	µs/cm							
	Oil & Grease	mg/L							
	pH	pH							

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
13 (RB01a)	pH	pH	Quarterly		Next sample event due March 2015				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Day	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather	Exceedance (Yes / No)
NM1	*30/01/2015*	*11:46:00*	*3.8*	*IA*			*35*			*0*	*NA*
NM1	29/01/2015	21:18:00	1.3		23		35			0	Nil
NM1	29/01/2015	22:30:00	0.2			29	35	40	45	0	Nil
NM2	30/01/2015	10:48:00	2.6	IA			35			0	Nil
NM2	29/01/2015	20:22:00	1.4		24		39			0	Nil
NM2	29/01/2015	22:59:00	0.4			28	39	34	45	0	Nil
NM3	30/01/2015	10:15:00	2.5	IA			35			0	Nil
NM3	29/01/2015	19:26:00	2.4		20		35			0	Nil
NM3	30/01/2015	0:24:00	0.9			22	35	28	45	0	Nil
NM4	*30/01/2015*	*11:18:00*	*4.1*	*IA*			*35*			*0*	*NA*
NM4	29/01/2015	20:48:00	0.5		23		35			0	Nil
NM4	29/01/2015	23:28:00	0.5			29	35	35	45	0	Nil
NM5	*30/01/2015*	*12:11:00*	*4.5*	*IA*			*35*			*0*	*NA*
NM5	29/01/2015	21:43:00	0.3		<20		35			0	Nil
NM5	29/01/2015	22:05:00	0.3			23	35	30	45	0	Nil
Cooboobindi	30/01/2015	9:48:00	1.8	24			45			0	Nil
NM6	29/01/2015	19:54:00	1.3		IA		35			0	Nil
NM6	29/01/2015	23:55:00	0.2			20	35	24	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***Evening / Night Leq & Night LA1 monitoring was conducted on the 30th January 2015.
****ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	3	100.41	108.1	120	No
	Vibration	mm/s		3	0.39	0.69	10	No

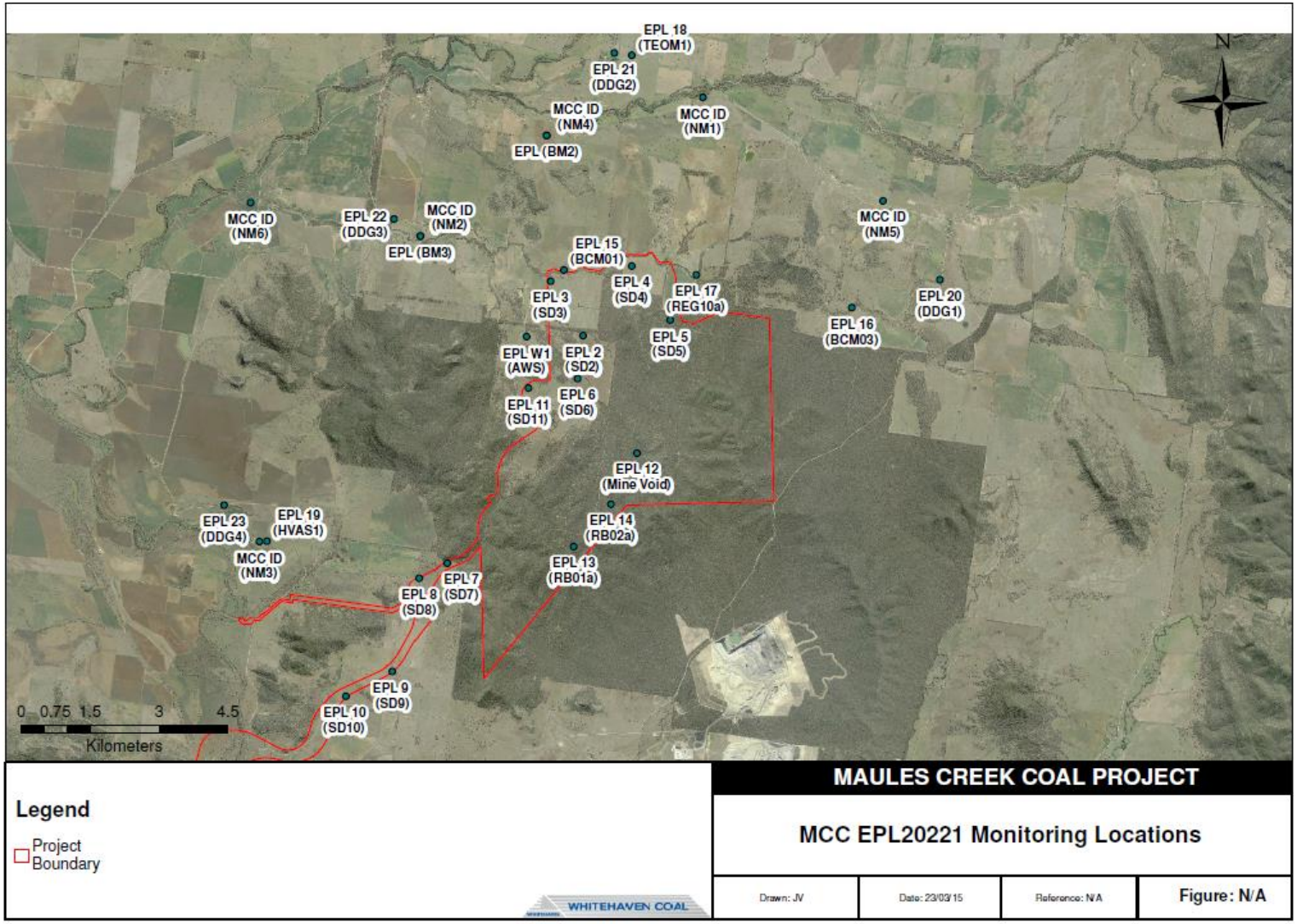
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	8.1	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	14.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.7	4	No
21 (DDG2)	Monthly	**g/m² month**	1.7	4	No
22 (DDG3)	Monthly	**g/m² month**	1.4	4	No
23 (DDG4)	Monthly	**g/m² month**	1.5	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: [February 2015]
Publication Date: [April 2015]

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 23rd December 2014 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
12 (Mine Void)	TSS	mg/L	Every 2 months	2	27/02/2015	09/03/2015	<5	7	9
	Conductivity	µs/cm		2	27/02/2015	09/03/2015	612	1496	2380
	Oil & Grease	mg/L		2	27/02/2015	09/03/2015	<5	<5	<5
	pH	pH		2	27/02/2015	09/03/2015	8.19	8.29	8.39

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
13 (RB01a)	pH	pH	Quarterly		Next sample event due March 2015				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather	Exceedance (Yes / No)
NM1	23/02/2015	20:29:00	2.4	<20		35			0	Nil
NM1	23/02/2015	22:29:00	2.7		IA	35	IA	45	0	Nil
NM2	23/02/2015	19:27:00	2.6	23		39			0	Nil
NM2	*23/02/2015*	*23:24:00*	*4.1*		*<25*	*39*	*29*	*45*	*0*	*NA*
NM3	23/02/2015	18:31:00	1.7	IA		35			0	Nil
NM3 [1]	*24/02/2015*	*0:20:00*	*5.1*		*<20*	*35*	*<25*	*45*	*0*	*NA*
NM4 [2]	23/02/2015	19:58:00	2.5	<25		35			0	Nil
NM4	*23/02/2015*	*22:56:00*	*3.7*		*IA*	*35*	*IA*	*45*	*0*	*NA*
NM5	*23/02/2015*	*20:58:00*	*4.5*	*IA*		*35*			*0*	*NA*
NM5	23/02/2015	22:02:00	2.8		IA	35	IA	45	0	Nil
NM6	23/02/2015	18:59:00	1.7	IA		35			0	Nil
NM6	*23/02/2015*	*23:53:00*	*4.1*		*IA*	*35*	*IA*	*45*	*0*	*NA*

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***Evening / Night Leq & Night LA1 monitoring was conducted on the 23rd February 2015.
****ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.
1 MCC contribution measured at Olivedene due to interference from birds and wind at NM3 and has been adjusted for distance loss.
2 Met data for this measurement was unavailable. The nearest available met data was used instead.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	6	99.75	111.9	120	No
	Vibration	mm/s		6	0.26	0.56	10	No

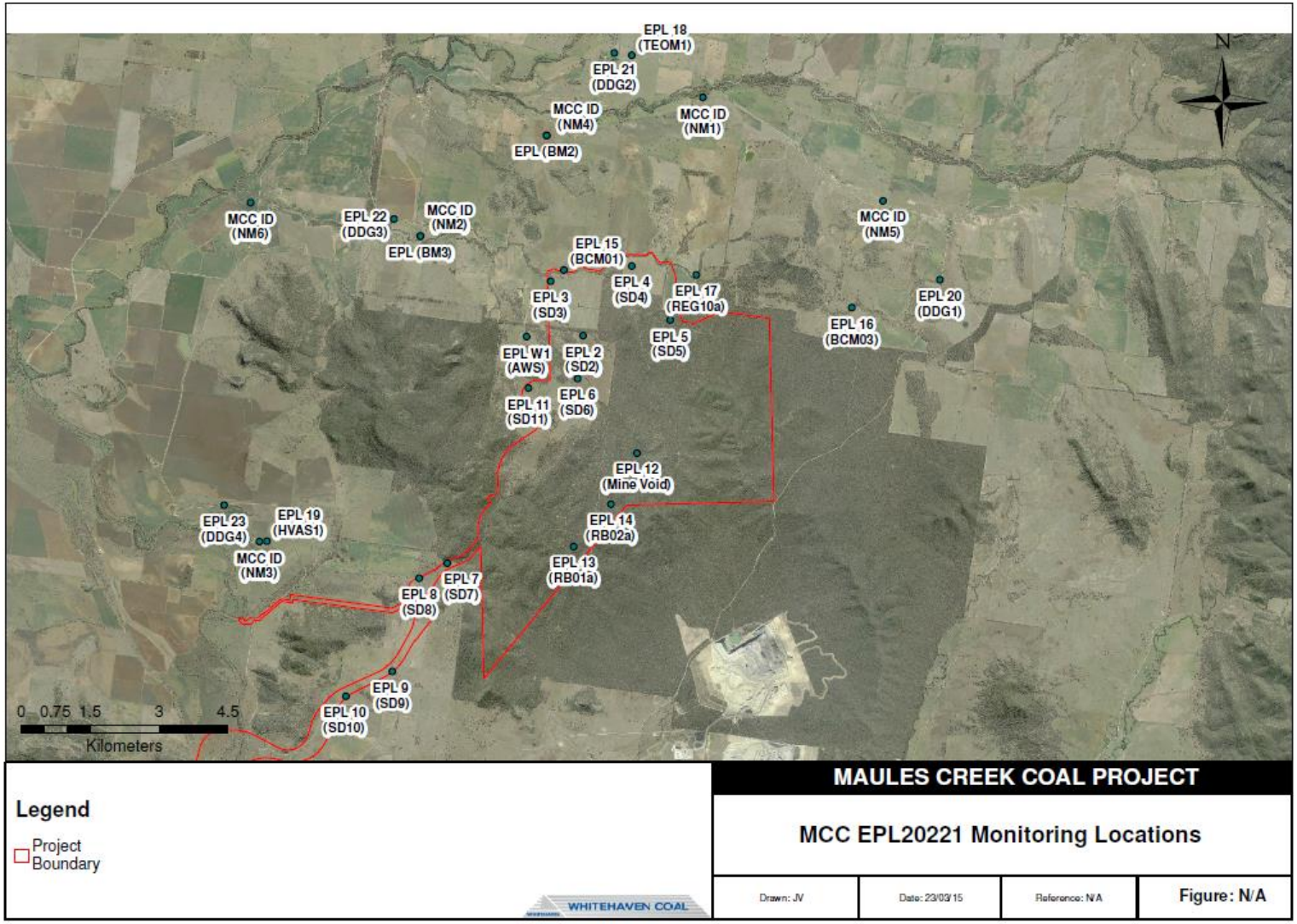
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	8.8	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	14.9	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.7	4	No
21 (DDG2)	Monthly	**g/m² month**	1.6	4	No
22 (DDG3)	Monthly	**g/m² month**	1.4	4	No
23 (DDG4)	Monthly	**g/m² month**	1.6	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: [March 2015]
Publication Date: [April 2015]

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 23rd December 2014 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
12 (Mine Void)	TSS	mg/L	Every 2 months	0	Next sample event due April 2015				
	Conductivity	µs/cm		0					
	Oil & Grease	mg/L		0					
	pH	pH		0					

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
13 (RB01a)	pH	pH	Quarterly	Sandy water column	Next sample event due June 2015				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly	Sandy water column					
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly	Dry					
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	Dry					
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	Dry					
	Conductivity	µs/cm							
	TDS	mg/L							

Groundwater monitoring occurred on the 18th March 2015.
Bores EPL ID 13 & 14, are 220 & 234 meters deep respectively. No analysis due to sandy water columns.
Bores EPL ID 15, 16 & 17, are each 10meters.

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather	Exceedance (Yes / No)
NM1	29/03/2015	23:48:00	0.5		<30	35			0	Nil
NM1	30/03/2015	19:54:00	2.1	<20		35	<30	45	0	Nil
NM1	30/03/2015	20:09:00	2.2	<20		35			0	Nil
NM1	30/03/2015	20:26:00	1.3	<20		35			0	Nil
NM2	29/03/2015	21:46:00	0.7	<20		39			0	Nil
NM2	29/03/2015	22:02:00	0.5		<20	39	23	45	0	Nil
NM2	29/03/2015	22:17:00	0.6		<20	39			0	Nil
NM2	30/03/2015	21:40:00	1.6	<20		39			0	Nil
NM3	29/03/2015	19:09:00	0.4	IA		35			0	Nil
NM3	29/03/2015	19:24:00	0.5	IA		35	IA	45	0	Nil
NM3	29/03/2015	19:39:00	0.1	IA		35			0	Nil
NM3	30/03/2015	22:40:00	0.5		IA	35			0	Nil
NM4	29/03/2015	22:46:00	0.7		<20	35			0	Nil
NM4	29/03/2015	23:02:00	0.2		<20	35	25	45	0	Nil
NM4	29/03/2015	23:17:00	0.5	<20	<20	35			0	Nil
NM4	30/03/2015	21:14:00	1.1	<20		35			0	Nil
NM5	30/03/2015	0:14:00	1.3		<20	35			0	Nil
NM5	30/03/2015	18:57:00	1	<20		35	<20	45	0	Nil
NM5	30/03/2015	19:12:00	1.5	<20		35			0	Nil
NM5	30/03/2015	19:27:00	2	<20		35			0	Nil
NM6	29/03/2015	20:11:00	0.4	IA		35			0	Nil
NM6	29/03/2015	20:27:00	0.8	IA		35	23	45	0	Nil
NM6	29/03/2015	20:43:00	1.1	IA		35			0	Nil
NM6	30/03/2015	22:10:00	1.2		<20	35			0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***Evening / Night Leq & Night LA1 monitoring was conducted on the 29th & 30th March 2015.
****ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	8	99.43	108.5	120	No
	Vibration	mm/s		8	0.27	0.78	10	No

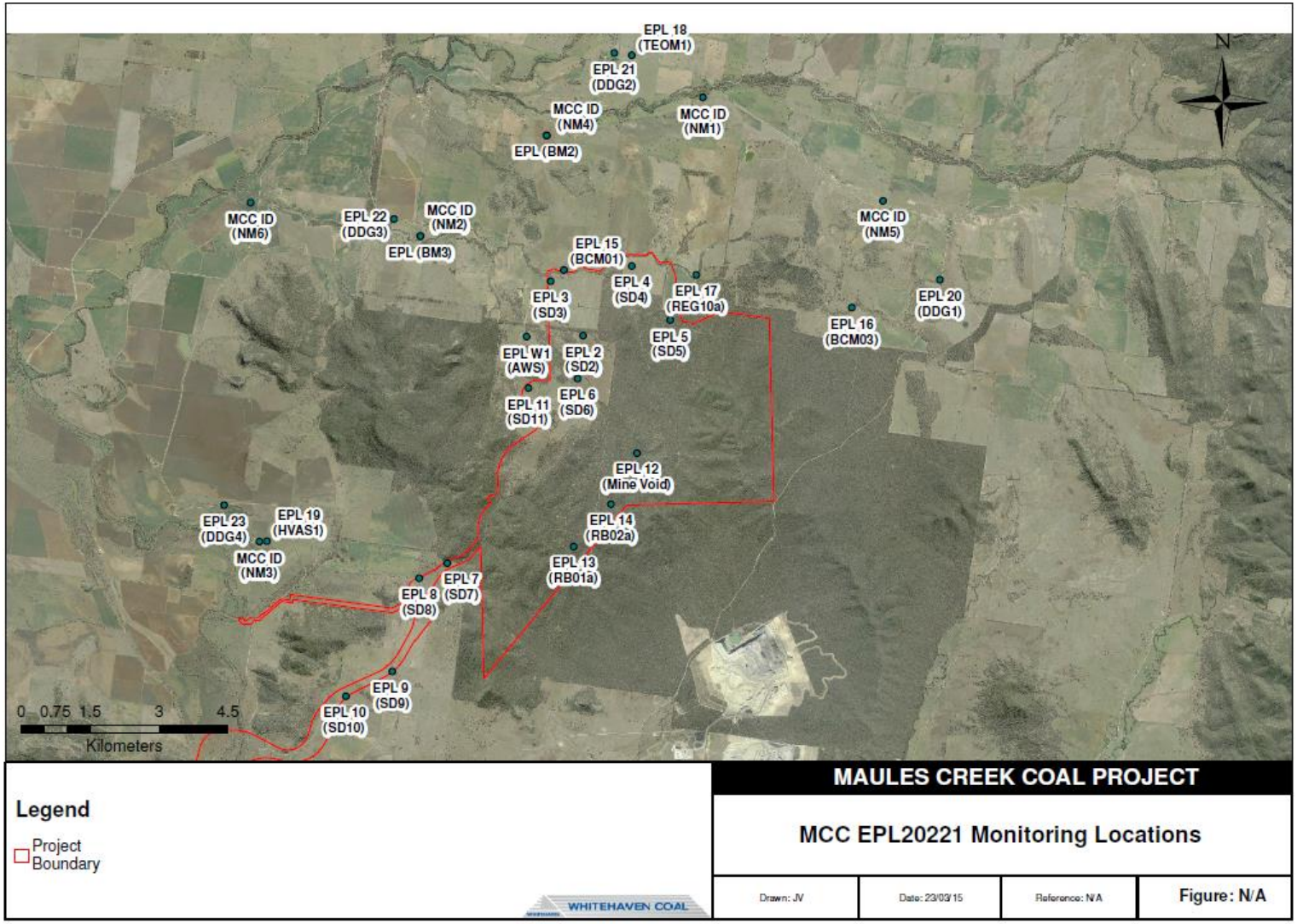
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	10.0	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	15.4	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.6	4	No
21 (DDG2)	Monthly	**g/m² month**	1.3	4	No
22 (DDG3)	Monthly	**g/m² month**	1.6	4	No
23 (DDG4)	Monthly	**g/m² month**	1.6	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: April 2015
Publication Date: 28 May 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 23rd December 2014 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months	1	22/04/2015	30/04/2015			<5
	Conductivity	µs/cm		1	22/04/2015	30/04/2015			946
	Oil & Grease	mg/L		1	22/04/2015	30/04/2015			<5
	pH	pH		1	22/04/2015	30/04/2015			8.07

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max
13 (RB01a)	pH	pH	Quarterly	Sandy water column	Next sample event due June 2015				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly	Sandy water column					
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly	Dry					
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	Dry					
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	Dry					
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather	Exceedance (Yes / No)
NM1	**22/04/2015**	**23:15:00**	**0.4**		**36**	**35**			**0**	**1[(1)]**
NM1	22/04/2015	23:33:00	0.4		32	35	42	45	0	Nil
NM1	23/04/2015	20:15:00	1	27		35			0	Nil
NM1	23/04/2015	20:32:00	1.2	27		35			0	Nil
NM2	22/04/2015	21:45:00	0.3	<20		39			0	Nil
NM2	22/04/2015	22:02:00	0.6		23	39	27	45	0	Nil
NM2	23/04/2015	21:43:00	0.5	IA		39			0	Nil
NM2	23/04/2015	21:58:00	0.9	IA		39			0	Nil
NM3	22/04/2015	20:17:00	0.3	20		35			0	Nil
NM3	22/04/2015	20:32:00	0.3	22		35	25	45	0	Nil
NM3	23/04/2015	23:09:00	0.5		23	35			0	Nil
NM3	23/04/2015	23:25:00	0.8		23	35			0	Nil
NM4	22/04/2015	22:31:00	0.5		29	35			0	Nil
NM4	22/04/2015	22:46:00	0.3		27	35	44	45	0	Nil
NM4	23/04/2015	20:59:00	1.2	<20		35			0	Nil
NM4	23/04/2015	21:14:00	0.4	<20		35			0	Nil
NM5	22/04/2015	23:59:00	0.4		23	35			0	Nil
NM5	23/04/2015	0:15:00	0.3		23	35	30	45	0	Nil
NM5	23/04/2015	19:35:00	1.1	25		35			0	Nil
NM5	23/04/2015	19:51:00	0.4	29		35			0	Nil
NM6	22/04/2015	21:02:00	0.4	<20		35			0	Nil
NM6	22/04/2015	21:18:00	0.5	<20		35	IA	45	0	Nil
NM6	23/04/2015	22:25:00	0.5		IA	35			0	Nil
NM6	23/04/2015	22:41:00	0.2		IA	35			0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

---

(1) There was a 1 dB exceedance of the LAeq,15minute criterion at NM1 on 22 April 2015. A continuum, exhaust and engine noise from MCC was responsible for the 'site only' LAeq of 36 dB. An exceedance of up to 2 dB is not considered significant as Chapter 11 of the NSW Industrial Noise Policy deems a development to be in non-compliance only when "the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition." This is based on the fact that 2 dB is less than that change in loudness, 3 dB, where the difference is just perceptible to the normal ear (Bies and Hansen, 1988). This was reported to the EPA in accordance with the Maules Creek, Noise Management Plan.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	7	98.10	104.50	120	No
	Vibration	mm/s		7	0.28	0.87	10	No

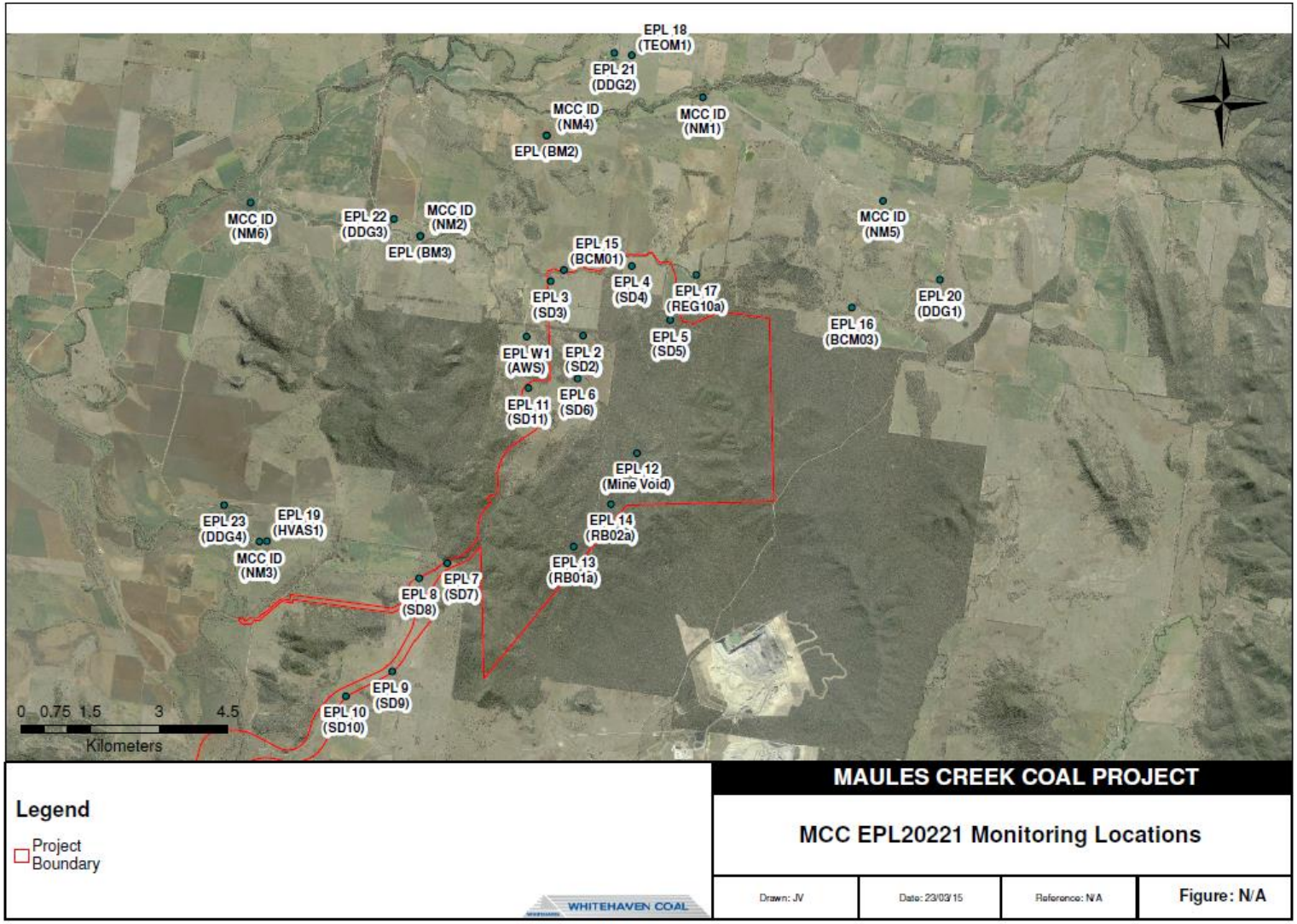
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	10.4	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	14.7	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.7	4	No
21 (DDG2)	Monthly	**g/m² month**	3.0	4	No
22 (DDG3)	Monthly	**g/m² month**	1.7	4	No
23 (DDG4)	Monthly	**g/m² month**	1.7	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: May 2014

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 5th February 2014 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
SD1	TSS	mg/L	Special Frequency Discharge only	0	No discharge event this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD2	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD3	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD4	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD5	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD6	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD7	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD8 (a)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
SD8 (b)	TSS	mg/L	Special Frequency Discharge only	0	No discharge events this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD8 (c)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
SD8 (d)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Day	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit (dB)	Weather	Exceedance (Yes / No)
NM1	15/05/2014	11:26	2.8	IA*				40	No rain	No
NM2	15/05/2014	10:26	2.4	IA				40	No rain	No
NM3	15/05/2014	09:48	2.8	29				40	No rain	No
NM4	15/05/2014	10:57	2.7	IA				40	No rain	No
NM5	15/05/2014	11:53	1.6	IA				40	No rain	No
Gooboobindi	15/05/2014	09:13	2.1	35				45	No rain	No

* IA = Inaudible

**MCC ID = Locations as per the approved Noise Management Plan.

Table 3 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Construction Blasts*	Noise	Db (Lin Peak)	All	16	94	106	120	No
	Vibration	mm/s		16	<0.5	<0.5	10	No

* Monitoring devices used were set at trigger levels of 88Db and 0.5mm/s.

** Only 3 of the 16 blast events triggered a reading at the blast monitoring units.

Figure

Figure 1 – EPL 20221 Monitoring Locations

MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: June 2015 (V3)
Publication Date: Republished December 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 23rd December 2014 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months	1	24/06/2015	14/07/2015			<5
	Conductivity	µs/cm		1	24/06/2015	14/07/2015			722
	Oil & Grease	mg/L		1	24/06/2015	14/07/2015			<5
	pH	pH		1	24/06/2015	14/07/2015			8.08

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly	1	29/06/2015	14/07/2015			9.26
	Conductivity	µs/cm							999
	TDS	mg/L							546
14 (RB02a)	pH	pH	Quarterly	1	29/06/2015	14/07/2015			11.6
	Conductivity	µs/cm							1330
	TDS	mg/L							493
15 (BCM01)	pH	pH	Quarterly	0	29/06/2015	Bore dry since installation			
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	29/06/2015	Bore dry since installation			
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	0	29/06/2015	Bore dry since installation			
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	18/06/2015	20:15:00	1.8	IA		35			0	No
NM1	18/06/2015	20:30:00	1.0	IA		35			0	No
NM1	19/06/2015	23:24:00	1.1		28	35	35	45	0	No
NM1	19/06/2015	23:58:00	0.2		29	35	34	45	0	No
NM2	18/06/2015	22:24:00	1.3		IA	39	IA	45	0	No
NM2	18/06/2015	22:41:00	1.7		IA	39	IA	45	0	No
NM2	19/06/2015	21:28:00	0.4	36		39			0	No
NM2	19/06/2015	21:47:00	0.3	35		39			0	No
NM3	19/06/2015	0:02:00	0.8		IA	35	IA	45	0	No
NM3	19/06/2015	0:19:00	1.3		IA	35	IA	45	0	No
NM3	19/06/2015	20:05:00	0.3	24		35			0	No
NM3	19/06/2015	20:21:00	0.6	27		35			0	No
NM4	18/06/2015	21:38:00	2.1	16		35			0	No
NM4	18/06/2015	21:53:00	0.9	NM		35			0	No
NM4	**19/06/2015**	**22:32:00**	1.4		31	35	**46**	**45**	**0**	**Yes[1,2]**
NM4	19/06/2015	22:50:00	1.3		31	35	39	45	0	No[2]
NM5	18/06/2015	20:55:00	1.3	22		35			0	No
NM5	18/06/2015	21:10:00	2.0	23		35			0.1	No
NM5	20/06/2015	0:26:00	1.0		18	35	23	45	0	No
NM5	20/06/2015	0:45:00	0.4		16	35	23	45	0	No
NM6	18/06/2015	23:10:00	2.1		IA	35	IA	45	0	No
NM6	18/06/2015	23:29:00	1.5		IA	35	IA	45	0	No
NM6	19/06/2015	20:46:00	0.3	31		35			0	No[2]
NM6	19/06/2015	21:02:00	0.2	30		35			0	No

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

---

[1] There was a 1 dB exceedance of the LA1,1minute criterion at NM4 on 19 June 2015 at 22:32. Engine continuum was audible throughout this measurement, along with engine surges, horns, dozer tracks, and impact noise caused by bucket loads into empty truck bodies. The resulting LAeq,15minute complied with the impact assessment criterion. The measured LA1,1minute was generated by a first pass load from an excavator bucket into an empty truck body. An exceedance of up to 2 dB is not considered significant as Chapter 11 of the NSW Industrial Noise Policy deems a development to be in non-compliance only when "the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition." This is based on the fact that 2 dB is less than that change in loudness, 3 dB, where the difference is just perceptible to the normal ear (Bies and Hansen, 1988).

[2] See Low Frequency Assessment table below

Noise Monitoring (Attended - Low Frequency Assessment)

Five of the twenty-four measurements occurred during which operational activities from MCC were directly measurable (not "inaudible", "not measurable" or less than a maximum cut-off value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). These five measurements were further analysed for low-frequency noise against relevant triggers. Where results in the following table are greater than the applicable 'Industrial Noise Policy' (INP), or 'Broner' low frequency modifying factor triggers due to activities at MCC, a 5 dB modifying factor correction is applied to the measured noise level.

MCC ID	Date	Start Time	Broner low frequency modifying factor trigger (dB) (1)	Broner Total L_{Ceq} (dB) (2,5)	INP low frequency modifying factor trigger (dB) (3)	INP Total L_{Ceq} minus L_{Aeq} (dB) (4,5)	Measured MCC only L_{Aeq} (dB)	Modifying factor correction (dB)	Site only L_{Aeq} *with* modifying factor correction applied (5)	Relevant MCC L_{Aeq} impact assessment criterion (dB)	Exceedance (Yes / No)
NM2	19/06/2015	21:28:00	>60	**63**	>=15	**26**	36	+5	**41**	39	**Yes(a)**
NM2	19/06/2015	21:47:00	>60	60	>=15	**25**	35	+5	**40**	39	**Yes(a)**
NM4	19/06/2015	22:32:00	>60	58	>=15	**27**	31	+5	**36**	35	**Yes**
NM4	19/06/2015	22:50:00	>60	58	>=15	**27**	31	+5	**36**	35	**Yes**
NM6	19/06/2015	20:46:00	>60	58	>=15	**24**	31	+5	**36**	35	**Yes**

(1) Night LCeq modifying factor trigger as detailed in Broner (2010);
(2) These are measured C-weighted noise levels (at frequencies less than 250 Hz) and are not always the result of activity at MCC.
(3) INP low frequency modifying factor trigger as detailed in the Industrial Noise Policy;
(4) This is the total measured C-weighted noise level minus the total measured A-weighted noise level and are not always the result of activity at MCC;
(5) Bold results are greater than the relevant low frequency modifying factor trigger.
(a) This residence is listed in MCC Project Approval PA 10_0138, Schedule 3 Table 2. IE within the 35dB noise impact contour.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	6	103.2	113.6	120	No
	Vibration	mm/s		6	0.19	0.42	10	No

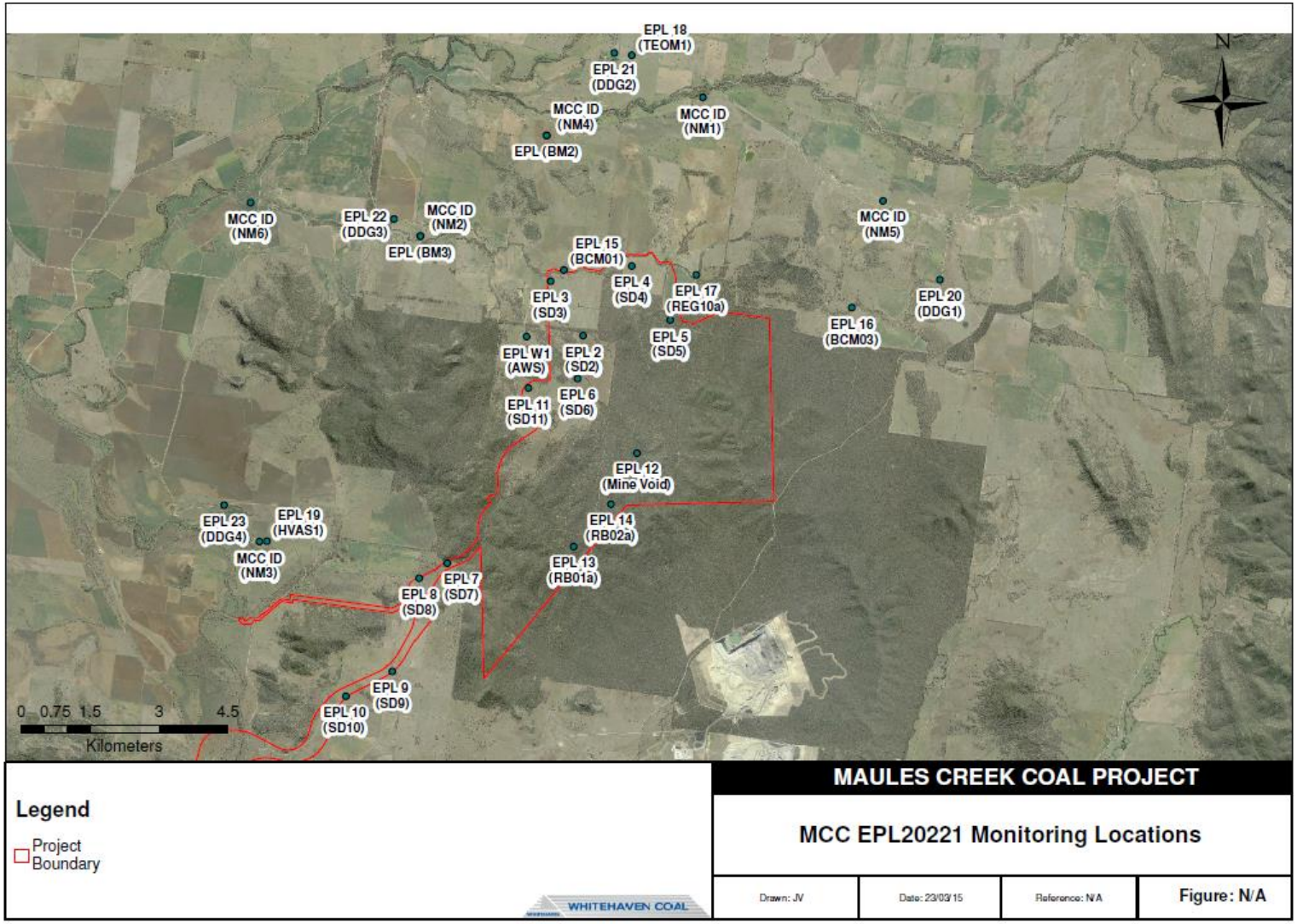
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	11.2	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	14.0	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.3	4	No
21 (DDG2)	Monthly	**g/m² month**	2.9	4	No
22 (DDG3)	Monthly	**g/m² month**	1.7	4	No
23 (DDG4)	Monthly	**g/m² month**	1.8	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: July 2015
Publication Date: August 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months		Next sample August				
	Conductivity	µs/cm							
	Oil & Grease	mg/L							
	pH	pH							

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly		Next sample September				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	30/07/2015	20:15:00	0.6	IA		35			0	Nil
NM1	30/07/2015	20:30:00	0.5	IA		35			0	Nil
NM1	29/07/2015	22:53:00	0.5		25	35	38	45	0	Nil
NM1	29/07/2015	23:13:00	0.9		29	35	36	45	0	Nil
NM2	29/07/2015	21:19:00	0.7	<20		39			0	Nil
NM2	29/07/2015	21:37:00	0.4	<20		39			0	Nil
NM2	30/07/2015	23:45:00	0.7		IA	39	IA	45	0	Nil
NM2	31/07/2015	0:00:00	0.3		IA	39	IA	45	0	Nil
NM3	29/07/2015	19:33:00	0.8	<20		35			0	Nil
NM3	29/07/2015	19:50:00	0.9	<20		35			0	Nil
NM3	30/07/2015	22:01:00	0.4		IA	35	IA	45	0	Nil
NM3	30/07/2015	22:17:00	0.4		IA	35	IA	45	0	Nil
NM4	30/07/2015	19:28:00	0.6	<20		35			0	Nil
NM4	30/07/2015	19:44:00	1.1	<20		35			0	Nil
NM4	29/07/2015	22:04:00	0.4		<25	35	<25	45	0	Nil
NM4	29/07/2015	22:21:00	0.5		28	35	31	45	0	Nil
NM5	30/07/2015	20:59:00	0.6	<25		35			0	Nil
NM5	30/07/2015	21:16:00	0.4	<20		35			0	Nil
NM5	29/07/2015	23:40:00	0.8		<25	35	29	45	0	Nil
NM5	30/07/2015	0:04:00	0.4		<25	35	30	45	0	Nil
NM6	29/07/2015	20:22:00	0.9	<20		35			0	Nil
NM6	29/07/2015	20:44:00	0.8	<20		35			0	Nil
NM6	30/07/2015	22:50:00	0.5		IA	35	IA	45	0	Nil
NM6	30/07/2015	23:06:00	0.5		IA	35	IA	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	All	8	96.28	106.2	120	No
Blasts	Vibration	mm/s		8	0.19	0.60	10	No

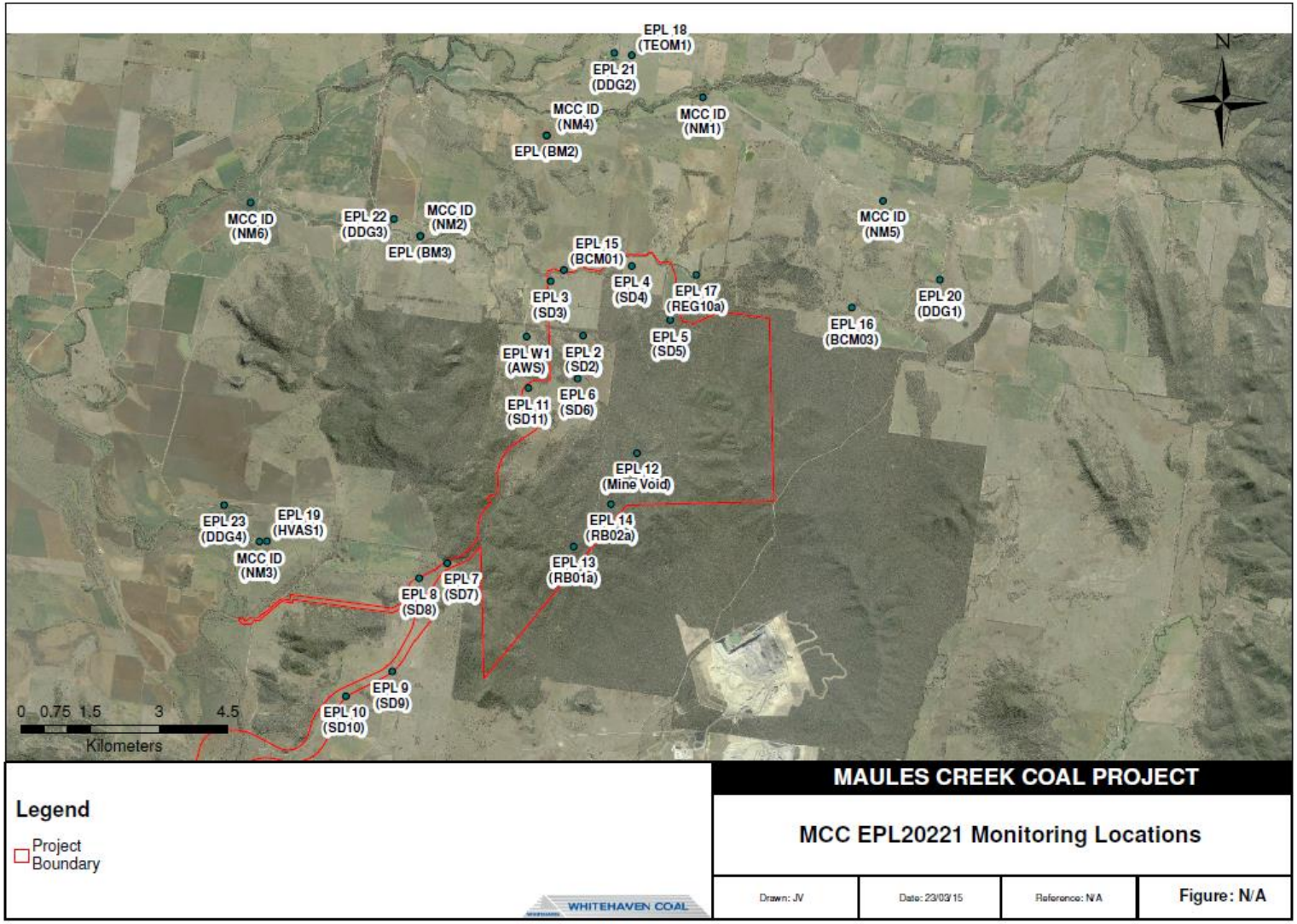
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	10.8	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	13.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.1	4	No
21 (DDG2)	Monthly	**g/m² month**	2.9	4	No
22 (DDG3)	Monthly	**g/m² month**	1.7	4	No
23 (DDG4)	Monthly	**g/m² month**	1.8	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: August 2015
Publication Date: September 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 13th February 2015 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months		Mine pit dry during August, insufficient inflows for sampling. Next sample October.				
	Conductivity	µs/cm							
	Oil & Grease	mg/L							
	pH	pH							

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly		Next sample September				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	19/08/2015	20:30:00	1.4	28		35			0	Nil
NM1	19/08/2015	20:47:00	0.2	29		35			0	Nil
NM1	18/08/2015	22:55:00	0.4		21	35	28	45	0	Nil
NM1	18/08/2015	23:15:00	0.1		24	35	29	45	0	Nil
NM2	18/08/2015	21:18:00	0.6	26		39			0	Nil
NM2	18/08/2015	21:36:00	0.6	24		39			0	Nil
NM2	19/08/2015	22:06:00	0.6		22	39	26	45	0	Nil
NM2	19/08/2015	22:24:00	0.5		22	39	27	45	0	Nil
NM3	18/08/2015	19:40:00	1.4	26		35			0	Nil
NM3	18/08/2015	19:57:00	0.6	24		35			0	Nil
NM3	19/08/2015	23:47:00	0.4		26	35	31	45	0	Nil
NM3	20/08/2015	0:05:00	1.1		25	35	30	45	0	Nil
NM4	19/08/2015	21:17:00	0.5	27		35			0	Nil
NM4	19/08/2015	21:34:00	0.3	25		35			0	Nil
NM4	18/08/2015	22:05:00	0.4		23	35	30	45	0	Nil
NM4	18/08/2015	22:24:00	1		22	35	30	45	0	Nil
NM5	19/08/2015	19:46:00	0.9	27		35			0	Nil
NM5	19/08/2015	20:03:00	1.1	22		35			0	Nil
NM5	18/08/2015	23:44:00	0.6		26	35	32	45	0	Nil
NM5	19/08/2015	0:00:00	0.4		25	35	31	45	0	Nil
NM6	18/08/2015	20:25:00	1.2	22		35			0	Nil
NM6	18/08/2015	20:44:00	0.8	21		35			0	Nil
NM6	19/08/2015	22:58:00	0.2		18	35	24	45	0	Nil
NM6	19/08/2015	23:15:00	0.3		17	35	24	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	9	95.82	105.4	120	No
	Vibration	mm/s		9	0.18	0.59	10	No

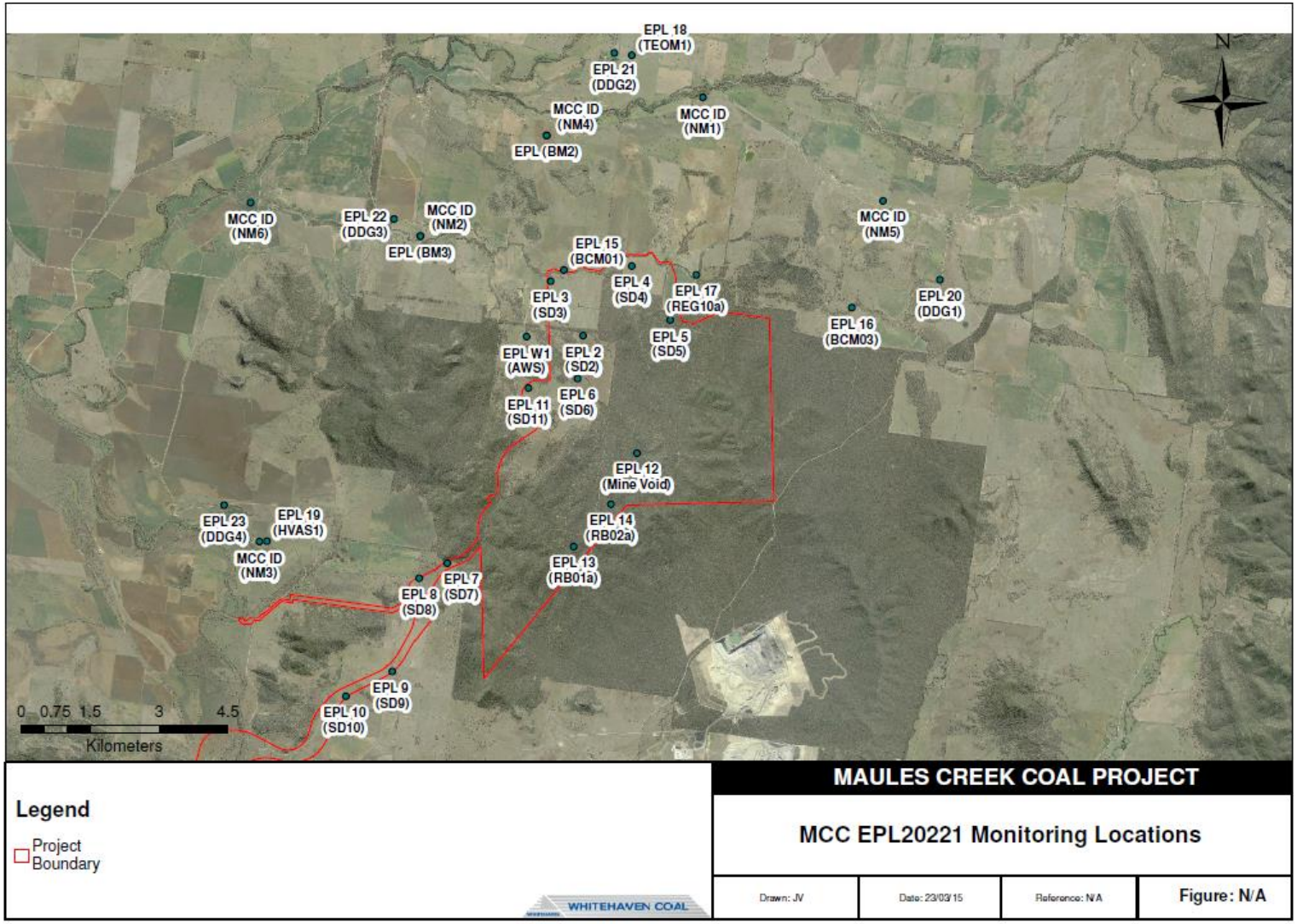
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	10.7	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	13.2	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.0	4	No
21 (DDG2)	Monthly	**g/m² month**	2.7	4	No
22 (DDG3)	Monthly	**g/m² month**	1.5	4	No
23 (DDG4)	Monthly	**g/m² month**	1.6	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: September 2015
Publication Date: October 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 21st September 2015 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months		Next sample October.				
	Conductivity	µs/cm							
	Oil & Grease	mg/L							
	pH	pH							

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly	1	24/09/2015	25/09/2015			9.49
	Conductivity	µs/cm							979
	TDS	mg/L							578
14 (RB02a)	pH	pH	Quarterly	1	24/09/2015	25/09/2015			12
	Conductivity	µs/cm							1660
	TDS	mg/L							452
15 (BCM01)	pH	pH	Quarterly	0	18/09/2015	Bore dry since installation, next sample December.			
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	18/09/2015	Bore dry since installation, next sample December.			
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	0	24/09/2015	Bore dry since installation, next sample December.			
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	29/09/2015	20:38:00	0.6	25		35			0	Nil
NM1	29/09/2015	20:54:00	0.5	25		35			0	Nil
NM1	28/09/2015	22:51:00	0.4		27	35	32	45	0	Nil
NM1	28/09/2015	23:07:00	0.4		27	35	32	45	0	Nil
NM2	28/09/2015	21:00:00	0.5	<20		39			0	Nil
NM2	28/09/2015	21:16:00	0.3	<20		39			0	Nil
NM2	29/09/2015	22:15:00	0.5		<20	39	<20	45	0	Nil
NM2	29/09/2015	22:30:00	0.4		<20	39	<20	45	0	Nil
NM3	28/09/2015	19:26:00	0.9	IA		35			0	Nil
NM3	28/09/2015	19:42:00	1	IA		35			0	Nil
NM3	29/09/2015	23:47:00	0.4		IA	35	IA	45	0	Nil
NM3	30/09/2015	0:02:00	0.2		IA	35	IA	45	0	Nil
NM4	29/09/2015	19:42:00	1	25		35			0	Nil
NM4	29/09/2015	19:58:00	0.5	25		35			0	Nil
NM4	28/09/2015	22:00:00	0.9		<20	35	21	45	0	Nil
NM4	28/09/2015	22:16:00	0.6		28	35	40	45	0	Nil
NM5	29/09/2015	21:23:00	0.5	<20		35			0	Nil
NM5	29/09/2015	21:39:00	0.3	<20		35			0	Nil
NM5	28/09/2015	23:42:00	0.4		28	35	33	45	0	Nil
NM5	28/09/2015	23:58:00	0.3		29	35	39	45	0	Nil
NM6	28/09/2015	20:09:00	1.2	IA		35			0	Nil
NM6	28/09/2015	20:25:00	1	IA		35			0	Nil
NM6	29/09/2015	22:58:00	0.4		IA	35	IA	45	0	Nil
NM6	29/09/2015	23:19:00	0.6		IA	35	IA	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Noise Monitoring (Attended - Low Frequency Assessment)

None of the twenty-four measurements occurred during which operational activities from MCC were directly measurable (not “inaudible”, “not measurable” or less than a maximum cut-off value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further analysis was required.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	8	97.95	110.0	120	No
	Vibration	mm/s		8	0.16	0.4	10	No

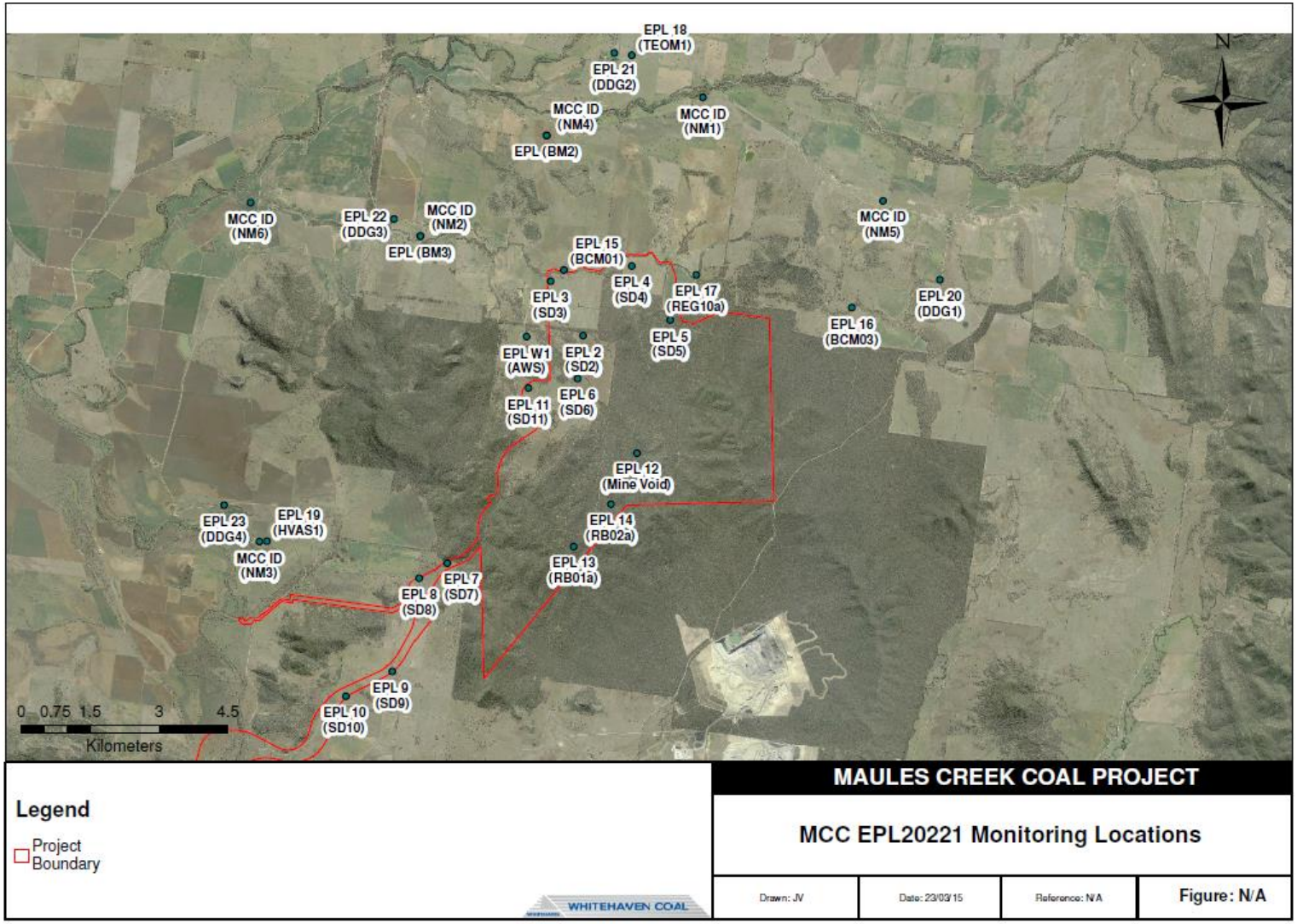
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	10.2	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	12.9	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1)	Monthly	**g/m² month**	2.1	4	No
21 (DDG2)	Monthly	**g/m² month**	2.7	4	No
22 (DDG3)	Monthly	**g/m² month**	1.5	4	No
23 (DDG4)	Monthly	**g/m² month**	1.1	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: October 2015
Publication Date: November 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 21st September 2015 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months	1	21/10/2015	9/11/2015			48
	Conductivity	µs/cm		1	21/10/2015	9/11/2015			1600
	Oil & Grease	mg/L		1	21/10/2015	9/11/2015			<5
	pH	pH		1	21/10/2015	9/11/2015			8.22

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly	0		Next sample December.			
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Limits Apply)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	20/10/2015	19:19:00	2	IA		35			0	Nil
NM1	20/10/2015	19:38:00	1.9	IA		35			0	Nil
NM1	19/10/2015	22:59:00	0.7		21	35	23	45	0	Nil
NM1	19/10/2015	23:16:00	0.6		24	35	30	45	0	Nil
NM2	19/10/2015	20:31:00	0.6	IA		39			0	Nil
NM2	19/10/2015	20:47:00	0.6	IA		39			0	Nil
NM2	20/10/2015	22:01:00	0.6		IA	39	IA	45	0	Nil
NM2	20/10/2015	22:17:00	0.3		IA	39	IA	45	0	Nil
NM3	19/10/2015	18:58:00	1.8	IA		35			0	Nil
NM3	19/10/2015	19:14:00	1.1	IA		35			0	Nil
NM3	20/10/2015	23:32:00	0.3		IA	35	IA	45	0	Nil
NM3	20/10/2015	23:48:00	0.2		IA	35	IA	45	0	Nil
NM4	20/10/2015	20:12:00	0.3	IA		35			0	Nil
NM4	20/10/2015	20:28:00	0.2	IA		35			0	Nil
NM4	19/10/2015	22:00:00	0.4		15	35	17	45	0	Nil
NM4	19/10/2015	22:31:00	0.2		NM	35	NM	45	0	Nil
NM5	*20/10/2015*	*18:38:00*	*3.7*	*IA*		*35*			*0*	*NA*
NM5	20/10/2015	18:54:00	2.1	IA		35			0	Nil
NM5	19/10/2015	23:42:00	0.3		24	35	30	45	0	Nil
NM5	19/10/2015	23:59:00	0.4		22	35	30	45	0	Nil
NM6	19/10/2015	19:45:00	0.7	IA		35			0	Nil
NM6	19/10/2015	20:01:00	0.4	IA		35			0	Nil
NM6	20/10/2015	22:47:00	0.6		IA	35	IA	45	0	Nil
NM6	20/10/2015	23:03:00	0.6		IA	35	IA	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Noise Monitoring (Attended - Low Frequency Assessment)

None of the twenty-four measurements occurred during which operational activities from MCC were directly measurable (not “inaudible”, “not measurable” or less than a maximum cut-off value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further analysis was required.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	11	99.6	108.5	120	No
	Vibration	mm/s		11	0.24	0.62	10	No

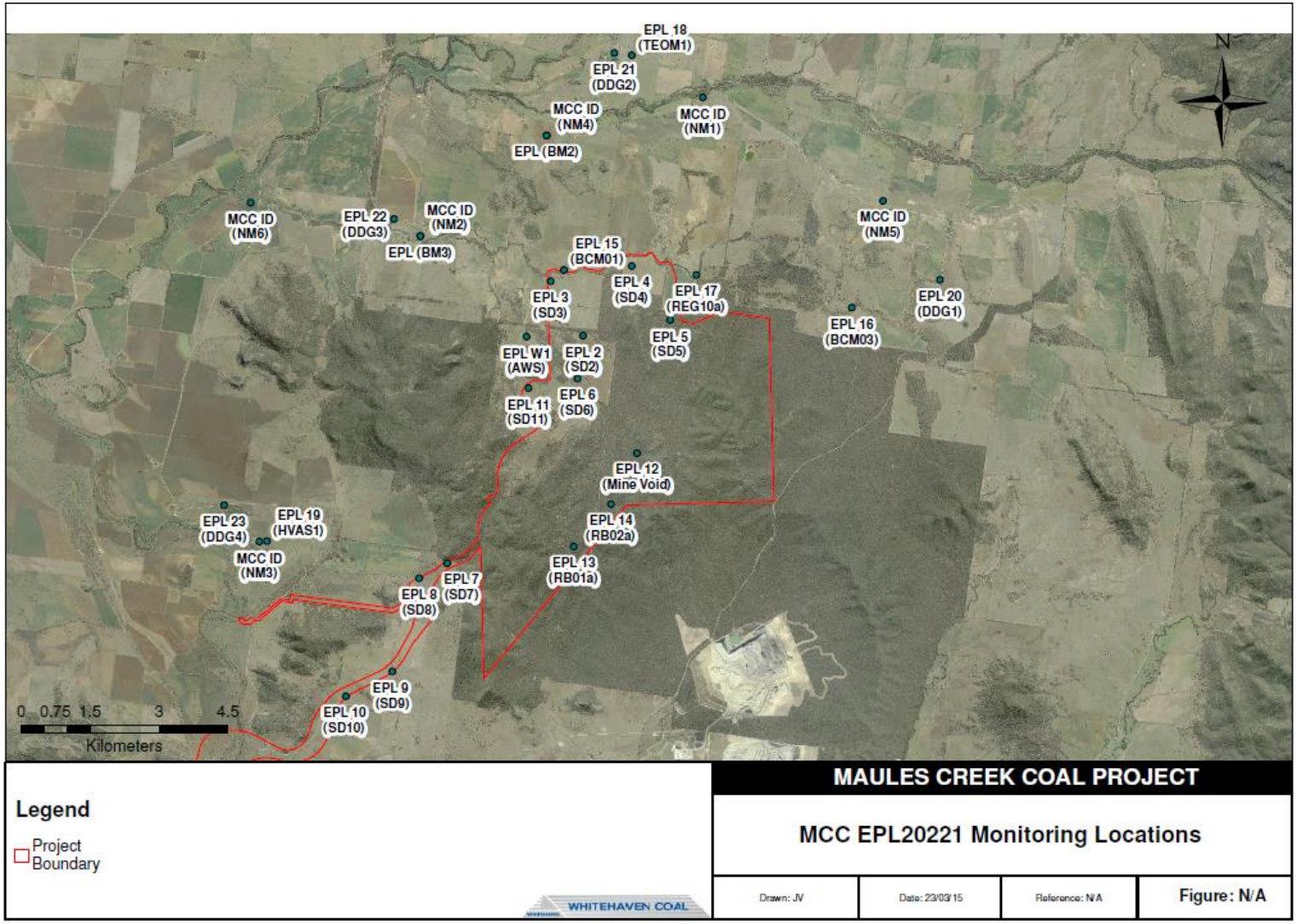
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	9.6	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	12.3	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	**g/m² month**	2.0	4	No
21 (DDG2/MC2)	Monthly	**g/m² month**	2.6	4	No
22 (DDG3/MC3)	Monthly	**g/m² month**	1.4	4	No
23 (DDG4/MC4)	Monthly	**g/m² month**	1.1	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: November 2015
Publication Date: December 2015

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 21st September 2015 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months	0	Next sample December.				
	Conductivity	µs/cm		0					
	Oil & Grease	mg/L		0					
	pH	pH		0					

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly	0	Next sample December.				
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	24/11/2015	19:26:00	1.2	IA		35			0	Nil
NM1	24/11/2015	19:44:00	0.9	IA		35			0	Nil
NM1	23/11/2015	23:01:00	0.6		26	35	32	45	0	Nil
NM1	23/11/2015	23:19:00	0.8		27	35	34	45	0	Nil
NM2	23/11/2015	20:25:00	2.1	21		39			0	Nil
NM2	23/11/2015	20:43:00	1.6	24		39			0	Nil
NM2	24/11/2015	22:05:00	0.5		19	39	26	45	0	Nil
NM2	24/11/2015	22:22:00	0.6		21	39	27	45	0	Nil
NM3	*23/11/2015*	*19:30:00*	*3.5*	*IA*		*35*			*0*	*NA*
NM3	23/11/2015	21:14:00	1.7	24		35			0	Nil
NM3	24/11/2015	23:34:00	0.4		23	35	27	45	0	Nil
NM3	24/11/2015	23:51:00	0.6		21	35	25	45	0	Nil
NM4	24/11/2015	20:54:00	0.6	IA		35			0	Nil
NM4	24/11/2015	21:12:00	0.4	IA		35			0	Nil
NM4	23/11/2015	22:09:00	1		27	35	34	45	0	Nil
NM4	23/11/2015	22:27:00	1.1		29	35	33	45	0	Nil
NM5	24/11/2015	20:07:00	0.3	IA		35			0	Nil
NM5	24/11/2015	20:25:00	0.3	IA		35			0	Nil
NM5	23/11/2015	23:46:00	0.8		28	35	33	45	0	Nil
NM5	24/11/2015	0:04:00	0.6		27	35	33	45	0	Nil
NM6	*23/11/2015*	*19:57:00*	*3.1*	*IA*		*35*			*0*	*NA*
NM6	23/11/2015	21:39:00	1.2	20		35			0	Nil
NM6	24/11/2015	22:49:00	0.3		IA	35	IA	45	0	Nil
NM6	24/11/2015	23:06:00	0.5		17	35	20	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Noise Monitoring (Attended - Low Frequency Assessment)

None of the twenty-four measurements occurred during which operational activities from MCC were directly measurable (not “inaudible”, “not measurable” or less than a maximum cut-off value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further analysis was required.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	8	99.21	108.50	120	No
	Vibration	mm/s		8	0.25	0.62	10	No

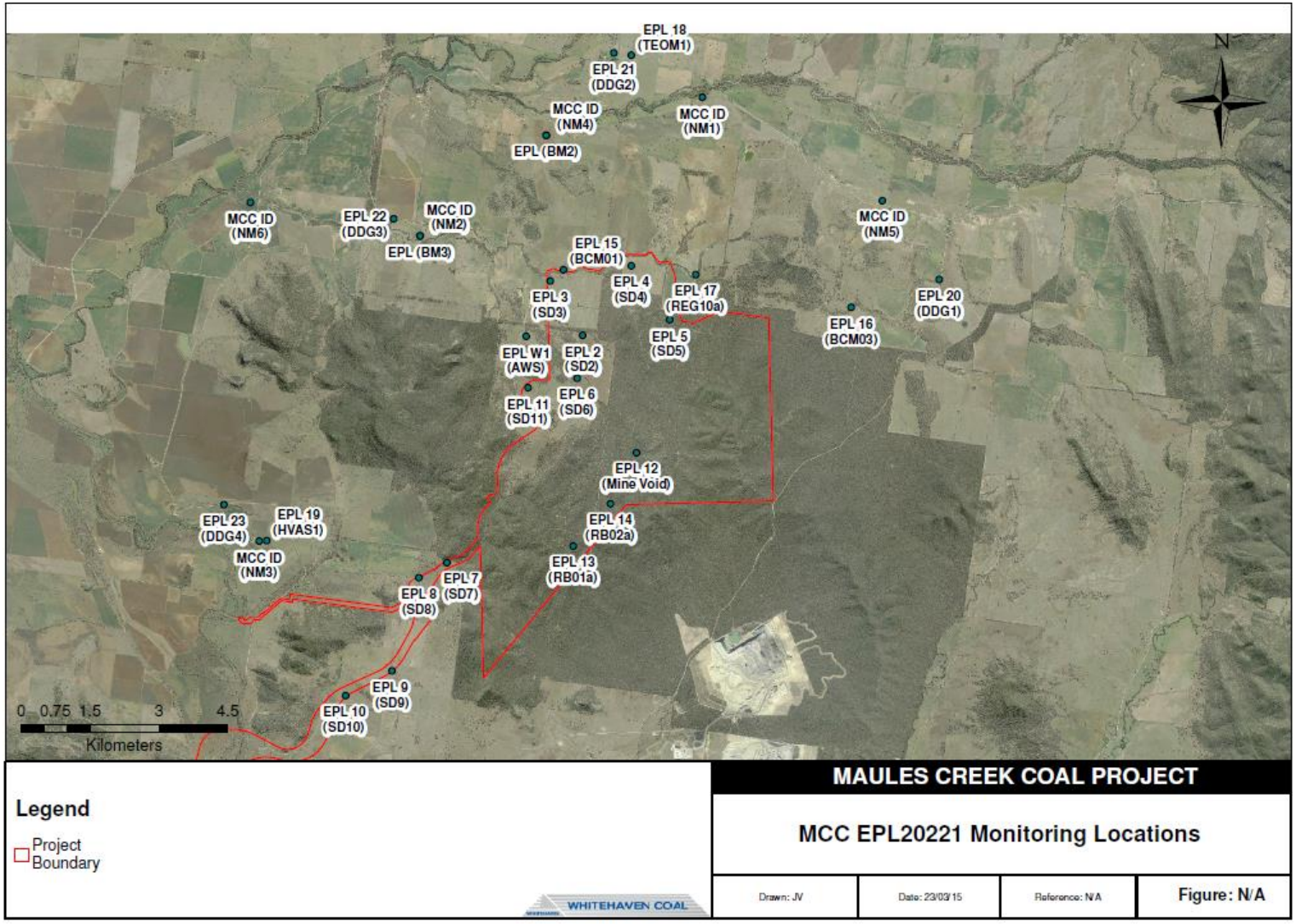
Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	9.6	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	12.8	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	**g/m² month**	2.1	4	No
21 (DDG2/MC2)	Monthly	**g/m² month**	2.9	4	No
22 (DDG3/MC3)	Monthly	**g/m² month**	1.5	4	No
23 (DDG4/MC4)	Monthly	**g/m² month**	1.3	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221
EPA Website Link: Hyperlink to Maules Creek Coal, Environment Protection Licence
Licensee: Maules Creek Coal Mine Pty Ltd
Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382
EPL Monitoring Points: Figure 1
Sampling Period: December 2015
Publication Date: February 2016

Context: This Monthly Monitoring Summary aligns with the applicable Environment Protection Licence (EPL) – Maules Creek Coal Mine issued 21st September 2015 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – Wet Weather Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
4 (SD4)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
6 (SD6)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
8 (SD8)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
10 (SD10)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
11 (SD11)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

Table 2 – Surface Water Monitoring – Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
12 (Mine Void)	TSS	mg/L	Every 2 months	1	18 Dec 2015	12 Jan 2016			<5
	Conductivity	µs/cm		1	18 Dec 2015	12 Jan 2016			1640
	Oil & Grease	mg/L		1	18 Dec 2015	12 Jan 2016			<5
	pH	pH		1	18 Dec 2015	12 Jan 2016			8.38

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
13 (RB01a)	pH	pH	Quarterly	0		Next sample January			
	Conductivity	µs/cm							
	TDS	mg/L							
14 (RB02a)	pH	pH	Quarterly	0					
	Conductivity	µs/cm							
	TDS	mg/L							
15 (BCM01)	pH	pH	Quarterly	0	29 Dec 2016	Bore dry since installation			
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	30 Dec 2016	Bore dry since installation			
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10a)	pH	pH	Quarterly	0	30 Dec 2016	Bore dry since installation			
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Evening	Measured Levels – dB(A) $L_{Aeq\ 15min}$ Night	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	Measured Levels – dB(A) $L_{A1\ (1\ min)}$ Night	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	7/12/2015	20:48:00	1.9	IA		35			0	Nil
NM1	7/12/2015	21:07:00	2.5	IA		35			0	Nil
NM1	7/12/2015	22:44:00	0.6		<20	35	<20	45	0	Nil
NM1	7/12/2015	22:59:00	1.1		<20	35	<20	45	0	Nil
NM2	7/12/2015	19:24:00	1.2	IA		39			0	Nil
NM2	7/12/2015	19:40:00	1.3	IA		39			0	Nil
NM2	8/12/2015	22:03:00	1.1		<20	39	<20	45	0	Nil
NM2	8/12/2015	22:28:00	0.8		<20	39	<20	45	0	Nil
NM3	7/12/2015	18:11:00	1.3	IA		35			0	Nil
NM3	8/12/2015	21:31:00	0.8	IA		35			0	Nil
NM3	8/12/2015	23:49:00	2.8		<20	35	<25	45	0	Nil
NM3	*9/12/2015*	*0:05:00*	*3.5*		*<20*	*35*	*<20*	*45*	*0*	*NA*
NM4	7/12/2015	20:05:00	1.4	IA		35			0	Nil
NM4	7/12/2015	20:21:00	1.1	IA		35			0	Nil
NM4	7/12/2015	23:44:00	2.3		<20	35	<20	45	0	Nil
NM4	7/12/2015	23:59:00	2.3		IA	35	IA	45	0	Nil
NM5	7/12/2015	21:30:00	1	IA		35			0	Nil
NM5	7/12/2015	21:45:00	0.6	IA		35			0	Nil
NM5	7/12/2015	22:01:00	0.3		IA	35	IA	45	0	Nil
NM5	7/12/2015	22:16:00	0.3		IA	35	IA	45	0	Nil
NM6	7/12/2015	18:38:00	2.1	IA		35			0	Nil
NM6	7/12/2015	18:55:00	2.2	IA		35			0	Nil
NM6	8/12/2015	22:55:00	0.9		IA	35	IA	45	0	Nil
NM6	8/12/2015	23:10:00	0.9		IA	35	IA	45	0	Nil

* IA & NM = Inaudible & Not Measurable.
**MCC ID = Locations as per the approved Noise Management Plan.
***ND = No data due to high prevailing winds during the attended noise monitoring event.
Italicised text indicates wind speed exceeds the 3.0m/s maximum for noise monitoring.

Noise Monitoring (Attended - Low Frequency Assessment)

None of the twenty-four measurements occurred during which operational activities from MCC were directly measurable (not “inaudible”, “not measurable” or less than a maximum cut-off value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further analysis was required.

Table 5 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	9	100.02	112.1	120	No
	Vibration	mm/s		9	0.19	0.35	10	No

Table 6 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	**µg/m³.month**	**PM_{10}**	9.6	30	No
19 (HVAS)	6 days	**µg/m³**	**PM_{10}**	13.5	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	**g/m² month**	2.1	4	No
21 (DDG2/MC2)	Monthly	**g/m² month**	2.8	4	No
22 (DDG3/MC3)	Monthly	**g/m² month**	1.4	4	No
23 (DDG4/MC4)	Monthly	**g/m² month**	1.4	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations