



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 2021

Obtained Date: 15 February 2021

Publication Date: 15 February 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	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	1	11/01/2021	Yes			47
	Conductivity	µs/cm		1		Yes			980
	Oil & Grease	mg/L		1		Yes			<5
	pH	pH		1		Yes			6.84

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 March 2021				
	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	12/01/2021	22:30	1.3	<20	35	<20	45	0	Nil
NM2	12/01/2021	23:31	0.9	<25	39	<25	45	0	Nil
NM3	12/01/2021	23:44	1.0	<25	35	<25	45	0	Nil
NM4	12/01/2021	23:00	1.6	<25	35	26	45	0	Nil
NM5	12/01/2021	22:00	0.4	IA	35	IA	45	0	Nil
NM6	13/01/2021	00:00	0.6	<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	11	97.85	111.2	120	No
	Vibration	mm/s		11	0.13	0.67	10	No

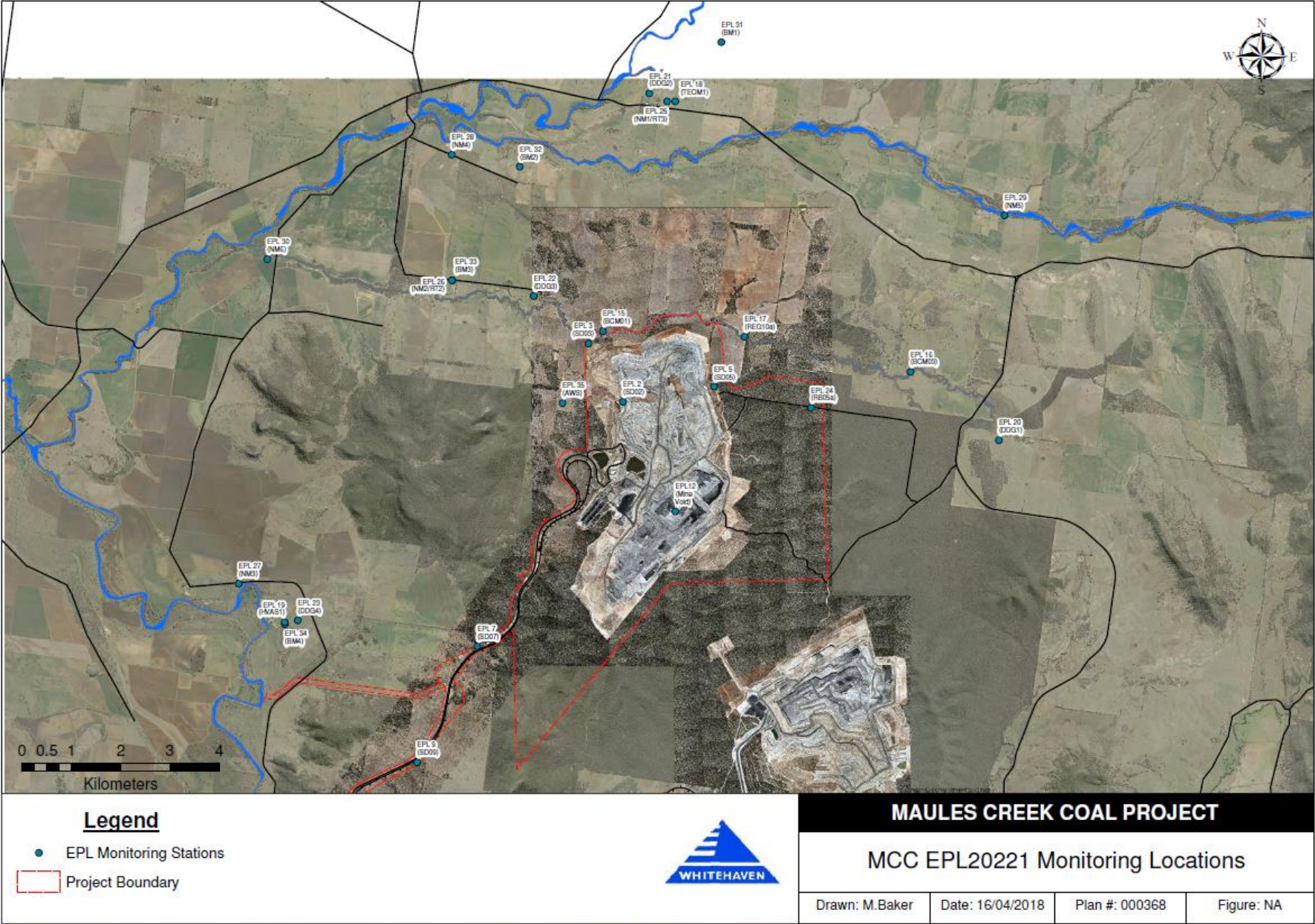
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	10.2	30	No
19 (HVAS)	6 days	µg/m ³	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/MC1)	Monthly	g/m ² month	2.0	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.2	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	2.6	4	No

Figure 1 - EPL 20221 Monitoring Locations





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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: February 2021

Obtained Date: 15 March 2021

Publication Date: 18 March 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	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	0	Next sample March				
	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	0	Next sample in March 2021				
	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	11/02/2021	22:30	1.1	27	35	33	45	0	Nil
NM2	11/02/2021	23:31	1.0	25	39	40	45	0	Nil
NM3	11/02/2021	23:40	1.0	IA	35	IA	45	0	Nil
NM4	11/02/2021	23:00	1.2	<20	35	<20	45	0	Nil
NM5	11/02/2021	22:00	1.0	IA	35	IA	45	0	Nil
NM6	11/02/2021	23:58	0.6	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.

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	8	96.25	109.50	120	No
	Vibration	mm/s		8	0.14	0.42	10	No

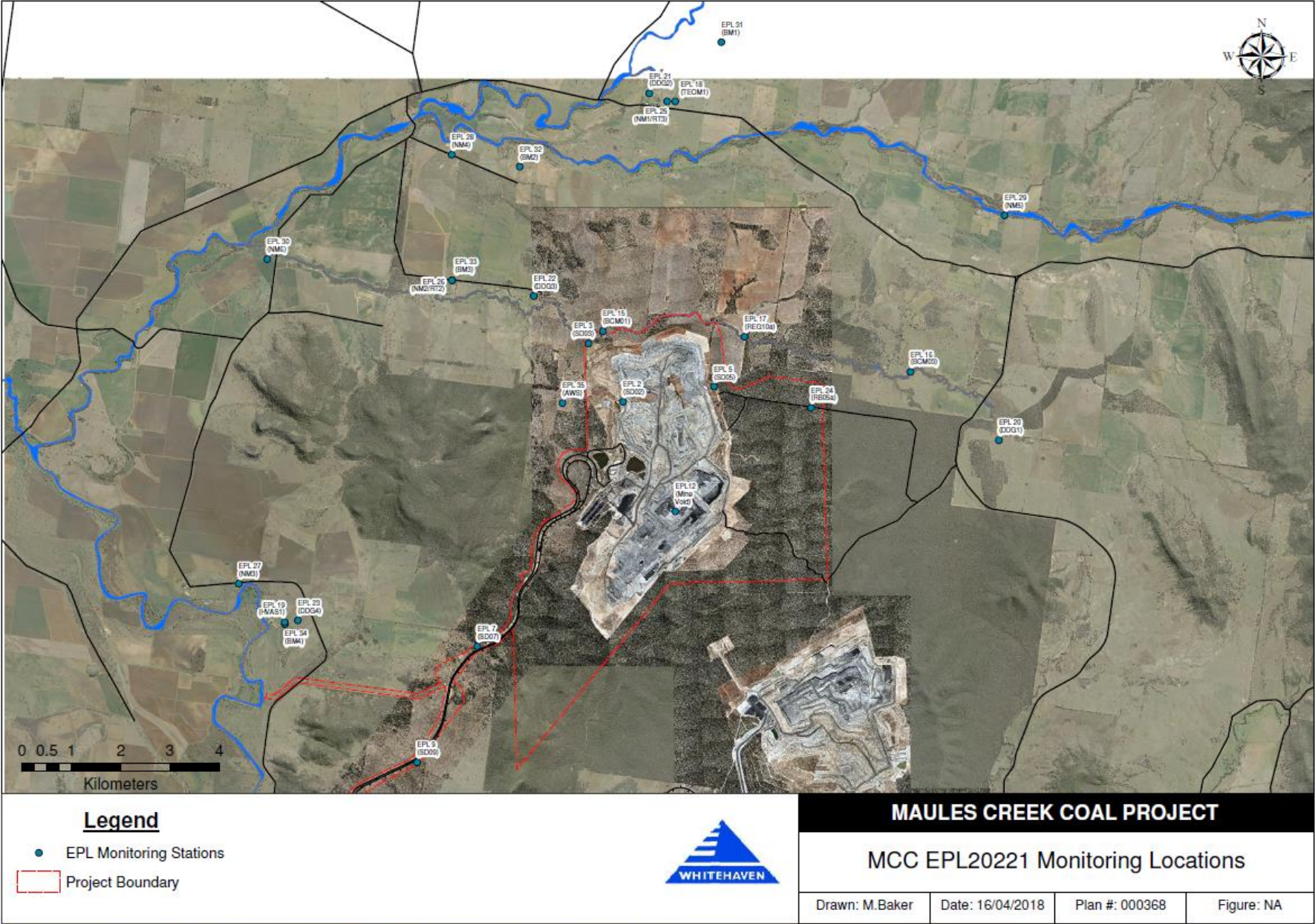
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	9.7	30	No
19 (HVAS)	6 days	µg/m ³	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/m ² month	1.8	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.0	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.9	4	No

Figure 1 - EPL 20221 Monitoring Locations





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Site Information

EPL No: 20221

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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 2021

Obtained Date: 15 April 2021

Publication Date: 17 April 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	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	1	08/03/2021	Yes			7
	Conductivity	µs/cm		1		Yes			1060
	Oil & Grease	mg/L		1		Yes			<5
	pH	pH		1		Yes			8.02

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	30/03/2021	Yes			7.91
	Conductivity	µs/cm				Yes			1840
	TDS	mg/L				Yes			1090

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	25/03/2021	22:45	0.5	26	35	<30	45	0	Nil
NM2	26/03/2021	00:15	0.5	<25	39	<25	45	0	Nil
NM3	25/03/2021	23:38	0.3	IA	35	IA	45	0	Nil
NM4	25/03/2021	23:45	0.4	<20	35	<20	45	0	Nil
NM5	25/03/2021	22:15	0.4	27	35	30	45	0	Nil
NM6	26/03/2021	00:41	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.

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	7	93.41	102.3	120	No
	Vibration	mm/s		7	0.13	0.48	10	No

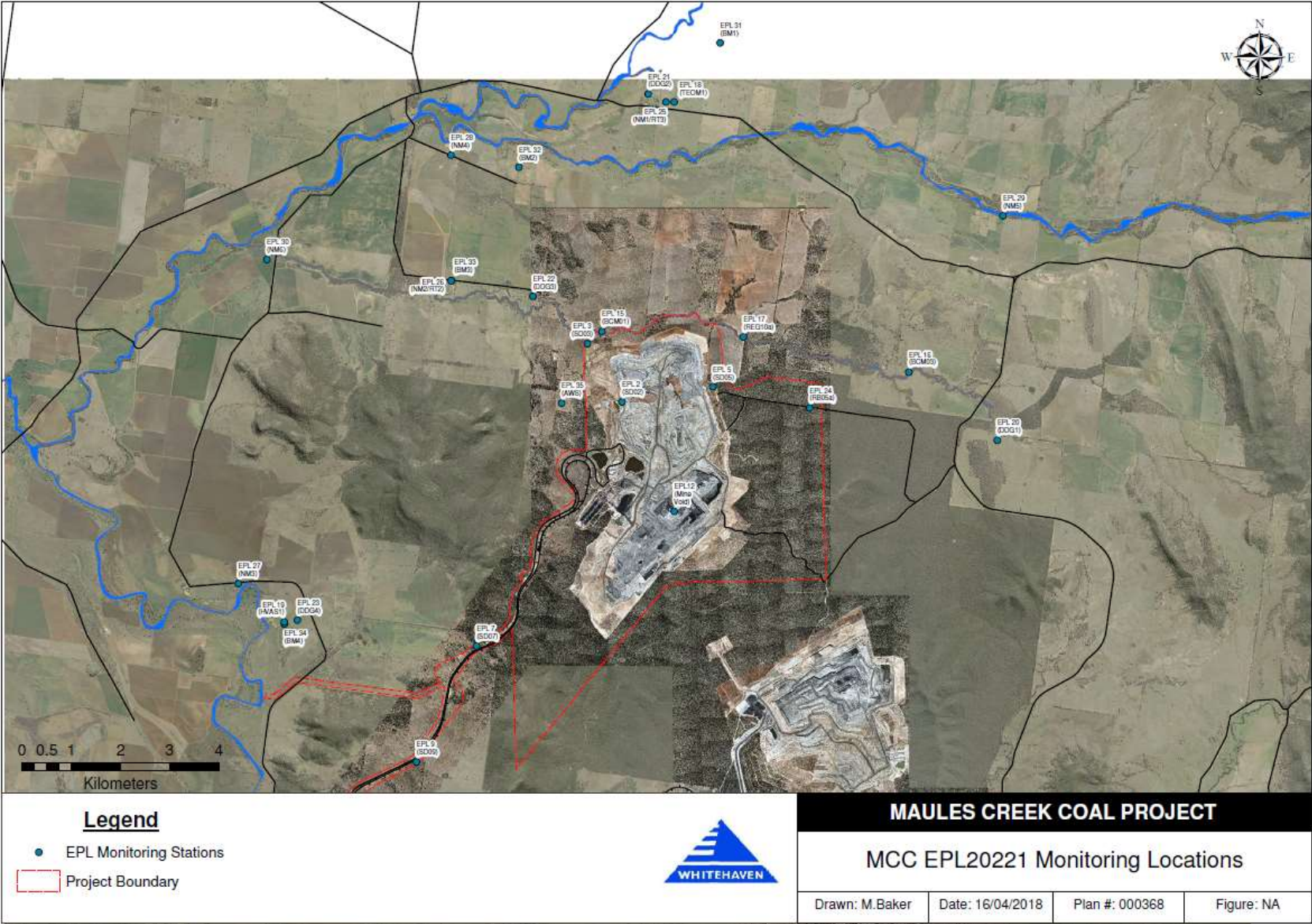
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	9.4	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	12.7	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	1.8	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.2	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.9	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: April 2021

Obtained Date: 14 May 2021

Publication Date: 17 May 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	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	0	Next sample May				
	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	0					Next sample in June 2021
	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	14/04/2021	22:30	0.4	IA	35	IA	45	0	Nil
NM2	14/04/2021	23:30	0.5	IA	39	IA	45	0	Nil
NM3	14/04/2021	23:34	0.4	IA	35	IA	45	0	Nil
NM4	14/04/2021	23:00	0.3	IA	35	IA	45	0	Nil
NM5	14/04/2021	22:00	0.3	29	35	32	45	0	Nil
NM6	14/04/2021	23:57	0.5	IA	35	IA	45	0	Nil

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

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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.

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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	96.0	107.6	120	No
	Vibration	mm/s		9	0.20	0.86	10	No

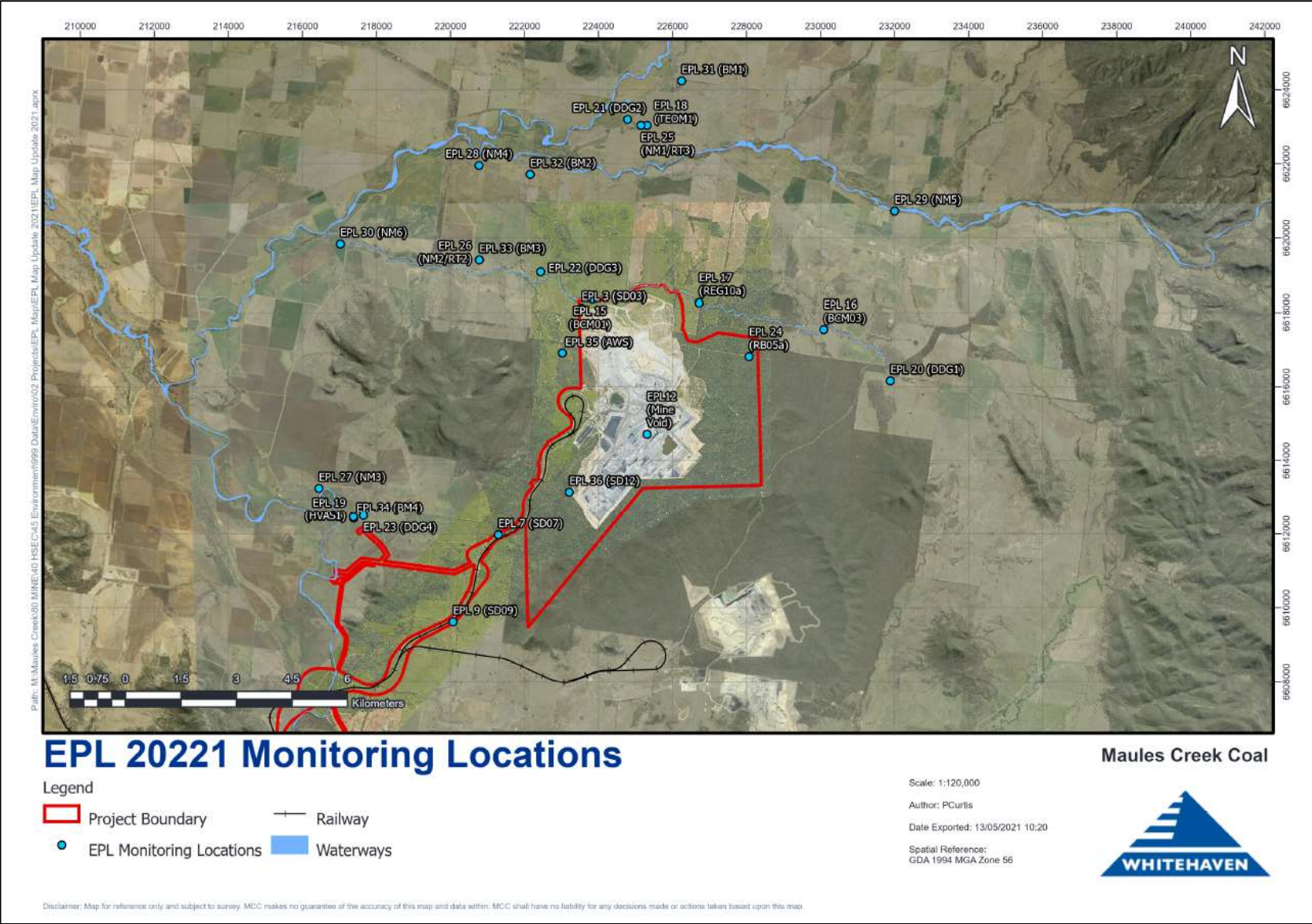
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	8.8	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	12.5	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	1.8	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	1.8	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: May 2021

Obtained Date: 15 June 2021

Publication Date: 21 June 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	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	1	Next sample May	15/06/2021			16
	Conductivity	µs/cm		1		15/06/2021			1090
	Oil & Grease	mg/L		1		15/06/2021			5
	pH	pH		1		15/06/2021			8.38

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	Next sample in June 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Next sample in June 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Next sample in June 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample in June 2021				
	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 L A1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	06/05/2021	22:40	0.9	<20	35	<20	45	0	Nil
NM2	06/05/2021	23:45	0.4	<20	39	<25	45	0	Nil
NM3	06/05/2021	23:33	0.4	<20	35	<25	45	0	Nil
NM4	06/05/2021	23:13	0.3	<20	35	<20	45	0	Nil
NM5	06/05/2021	22:08	0.9	<20	35	<20	45	0	Nil
NM6	07/05/2021	00:15	0.9	<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	8	96.2	111.3	120	No
	Vibration	mm/s		8	0.19	0.65	10	No

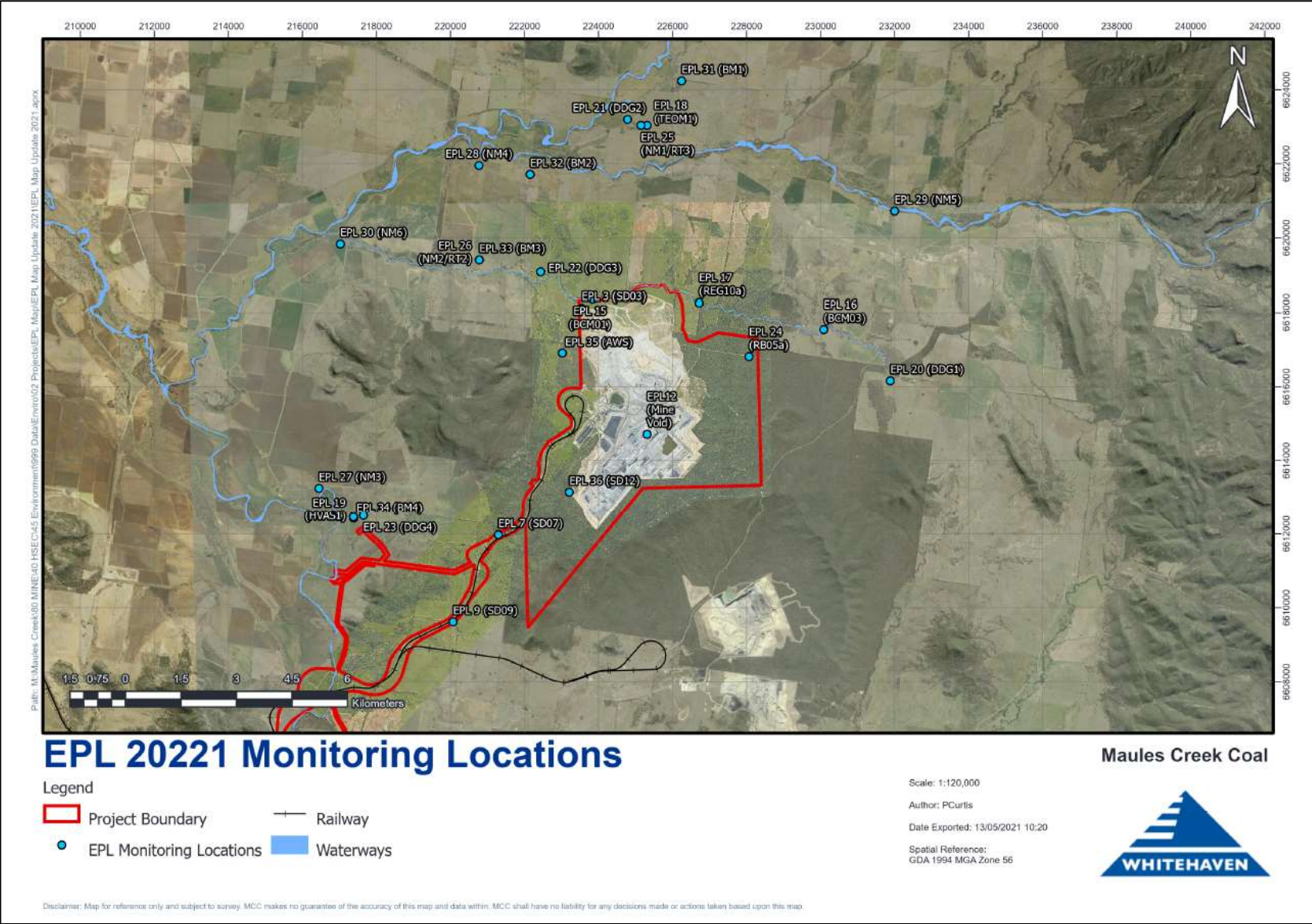
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	8.7	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	12.5	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	2.1	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.2	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: June 2021

Obtained Date: 15 July 2021

Publication Date: 19 July 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							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	1	12/06/2021	Yes				20
	Conductivity	µs/cm		1	12/06/2021	Yes				583
	Oil & Grease	mg/L		1	12/06/2021	Yes				<5
	pH	pH		1	12/06/2021	Yes				7.69
36 (SD12)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								

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 July				
	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
15 (BCM01)	pH	pH	Quarterly	0	Dry				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Dry				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Dry				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	16/06/2021				7.56
	Conductivity	µs/cm		1	16/06/2021				1830
	TDS	mg/L		1	16/06/2021				1010

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	17/06/2021	22:30	0.4	NM	35	NM	45	0	Nil
NM2	17/06/2021	23:30	0.4	NM	39	NM	45	0	Nil
NM3	17/06/2021	22:00	0.4	IA	35	IA	45	0	Nil
NM4	17/06/2021	23:00	0.3	NM	35	NM	45	0	Nil
NM5	17/06/2021	22:00	0.4	26	35	34	45	0	Nil
NM6	17/06/2021	23:58	0.4	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 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	8	94.4	103.6	120	No
	Vibration	mm/s		8	0.15	0.66	10	No

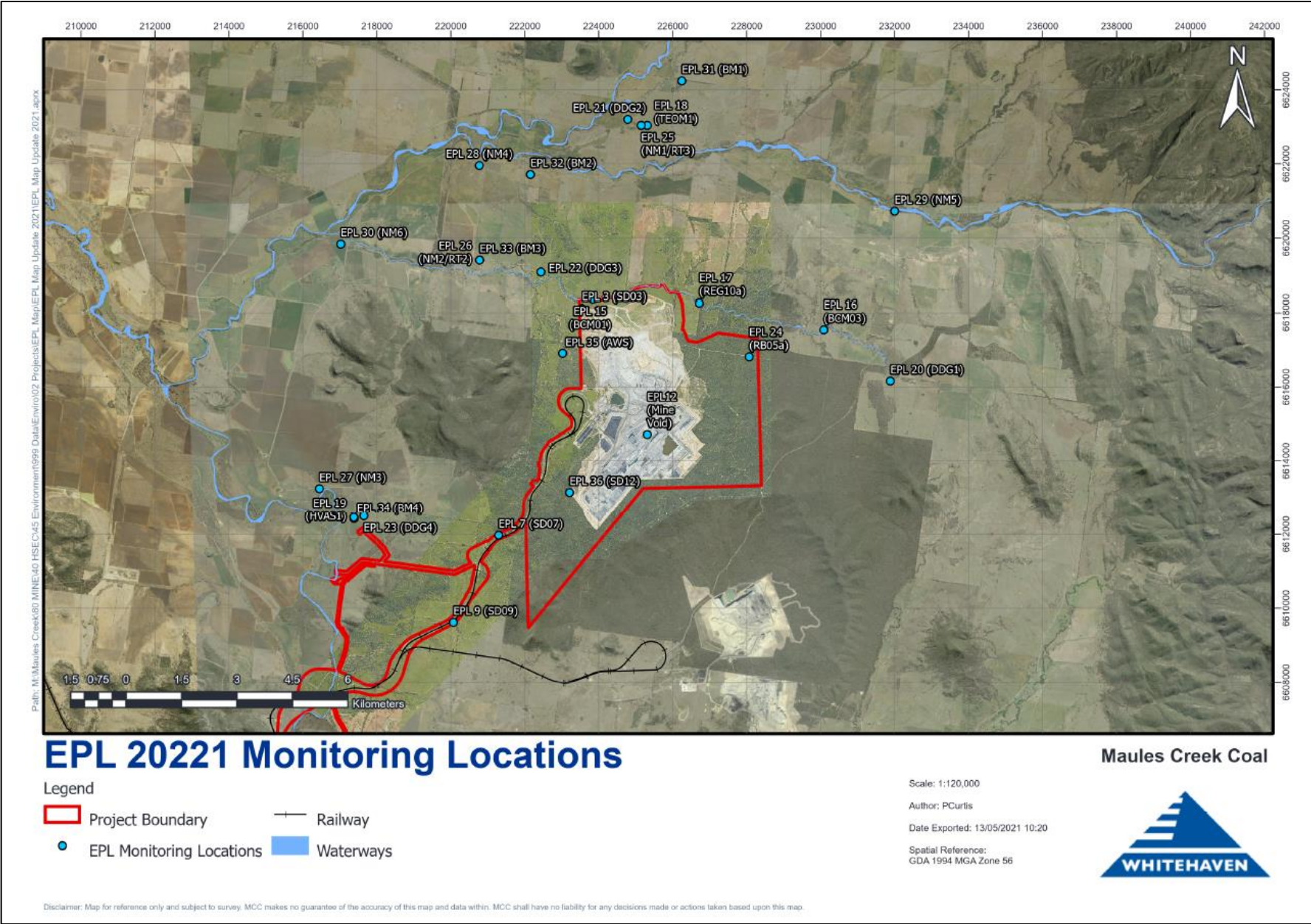
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	8.4	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	12.2	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	2.2	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	2.0	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.0	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: July 2021

Obtained Date: 13 August 2021

Publication Date: 19 August 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	No Discharge this month						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
36 (SD12)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								

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	Next Sample September	12/08/2021			19
	Conductivity	µs/cm		1		12/08/2021			1200
	Oil & Grease	mg/L		1		12/08/2021			<5
	pH	pH		1		12/08/2021			8.2

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	Next sample in September 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Next sample in September 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Next sample in September 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample in September 2021				
	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 L A1(1min) dB	Limit LA1 (1 min) (dB) Operations Criteria	Rain (mm)	Exceedance (Yes / No)
NM1	19/07/2021	22:30	0.2	26	35	29	45	0	Nil
NM2	19/07/2021	23:30	0.2	IA	39	IA	45	0	Nil
NM3	19/07/2021	22:00	0.1	IA	35	IA	45	0	Nil
NM4	19/07/2021	23:00	0.2	IA	35	IA	45	0	Nil
NM5	19/07/2021	22:00	0.1	23	35	27	45	0	Nil
NM6	20/07/2021	00:00	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 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	97.6	111.4	120	No
	Vibration	mm/s		9	0.2	1.18	10	No

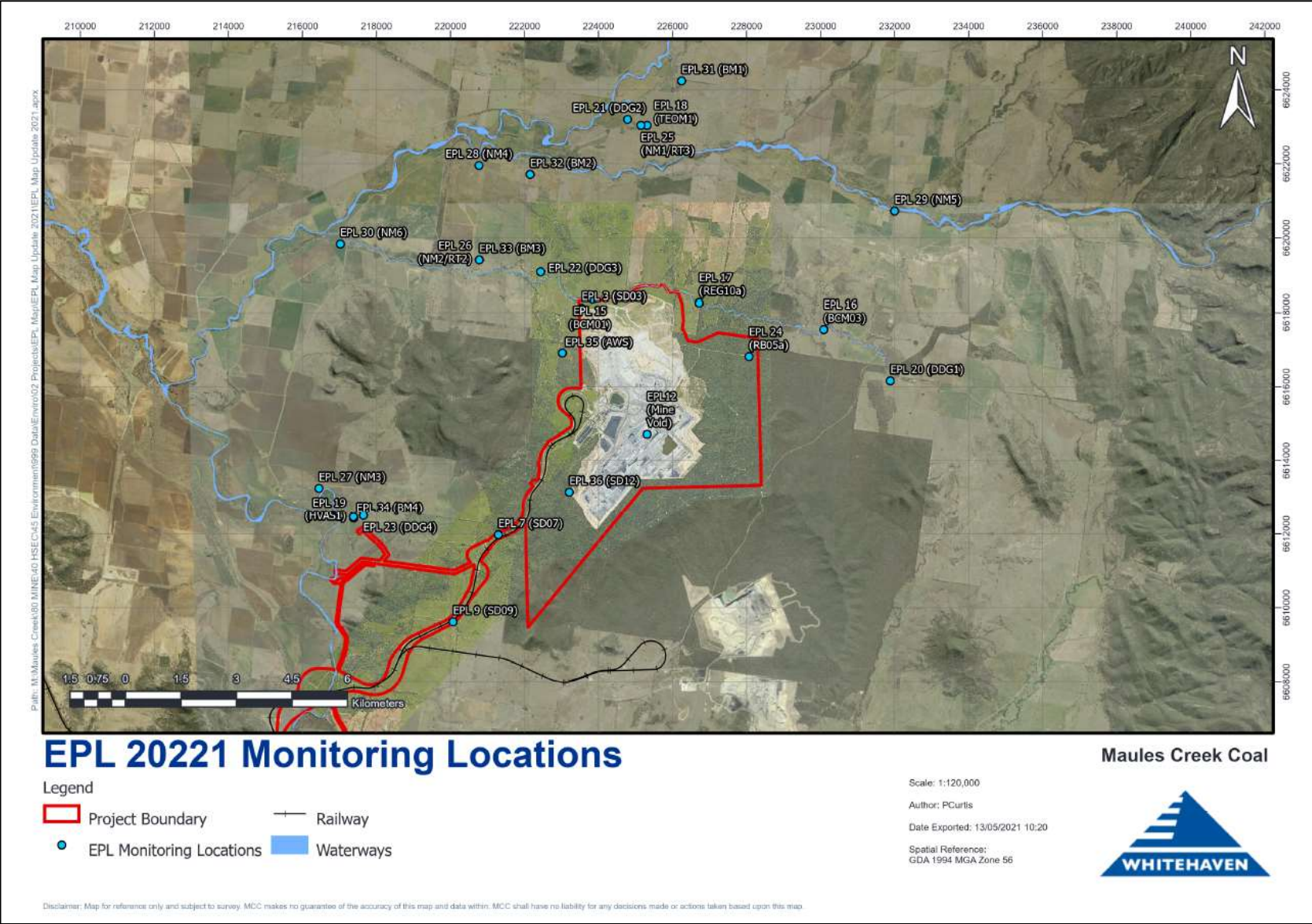
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	8.2	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	11.9	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	2.4	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.3	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	1.9	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.1	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: August 2021

Obtained Date: 22 September 2021

Publication Date: 22 September 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	No Discharge this month						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
36 (SD12)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								

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 September 2021				
	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	Next sample in September 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Next sample in September 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Next sample in September 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample in September 2021				
	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	03/08/2021	22:30	0.1	27	35	30	45	0	Nil
NM2	03/08/2021	23:30	2.1	IA	39	IA	45	0	Nil
NM3	03/08/2021	23:45	2.8	IA	35	IA	45	0	Nil
NM4	03/08/2021	23:00	0.2	IA	35	IA	45	0	Nil
NM5	03/08/2021	22:00	0.2	25	35	30	45	0	Nil
NM6	03/08/2021	23:56	2.4	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 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	8	95.72	111.0	120	No
	Vibration	mm/s		8	0.32	2.78	10	No

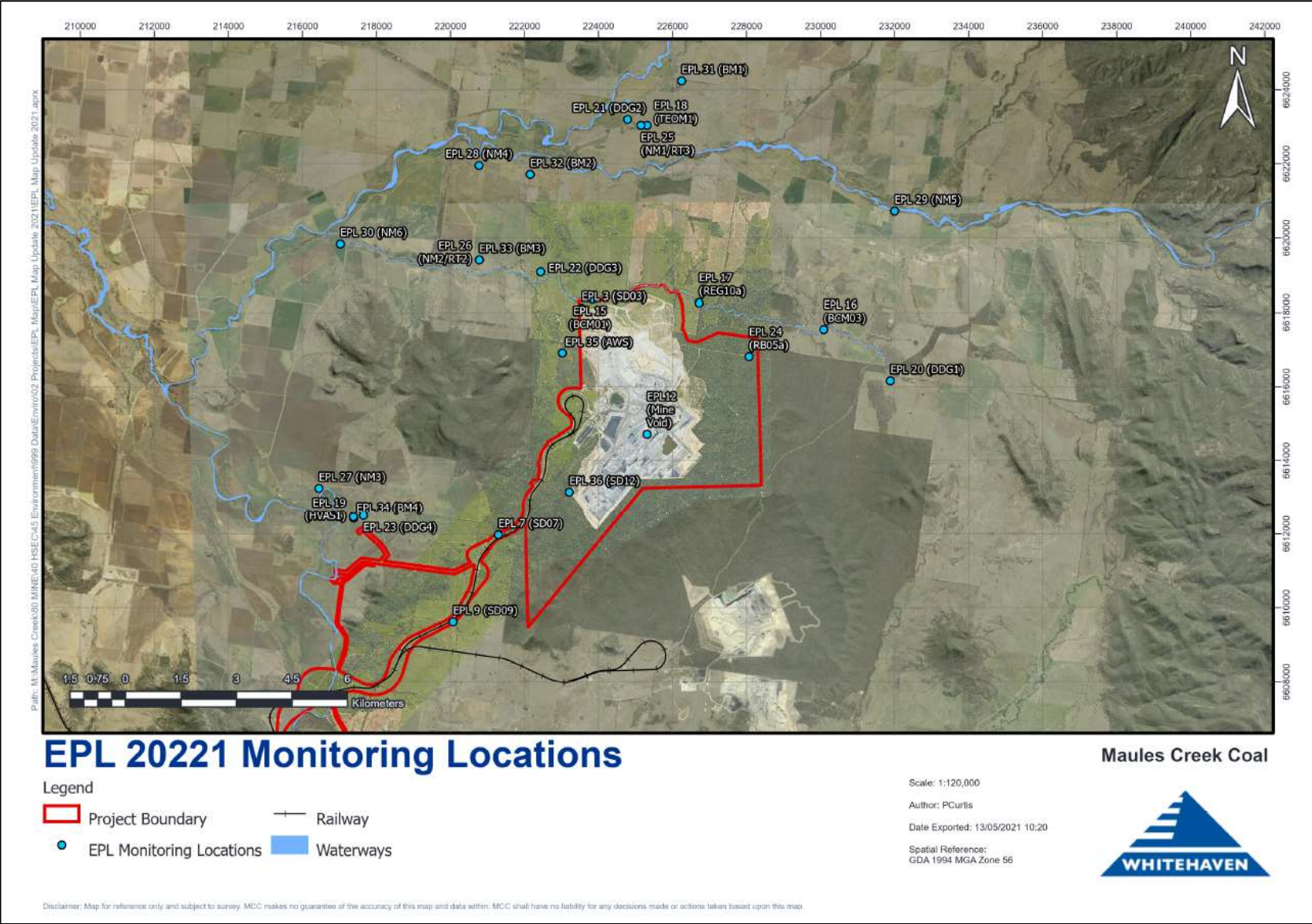
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	7.9	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	11.9	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	2.4	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.2	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	1.8	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.3	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: September 2021

Obtained Date: 15 October 2021

Publication Date: 21 October 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 Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	No discharge at this location this month.						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
3 (SD3)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
5 (SD5)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								

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	10/09/2021	Yes			40
	Conductivity	µs/cm		1		Yes			1140
	Oil & Grease	mg/L		1		Yes			<5
	pH	pH		1		Yes			8.19

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	Dry				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Dry				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Dry				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	16/09/2021				7.4
	Conductivity	µs/cm			16/09/2021				1890
	TDS	mg/L			16/09/2021				1140

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 LAeq 1min dB	Limit LA1 (1 min) (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	08/09/2021	22:30	0.2	IA	35	IA	45	0	Nil
NM2	08/09/2021	23:30	0.7	IA	39	IA	45	0	Nil
NM3	08/09/2021	23:39	0.4	IA	35	IA	45	0	Nil
NM4	08/09/2021	23:00	0.2	IA	35	IA	45	0	Nil
NM5	08/09/2021	22:00	0.5	IA	35	IA	45	0	Nil
NM6	08/09/2021	23:57	0.5	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.

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	11	95.53	107.4	120	No
	Vibration	mm/s		11	0.15	0.77	10	No

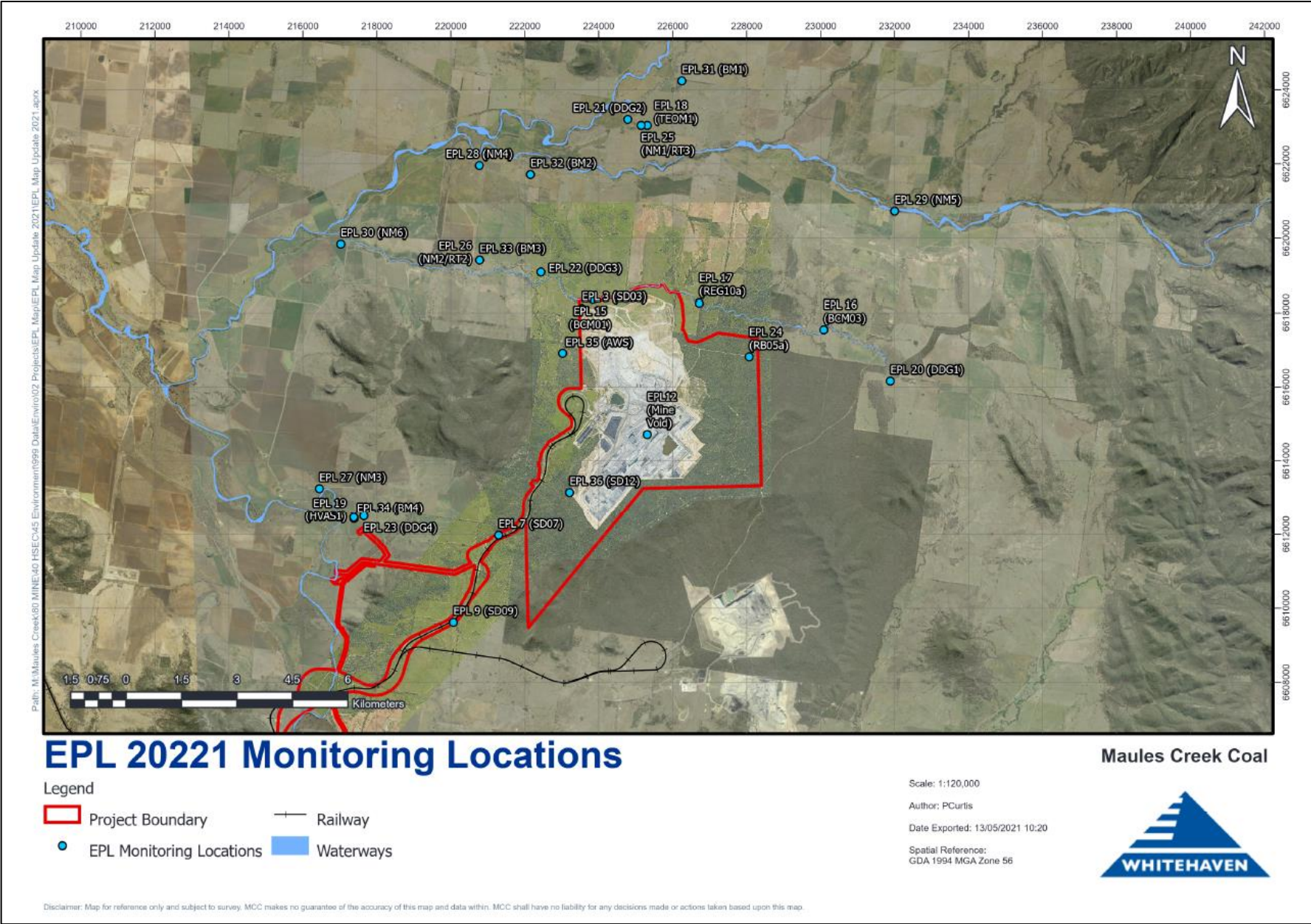
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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/m³ month	PM ₁₀	7.7	30	No
19 (HVAS)	6 days	µg/m³	PM ₁₀	11.9	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	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.8	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.2	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: October 2021

Obtained Date: 15 November 2021

Publication Date: 23 November 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 Value	Mean Value	Median Value	Max / Only Value
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	No discharge at this location this month.						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
3 (SD3)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
5 (SD5)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	2	14/10/21 & 15/10/21	Yes	28	28	28	28
	Conductivity	µs/cm		2			542	579.5	579.5	617
	Oil & Grease	mg/L		2			<5	<5	<5	<5
	pH	pH		2			7.83	7.87	7.87	7.91

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 November 2021				
	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	Next Sample in December 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Next Sample in December 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Next Sample in December 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next Sample in December 2021				
	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 LAeq 1min dB	Limit LA1 (1 min) (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	19/10/2021	22:30	0.9	27	35	29	45	0	Nil
NM2	19/10/2021	23:46	0.6	<25	39	30	45	0	Nil
NM3	19/10/2021	23:37	0.7	IA	35	IA	45	0	Nil
NM4	19/10/2021	23:00	0.5	<25	35	<25	45	0	Nil
NM5	19/10/2021	22:00	0.6	28	35	31	45	0	Nil
NM6	20/10/2021	00:13	0.4	<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	7	97.35	109	120	No
	Vibration	mm/s		7	0.24	1.52	10	No

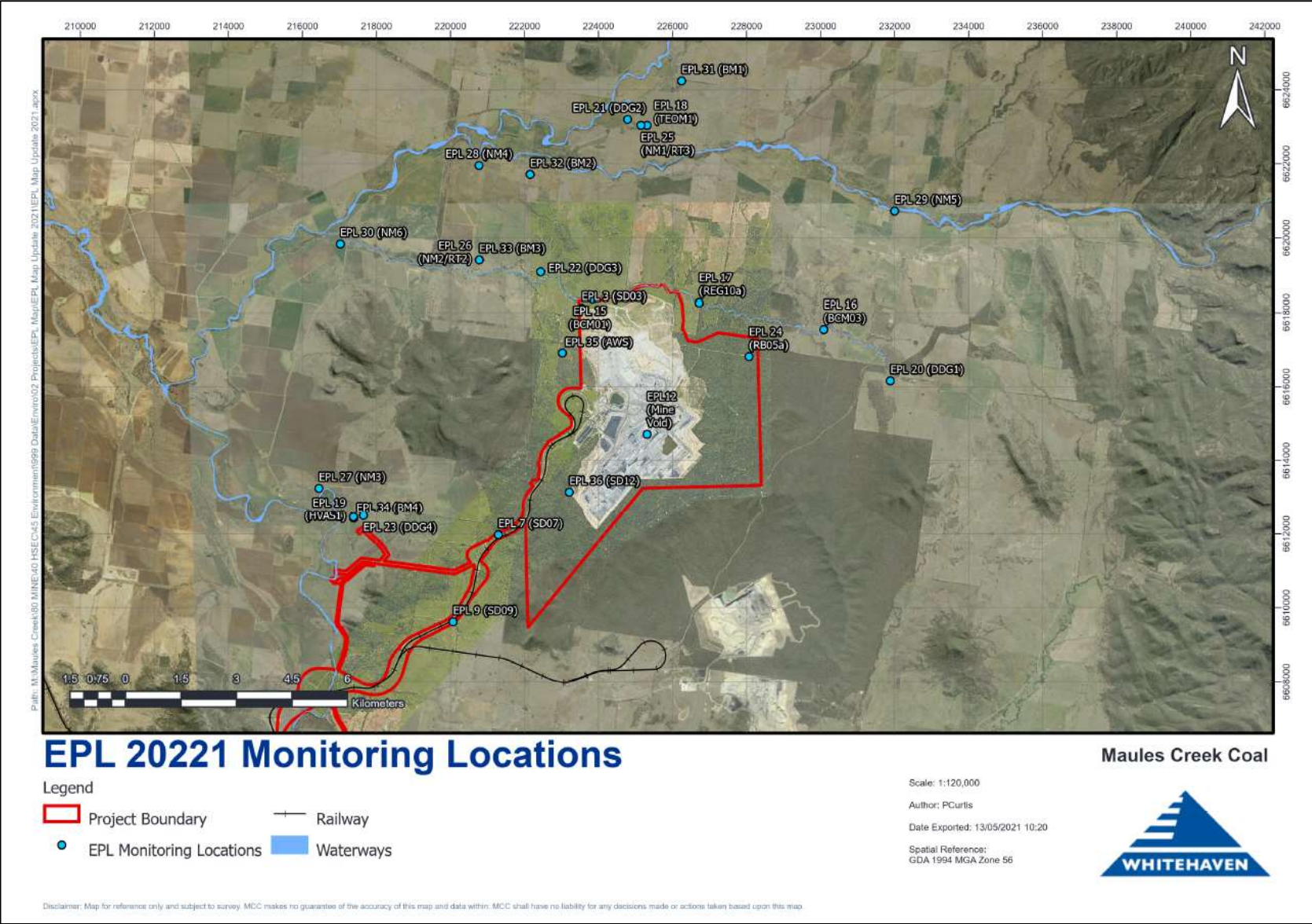
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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	7.6	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	11.3	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	1.9	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	1.8	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.2	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: November 2021

Obtained Date: 17 December 2021

Publication Date: 17 December 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 Value	Mean Value	Median Value	Max / Only Value
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	No discharge at this location this month.						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	11	8/11/2021 and 21-30/11/21	Yes	5	20.18	22	35
	Conductivity	µs/cm					142	537.91	442	810
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.19	7.90	8.03	8.44
36 (SD12)	TSS	mg/L	Special Frequency Discharge only	No discharge at this location this month.						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								

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	15/11/2021	Yes			<5
	Conductivity	µs/cm							1120
	Oil & Grease	mg/L							<5
	pH	pH							8.27

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	Next Sample in December 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Next Sample in December 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Next Sample in December 2021				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next Sample in December 2021				
	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 LAeq 1min dB	Limit LA1 (1 min) (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	3/11/2021	22:30	0.4	IA	35	IA	45	0	No
NM2	3/11/2021	23:30	0.7	IA	39	IA	45	0	No
NM3	3/11/2021	23:28	0.7	IA	35	IA	45	0	No
NM4	3/11/2021	23:00	0.2	IA	35	IA	45	0	No
NM5	3/11/2021	22:00	0.6	IA	35	IA	45	0	No
NM6	3/11/2021	23:56	0.9	IA	35	IA	45	0	No

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	6	95.92	114.9	120	No
	Vibration	mm/s		6	0.16	0.59	10	No

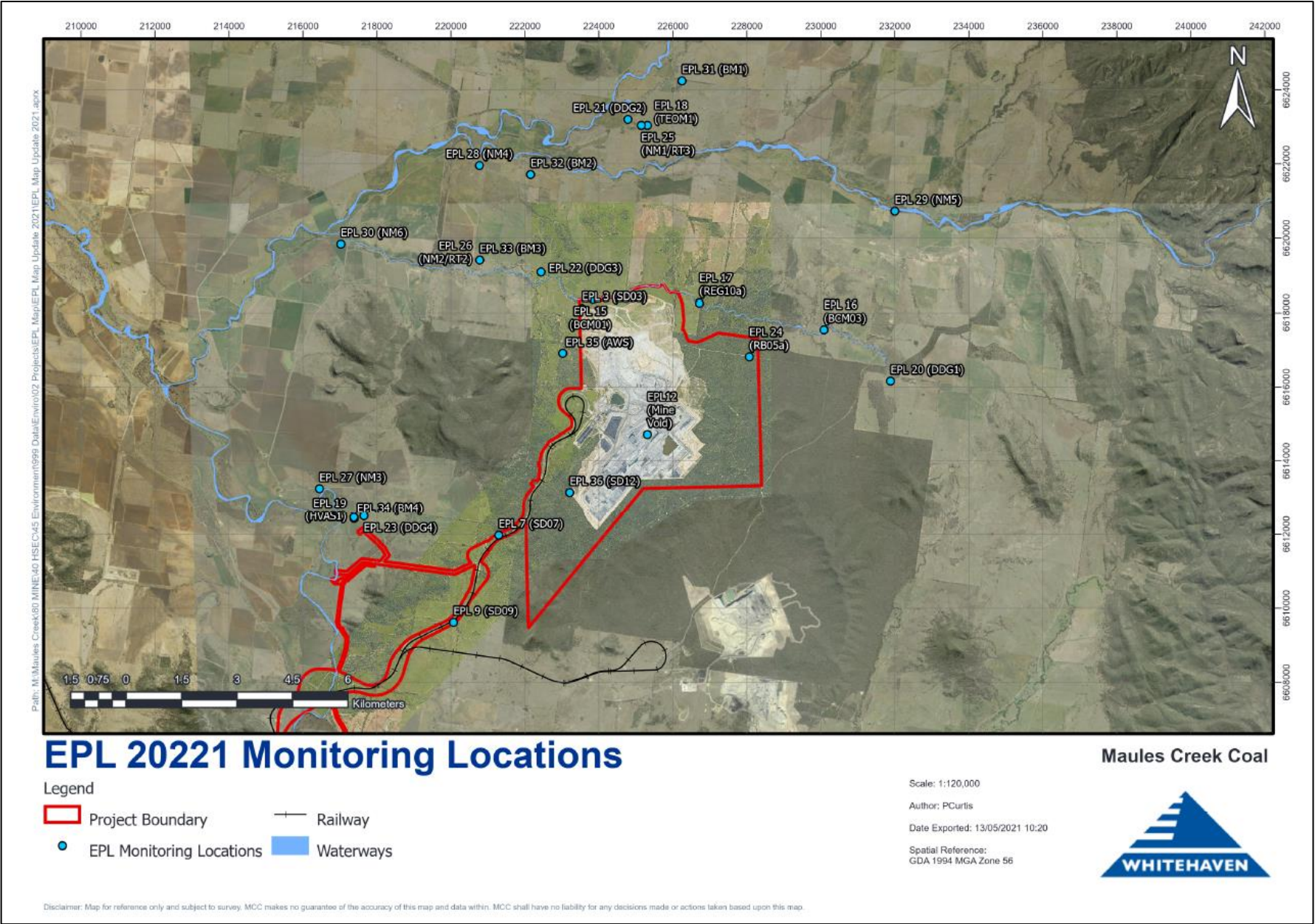
Note: As of March 2018, in accordance with the requirements of the approved variation of EPL 20221; M7.1 blast monitoring results are for four blast monitoring points 31 (BM1), 32 (BM2), 33 (BM3) and 34 (BM4).

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/m³ month	PM ₁₀	6.8	30	No
19 (HVAS)	6 days	µg/m³	PM ₁₀	9.7	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.9	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.9	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.1	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 2021

Obtained Date: 14 January 2022

Publication Date: 17 January 2022

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 Value	Mean Value	Median Value	Max / Only Value
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	No discharge at these locations this month.						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
7 (SD7)	TSS	mg/L	Special Frequency Discharge only							
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	5	1/12/21, 8/12/21, 9/12/21 10/12/21 11/12/21	Yes	10	18.2	14	38
	Conductivity	µs/cm					300	507.6	490	850
	Oil & Grease	mg/L					<5	<5	<5	<5
	pH	pH					7.27	7.58	7.53	8.12
36 (SD12)	TSS	mg/L	Special Frequency Discharge only	No discharge at this location this month.						
	Conductivity	µs/cm								
	Oil & Grease	mg/L								
	pH	pH								

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 2022	NA			
	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
15 (BCM01)	pH	pH	Quarterly	0	Dry – Next sample March 2022				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Dry – Next sample March 2022				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Dry – Next sample March 2022				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	30/12/21	Yes			7.53
	Conductivity	µs/cm							1820
	TDS	mg/L							1190

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 LAeq 1min dB	Limit LA1 (1 min) (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	15/12/21	22:30	0.3	23	35	28	45	0.0	No
NM2	16/12/21	00:00	0.5	<20	39	<20	45	0.0	No
NM3	15/12/21	23:37	0.4	IA	35	IA	45	0.0	No
NM4	16/12/21	00:30	0.2	<20	35	<20	45	0.0	No
NM5	15/12/21	22:01	0.5	<25	35	<25	45	0.0	No
NM6	16/12/21	01:00	0.1	IA	35	IA	45	0.0	No

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	8	92.85	111.2	120	No
	Vibration	mm/s		8	0.18	1.16	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	6.6	30	No
19 (HVAS)	6 days	µg/m ³	PM ₁₀	9.8	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m ² month	1.5	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m ² month	1.6	4	No
23 (DDG4/MC4)	Monthly	g/m ² month	1.2	4	No

Figure 1 – EPL 20221 Monitoring Locations

