



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: See Figure 1 below

Sampling Period: January 2020

Obtained Date: 17 February 2020

Publication Date: 21 February 2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	1	17/01/2020	Yes	-	-	-	234
	Conductivity	µs/cm		1	17/01/2020	Yes	-	-	-	550
	Oil & Grease	mg/L		1	17/01/2020	Yes	-	-	-	<5
	pH	pH		1	17/01/2020	Yes	-	-	-	7.25
5 (SD5)	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						
9 (SD9)	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	13/01/2020	Yes			<5
	Conductivity	µs/cm		1	13/01/2020	Yes			1070
	Oil & Grease	mg/L		1	13/01/2020	Yes			<5
	pH	pH		1	13/01/2020	Yes			9.12

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample to be taken next quarter.				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	29/01/2020	22:34	1.1	IA	35	IA	45	0	Nil
NM2	29/01/2020	23:45	3.0	<20	39	<20	45	0	Nil
NM3	29/01/2020	23:30	1.7	IA	35	IA	45	0	Nil
NM4	29/01/2020	23:15	0.9	IA	35	IA	45	0	Nil
NM5	29/01/2020	22:06	1.3	IA	35	IA	45	0	Nil
NM6	30/01/2020	00:14	3.6	IA	35	IA	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	10	97.04	115.3	120	No
	Vibration	mm/s		10	0.19	0.53	10	No

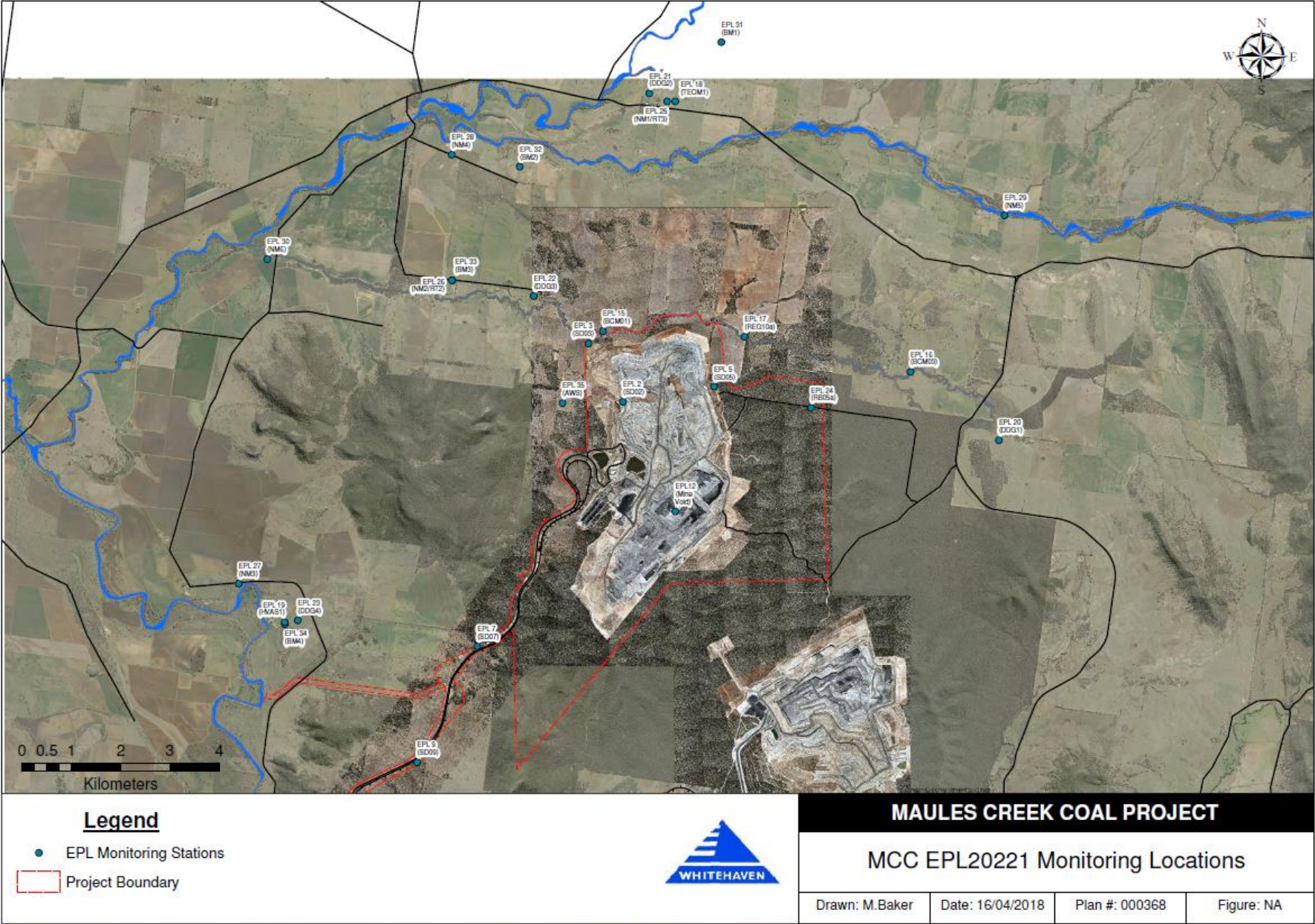
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	29.5	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	34.8	30	Yes

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.1	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.7	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.7	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	6.6	4	Yes

Figure 1 - EPL 20221 Monitoring Locations





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Licensee: Maules Creek Coal Mine Pty Ltd

Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382

EPL Monitoring Points: See Figure 1 below

Sampling Period: February 2020

Obtained Date: 15 March 2020

Publication Date: 25/03/2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	1	08/02/2020	Yes	-	-	-	47500
	Conductivity	µs/cm		1	08/02/2020	Yes	-	-	-	453
	Oil & Grease	mg/L		1	08/02/2020	Yes	-	-	-	<5
	pH	pH		1	08/02/2020	Yes	-	-	-	7.91
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	1	10/02/2020	Yes	-	-	-	1180
	Conductivity	µs/cm		1	10/02/2020	Yes	-	-	-	466
	Oil & Grease	mg/L		1	10/02/2020	Yes	-	-	-	8
	pH	pH		1	10/02/2020	Yes	-	-	-	7.89
5 (SD5)	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						
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

* Correction made to report correct discharge data. Discharge from 8th February until 10th February 2020.

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	18/02/2020	Yes			<5
	Conductivity	µs/cm		1	18/02/2020	Yes			1320
	Oil & Grease	mg/L		1	18/02/2020	Yes			<5
	pH	pH		1	18/02/2020	Yes			7.92

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample to be taken next quarter.				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	17/02/2020	22:30	1.4	IA	35	IA	45	0	Nil
NM2	17/02/2020	23:17	1.8	30	39	35	45	0	Nil
NM3	17/02/2020	23:45	3.3	<25	35	<25	45	0	Nil
NM4	17/02/2020	22:54	2.2	IA	35	IA	45	0	Nil
NM5	17/02/2020	22:00	1.1	IA	35	IA	45	0	Nil
NM6	17/02/2020	23:43	3.3	<20	35	20	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	7	97.49	105.60	120	No
	Vibration	mm/s		7	0.19	0.47	10	No

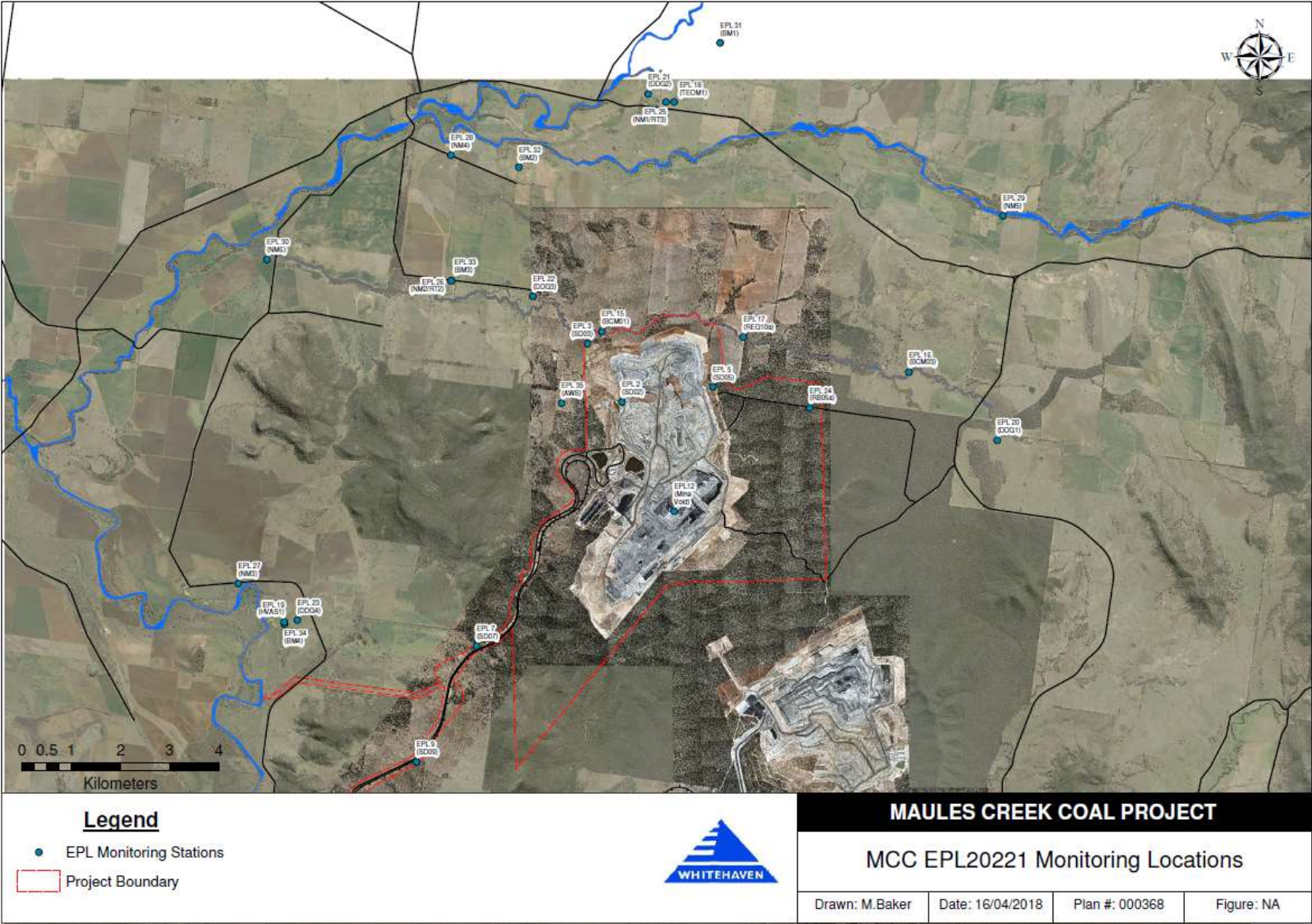
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	28.9	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	31.6	30	Yes

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.2	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.8	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.9	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	6.9	4	Yes

Figure 1 - EPL 20221 Monitoring Locations





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Licensee: Maules Creek Coal Mine Pty Ltd

Licensee Address: Maules Creek Coal Mine, Therribri Road, BOGGABRI NSW 2382

EPL Monitoring Points: See Figure 1 below

Sampling Period: March 2020

Obtained Date: 15 April 2020

Publication Date: 25/04/2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this 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						
3 (SD3)	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						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
9 (SD9)	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	16/03/2020	Yes			24
	Conductivity	µs/cm		1	16/03/2020	Yes			1060
	Oil & Grease	mg/L		1	16/03/2020	Yes			<5
	pH	pH		1	16/03/2020	Yes			8.06

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	No Access to Bore				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	17/03/2020	22:27	4.5	IA	35	IA	45	0	Nil
NM2	17/03/2020	23:30	3.5	25	39	45	45	0	Nil
NM3	17/03/2020	23:45	2.8	NM	35	NM	45	0	Nil
NM4	17/03/2020	23:00	3.4	<25	35	26	45	0	Nil
NM5	17/03/2020	22:00	3.9	IA	35	IA	45	0	Nil
NM6	17/03/2020	23:56	2.5	<20	35	<20	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	5	95.49	104.50	120	No
	Vibration	mm/s		5	0.14	0.53	10	No

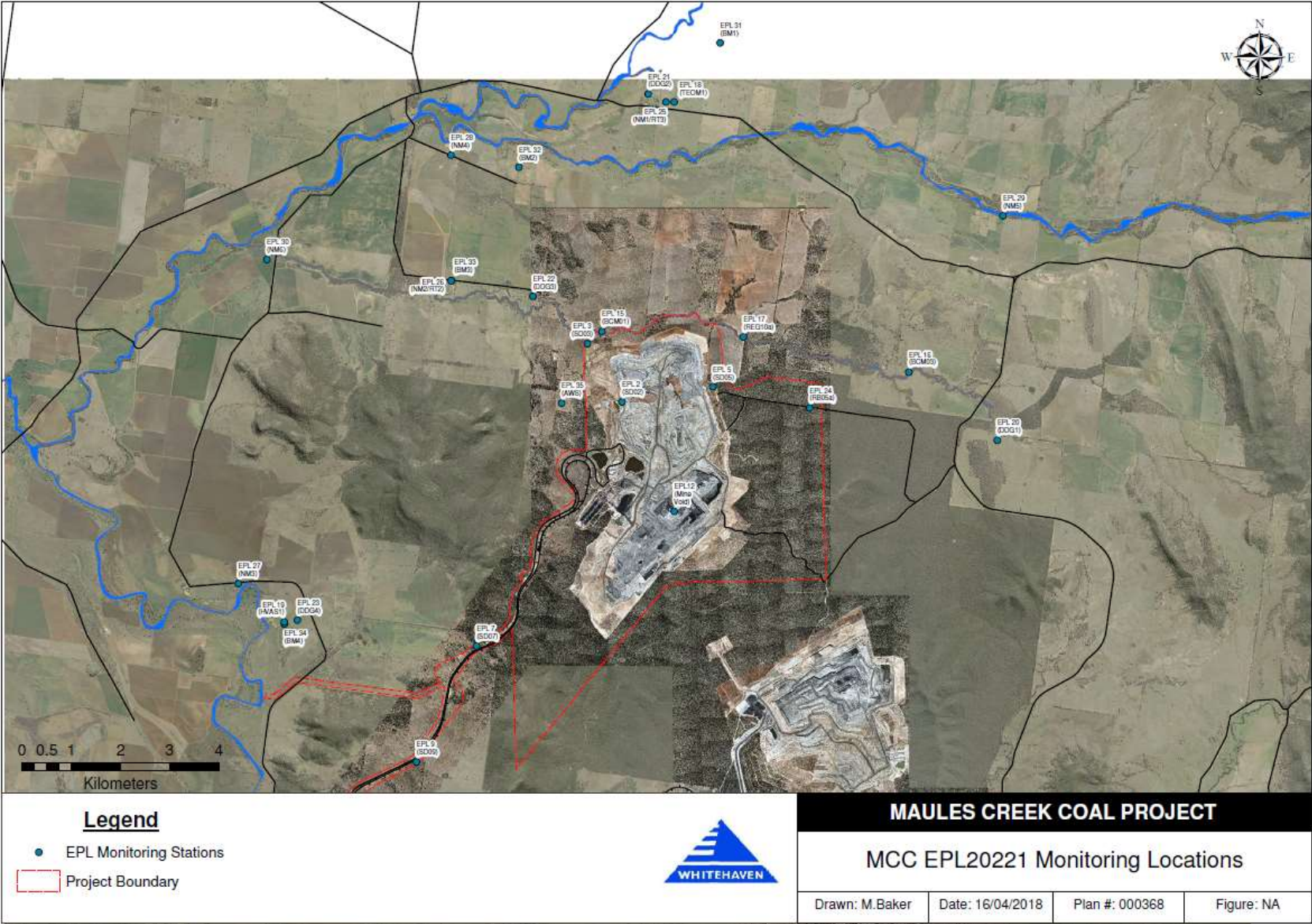
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	28.1	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	30.3	30	Yes

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.1	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.7	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.7	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	6.9	4	Yes

Figure 1 - EPL 20221 Monitoring Locations





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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: See Figure 1 below

Sampling Period: April 2020

Obtained Date: 15 May 2020

Publication Date: 21/05/2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this 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						
3 (SD3)	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						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
9 (SD9)	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	15/04/2020	Yes			8
	Conductivity	µs/cm		1	15/04/2020	Yes			1110
	Oil & Grease	mg/L		1	15/04/2020	Yes			<5
	pH	pH		1	15/04/2020	Yes			8.15

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample to be taken in June				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	01/04/2020	22:30	0.4	39	35	39	45	0	Yes
NM1	01/04/2020	23:13	0.4	IA	35	IA	45	0	Nil
NM2	02/04/2020	00:03	0.2	<20	39	<20	45	0	Nil
NM3	01/04/2020	23:30	0.2	IA	35	IA	45	0	Nil
NM4	01/04/2020	23:41	0.1	IA	35	IA	45	0	Nil
NM5	01/04/2020	22:00	0.2	IA	35	IA	45	0	Nil
NM6	01/04/2020	23:56	0.3	IA	35	IA	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

One measurement triggered a low-frequency modifying factor correction of 5 dB which caused this measurement to exceed the LAeq criterion by 4 dB. The measurement was assessed against the low frequency modification factors in accordance with the EPA's Noise Policy for Industry.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	10	94.32	107.80	120	No
	Vibration	mm/s		10	0.17	0.54	10	No

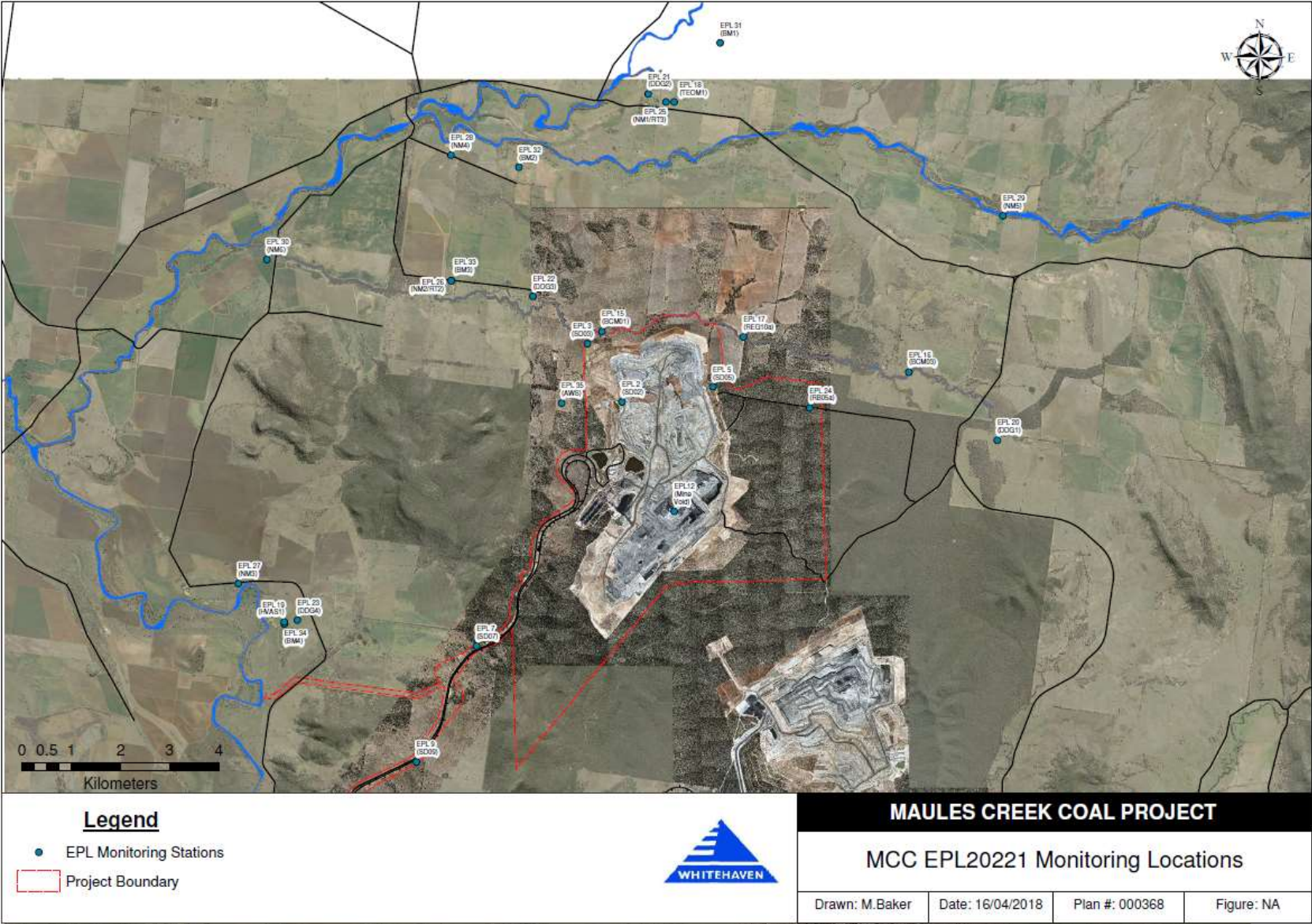
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	27.8	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	28.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.1	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.5	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	7.0	4	Yes

Figure 1 - EPL 20221 Monitoring Locations





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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: See Figure 1 below

Sampling Period: May 2020

Obtained Date: 15 June 2020

Publication Date: 22/06/2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this 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						
3 (SD3)	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						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
9 (SD9)	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	15/05/2020	Yes			6
	Conductivity	µs/cm		1	15/05/2020	Yes			1090
	Oil & Grease	mg/L		1	15/05/2020	Yes			<5
	pH	pH		1	15/05/2020	Yes			8.22

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample to be taken in June				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	14/05/2020	22:30	3.2	IA	35	IA	45	0	N/A
NM2	14/05/2020	23:30	2.6	<30	39	38	45	0	Nil
NM3	14/05/2020	23:30	2.6	<25	35	<25	45	0	Nil
NM4	14/05/2020	23:01	2.7	<20	35	<20	45	0	Nil
NM5	14/05/2020	22:00	3.6	IA	35	IA	45	0	N/A
NM6	15/05/2020	00:01	1.8	IA	35	IA	45	0	N/A

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	11	97.57	111.50	120	No
	Vibration	mm/s		11	0.15	0.75	10	No

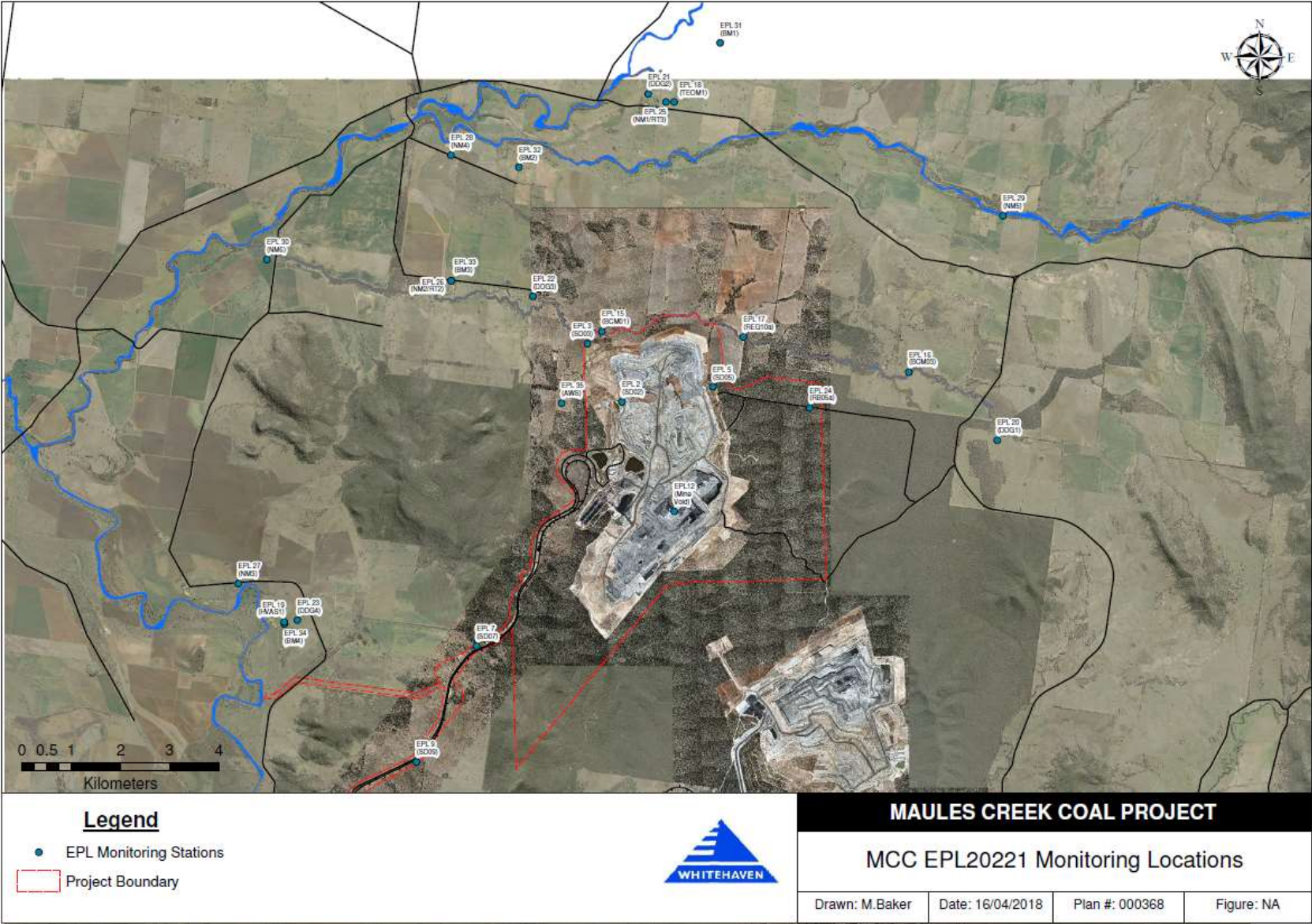
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	27.2	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	27.3	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.0	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.5	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.6	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	7.5	4	Yes

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: See Figure 1 below

Sampling Period: June 2020

Obtained Date: 15 July 2020

Publication Date: 16 July 2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value																								
2 (SD2)	TSS	mg/L	Special	0	No Discharge at this at this location this month																													
	Conductivity	µs/cm	Frequency	0																														
	Oil & Grease	mg/L	Discharge	0																														
	pH	pH	only	0																														
3 (SD3)	TSS	mg/L	Special	0							No Discharge at this at this location this month																							
	Conductivity	µs/cm	Frequency	0																														
	Oil & Grease	mg/L	Discharge	0																														
	pH	pH	only	0																														
3 (SD3)	TSS	mg/L	Special	0													No Discharge at this at this location this month																	
	Conductivity	µs/cm	Frequency	0																														
	Oil & Grease	mg/L	Discharge	0																														
	pH	pH	only	0																														
5 (SD5)	TSS	mg/L	Special	0																			No Discharge at this at this location this month											
	Conductivity	µs/cm	Frequency	0																														
	Oil & Grease	mg/L	Discharge	0																														
	pH	pH	only	0																														
7 (SD7)	TSS	mg/L	Special	0																									No Discharge at this at this location this month					
	Conductivity	µs/cm	Frequency	0																														
	Oil & Grease	mg/L	Discharge	0																														
	pH	pH	only	0																														
9 (SD9)	TSS	mg/L	Special	0	No Discharge at this at this location this month																													
	Conductivity	µs/cm	Frequency	0																														
	Oil & Grease	mg/L	Discharge	0																														
	pH	pH	only	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	12/06/2020	Yes			<5
	Conductivity	µs/cm		1	12/06/2020	Yes			1100
	Oil & Grease	mg/L		1	12/06/2020	Yes			<5
	pH	pH		1	12/06/2020	Yes			8.34

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	26/06/2020	Yes			7.61
	Conductivity	µs/cm			26/06/2020	Yes			1790
	TDS	mg/L			26/06/2020	Yes			1020

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	03/06/2020	22:30	0.6	<25	35	27	45	0	Nil
NM2	03/06/2020	23:30	0.1	28	39	39	45	0	Nil
NM3	03/06/2020	23:39	0.1	<25	35	27	45	0	Nil
NM4	03/06/2020	23:00	0.3	<20	35	<20	45	0	Nil
NM5	03/06/2020	22:00	0.3	IA	35	IA	45	0	Nil
NM6	03/06/2020	23:59	0.1	NM	35	NM	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	7	95.63	114.10	120	No
	Vibration	mm/s		7	0.16	0.53	10	No

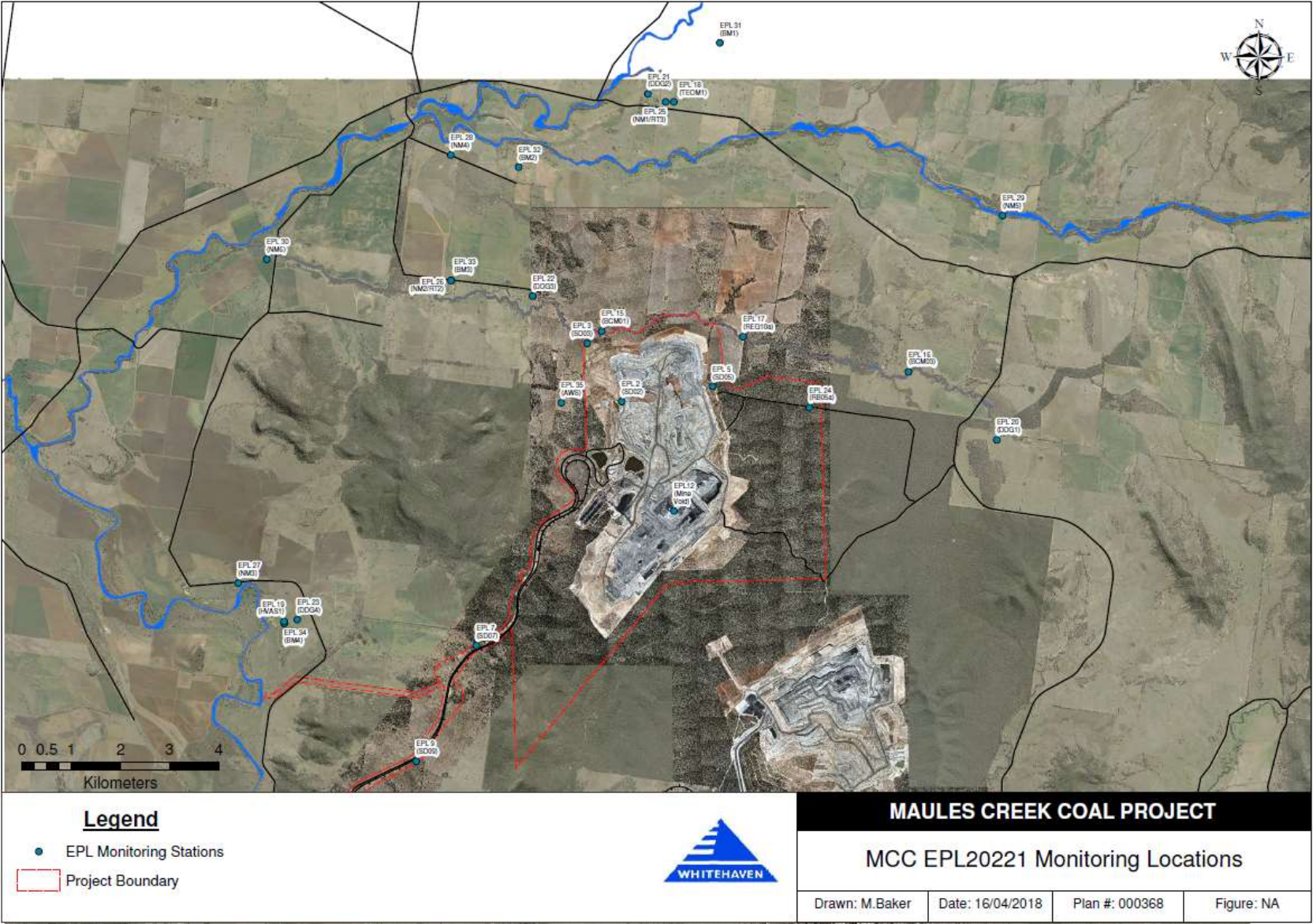
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	26.9	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	27.0	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	1.9	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.5	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	7.7	4	Yes

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: See Figure 1 below

Sampling Period: July 2020

Obtained Date: 14 August 2020

Publication Date: 19/08/2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value																								
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this 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							No Discharge at this 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													No Discharge at this at this location this month																	
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0																			No Discharge at this at this location this month											
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0																									No Discharge at this at this location this month					
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this at this location this month																													
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	09/07/2020	00:04	1.4	IA	35	IA	45	0	Nil
NM2	08/07/2020	23:35	1.1	IA	39	IA	45	0	Nil
NM3	08/07/2020	22:00	2.3	<20	35	<20	45	0	Nil
NM4	08/07/2020	23:08	1.5	<25	35	<25	45	0	Nil
NM5	09/07/2020	00:35	2.6	IA	35	IA	45	0	Nil
NM6	08/07/2020	22:36	3.2	<25	35	26	45	0	N/A

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	11	95.48	112.2	120	No
	Vibration	mm/s		11	0.22	1.1	10	No

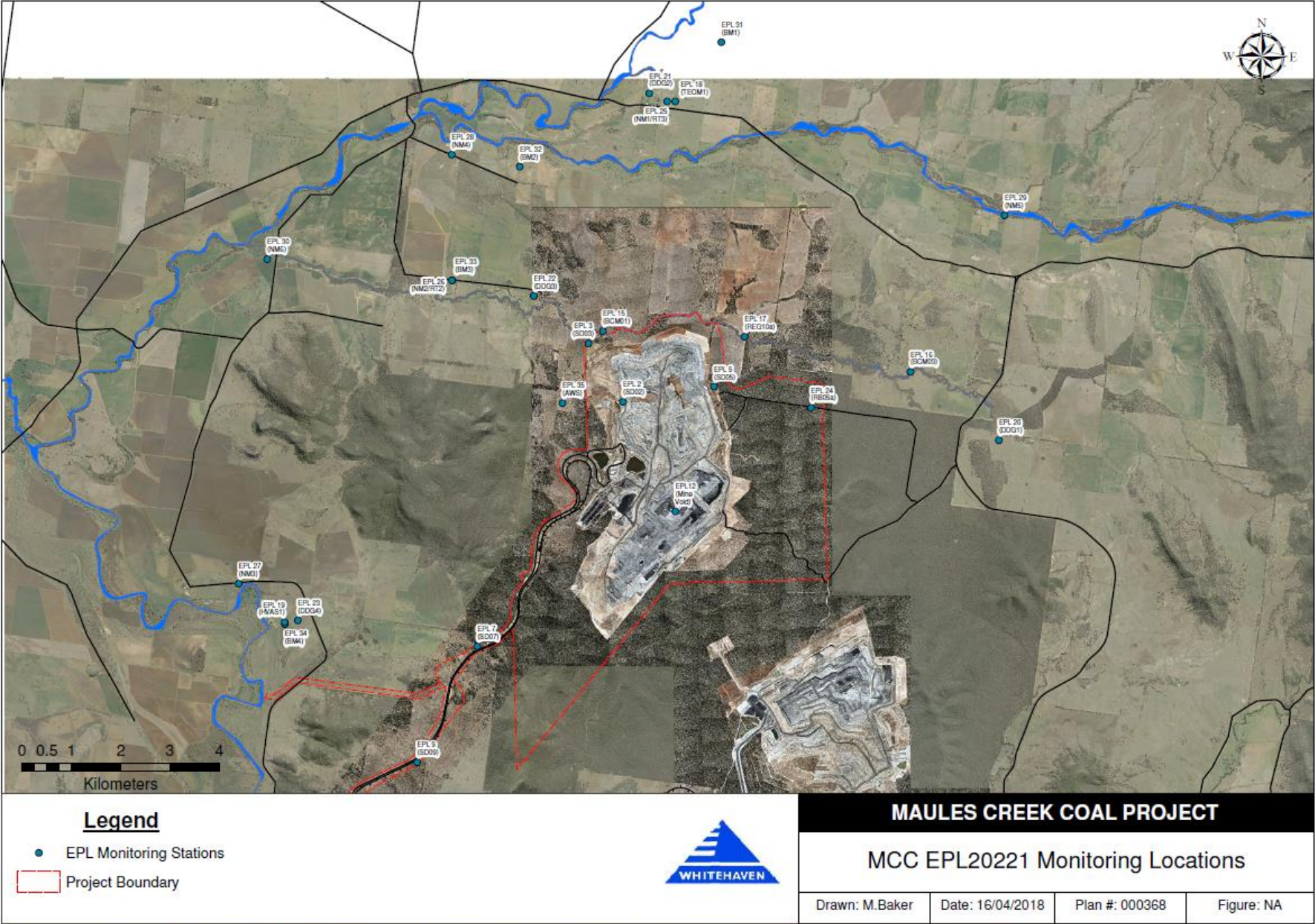
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	26.4	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	26.2	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	1.9	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.3	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	7.8	4	Yes

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: See Figure 1 below

Sampling Period: August 2020

Obtained Date: 15 September 2020

Publication Date: 16 September 2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value																								
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this 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							No Discharge at this 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													No Discharge at this at this location this month																	
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0																			No Discharge at this at this location this month											
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0																									No Discharge at this at this location this month					
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0	No Discharge at this at this location this month																													
	Conductivity	µs/cm		0																														
	Oil & Grease	mg/L		0																														
	pH	pH		0																														

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	03/08/2020	22:26	1.6	IA	35	IA	45	0	Nil
NM2	03/08/2020	23:11	1.9	IA	39	IA	45	0	Nil
NM3	04/08/2020	00:02	1.3	IA	35	IA	45	0	Nil
NM4	03/08/2020	22:50	1.1	IA	35	IA	45	0	Nil
NM5	03/08/2020	22:00	2.1	<25	35	29	45	0	Nil
NM6	03/08/2020	23:37	1.5	IA	35	IA	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	11	99.56	116.5	120	No
	Vibration	mm/s		11	0.44	4.07	10	No

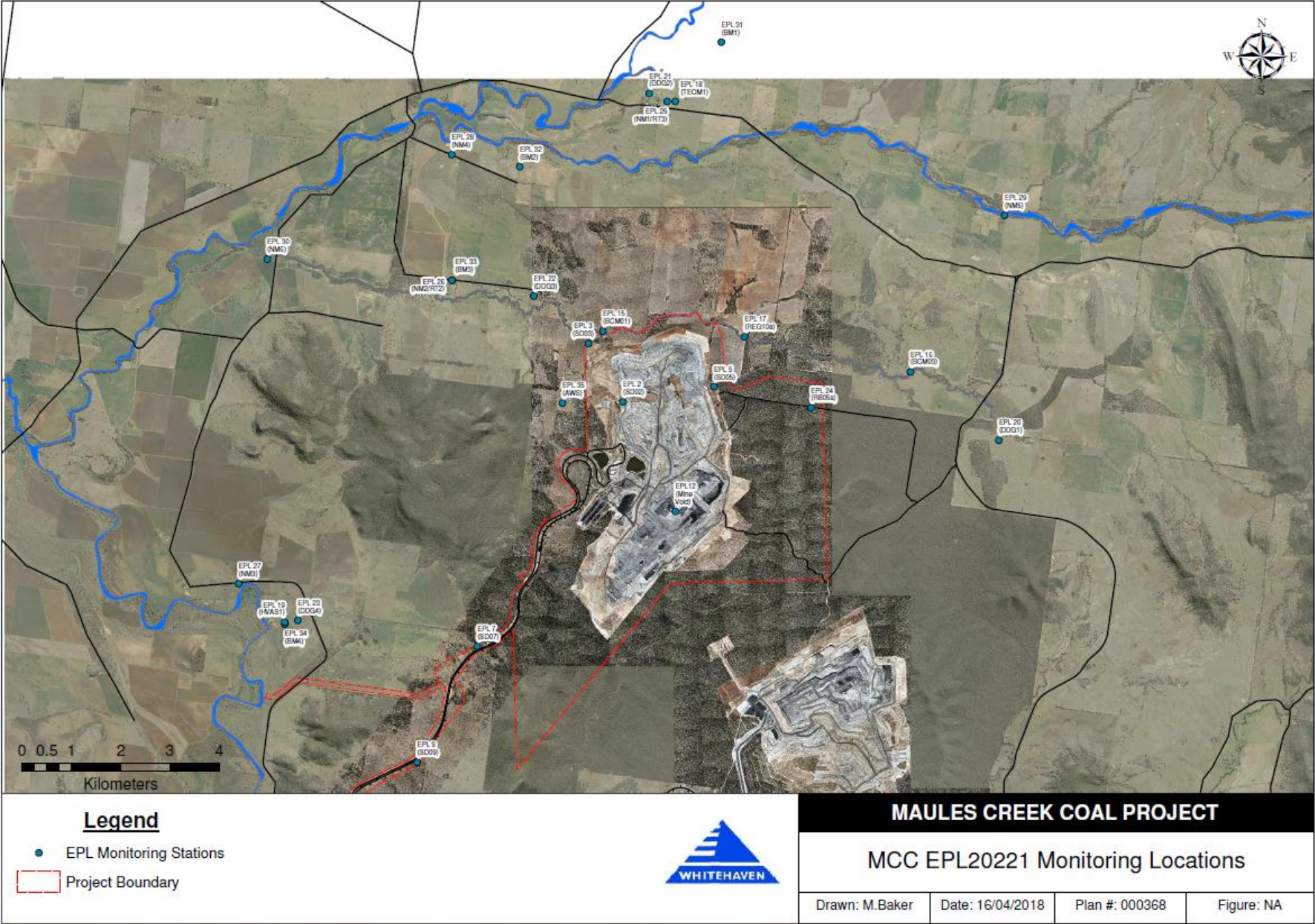
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	25.4	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	25.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	1.9	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.6	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.3	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	7.8	4	Yes

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: See Figure 1 below

Sampling Period: September 2020

Obtained Date: 15 October 2020

Publication Date: 16 October 2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special	0	No Discharge at this at this location this month					
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
3 (SD3)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
3 (SD3)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
5 (SD5)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
7 (SD7)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
9 (SD9)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	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	07/09/2020	Yes			16
	Conductivity	µs/cm		1		Yes			1480
	Oil & Grease	mg/L		1		Yes			<5
	pH	pH		1		Yes			7.45

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	18/09/2020	Yes			7.62
	Conductivity	µs/cm			18/09/2020	Yes			1870
	TDS	mg/L			18/09/2020	Yes			1240

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	01/09/2020	22:30	0.6	<25	35	<25	45	0	Nil
NM2	01/09/2020	23:30	0.5	<20	39	23	45	0	Nil
NM3	01/09/2020	23:31	0.5	IA	35	IA	45	0	Nil
NM4	01/09/2020	23:00	0.5	IA	35	IA	45	0	Nil
NM5	01/09/2020	22:00	0.7	<20	35	22	45	0	Nil
NM6	01/09/2020	23:58	0.4	IA	35	IA	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	12	97.93	112.2	120	No
	Vibration	mm/s		12	0.17	1.55	10	No

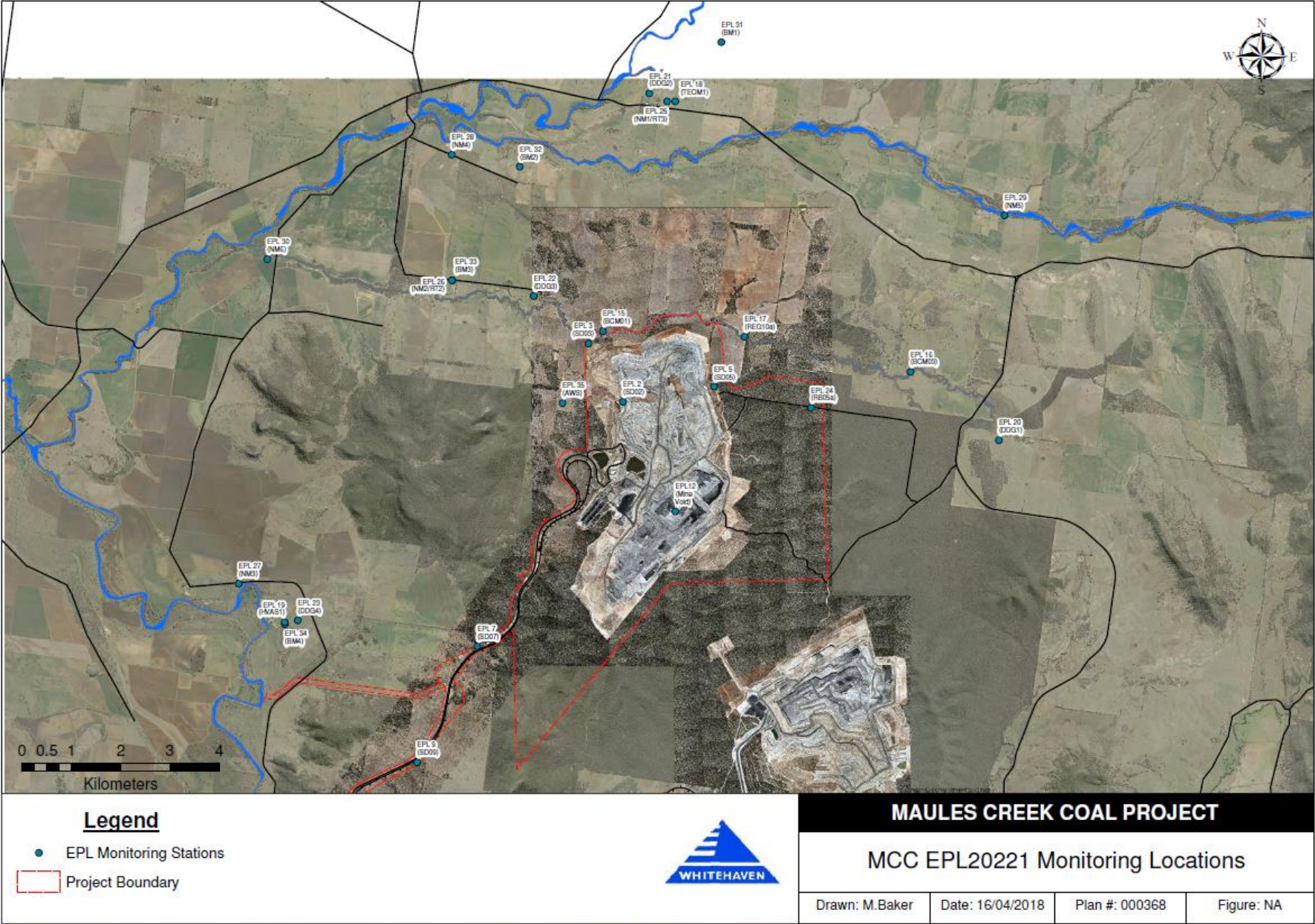
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	23.7	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	24.1	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.0	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.7	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.2	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	7.6	4	Yes

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: See Figure 1 below

Sampling Period: October 2020

Obtained Date: 13 November 2020

Publication Date: 19 November 2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special	0	No Discharge at this at this location this month					
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
3 (SD3)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
3 (SD3)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
5 (SD5)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
7 (SD7)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
9 (SD9)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	01/10/2020	22:30	1.6	35	35	37	45	0	Nil
NM2	01/10/2020	23:30	2.1	35	39	41	45	0	Nil
NM3	01/10/2020	23:35	1.3	IA	35	IA	45	0	Nil
NM4	01/10/2020	23:00	1.7	<30	35	<30	45	0	Nil
NM5	01/10/2020	22:00	1.2	<30	35	<30	45	0	Nil
NM6	01/10/2020	23:55	2.8	<25	35	<25	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	9	96.45	112.4	120	No
	Vibration	mm/s		9	0.20	1.05	10	No

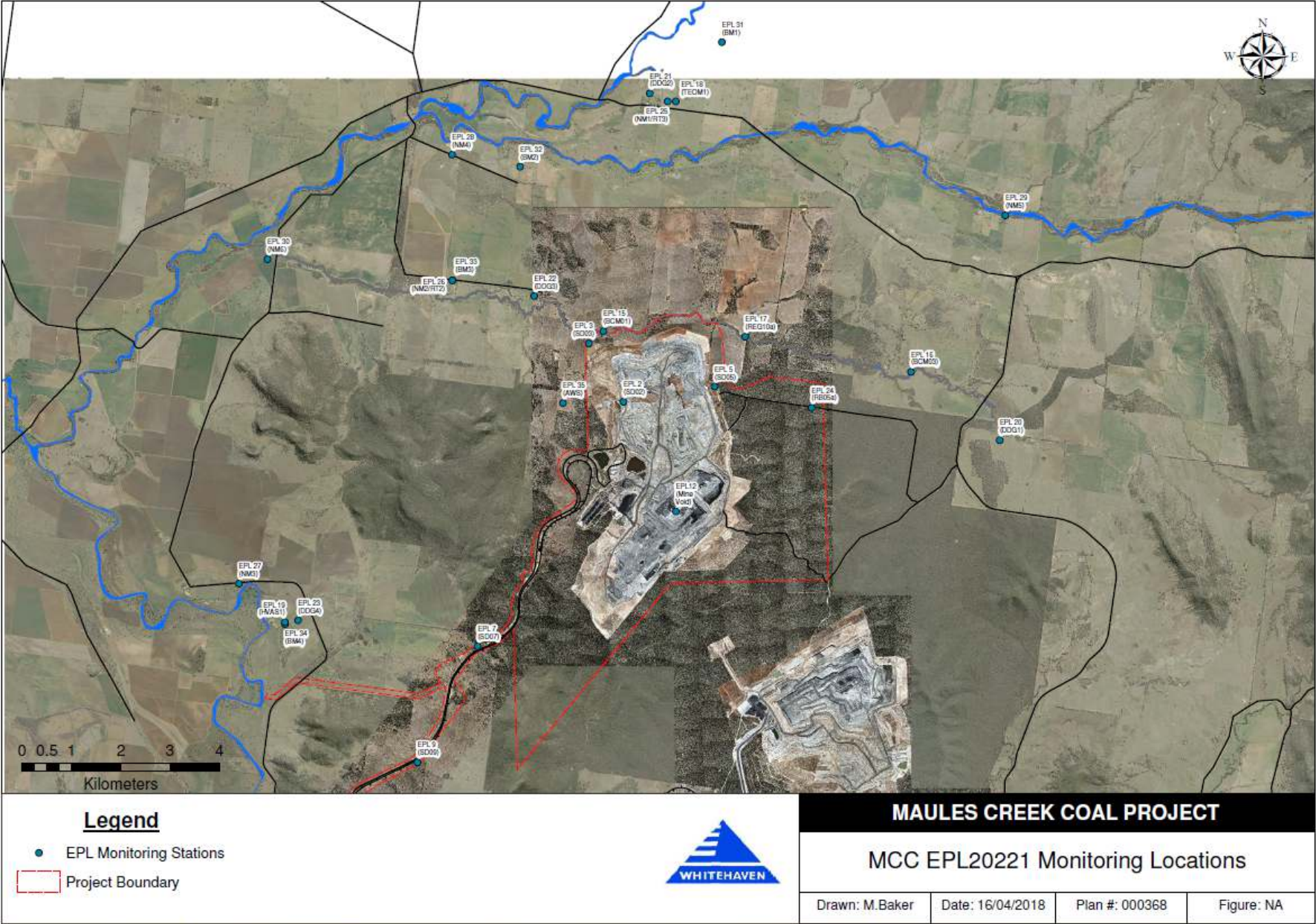
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	20.3	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	20.7	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.0	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	3.4	4	No

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: See Figure 1 below

Sampling Period: November 2020

Obtained Date: 15 December 2020

Publication Date: 17 December 2020

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
3 (SD3)	TSS	mg/L	Special	0	No Discharge this month					
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
7 (SD7)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
9 (SD9)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	0						
36 (SD12)	TSS	mg/L	Special	0						
	Conductivity	µs/cm	Frequency	0						
	Oil & Grease	mg/L	Discharge	0						
	pH	pH	only	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	2	10/11/2020	Yes	10	11.5	13
	Conductivity	µs/cm		2		Yes	1310	1410	1510
	Oil & Grease	mg/L		2		Yes	<10	<10	<10
	pH	pH		2		Yes	8.18	8.29	8.40

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample in December				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	09/11/2020	22:30	2.2	23	35	28	45	0	Nil
NM2	09/11/2020	23:30	1.0	29	39	34	45	0	Nil
NM3	09/11/2020	23:30	1.0	23	35	<25	45	0	Nil
NM4	09/11/2020	23:00	1.5	25	35	30	45	0	Nil
NM5	09/11/2020	22:00	3.5	IA	35	IA	45	0	N/A
NM6	09/11/2020	23:55	0.8	24	35	25	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

N/A in exceedance column means criterion was not applicable due to atmospheric conditions outside those specified in the project approval.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	10	95.73	105.7	120	No
	Vibration	mm/s		10	0.17	0.97	10	No

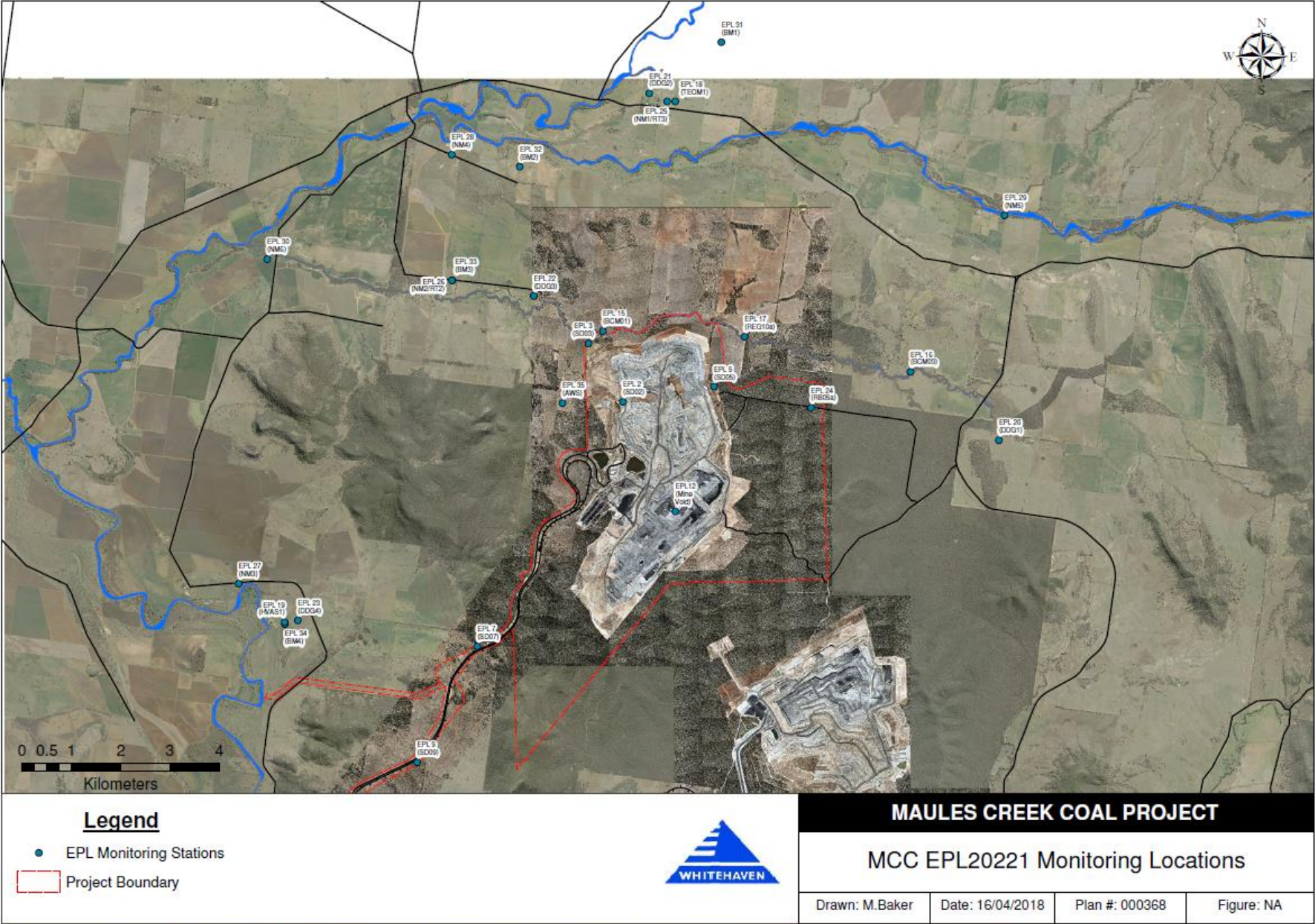
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	16.7	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	19.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	1.9	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.3	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	3.2	4	No

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: See Figure 1 below

Sampling Period: December 2020

Obtained Date: 15 January 2021

Publication Date: 20 January 2021

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 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	Mean	Median Value	Max / Only Value
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	1	04/12/2020	10/12/2020				440
	Conductivity	µs/cm		1	04/12/2020	10/12/2020				520
	Oil & Grease	mg/L		1	04/12/2020	10/12/2020				<10
	pH	pH		1	04/12/2020	10/12/2020				7.3
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
36 (SD12)	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 January				
	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
15 (BCM01)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	8/12/2020	Yes	-	-	7.63
	Conductivity	µs/cm					-	-	1840
	TDS	mg/L					-	-	1120

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min dB	Limit LAeq 15min (dB) Operations Criteria	MCCP LA1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	08/12/2020	22:30	2.2	23	35	28	45	0	Nil
NM2	08/12/2020	23:30	0.9	31	39	35	45	0	Nil
NM3	08/12/2020	23:31	0.9	IA	35	IA	45	0	Nil
NM4	08/12/2020	23:00	1.9	24	35	28	45	0	Nil
NM5	08/12/2020	22:00	2.3	IA	35	IA	45	0	Nil
NM6	08/12/2020	23:55	1.0	<20	35	<20	45	0	Nil

MCC ID = Locations as per the EPL No.20221.

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.

NM = Not Measurable. If site noise is noted as NM, <20 dB or <30 dB, this means some noise was audible but could not be quantified.

IA = Site noise was inaudible at the monitoring location.

N/A in exceedance column means criterion was not applicable due to atmospheric conditions outside those specified in the project approval.

Table 5 - Noise Monitoring (Attended - Low Frequency Assessment)

None of the measurements satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore no further assessment of low frequency noise was required to be undertaken.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Overpressure	Db (Lin Peak)	All	9	96.51	112.7	120	No
	Vibration	mm/s		9	0.24	0.93	10	No

Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

Table 7 – Dust Monitoring (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m ³ month	PM ₁₀	12.5	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	15.3	30	No

Table 8 –

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.0	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.2	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	2.8	4	No

Figure 1 - EPL 20221 Monitoring Locations

