

MAULES CREEK COAL MINE - MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221 EPA Website Link: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 February 2018 Publication Date: 01 March 2018

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

Monthly Monitoring Summary

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

Table 1 - Wet Weather Discharge - Surface Water Monitoring

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
	TSS	mg/L	Special	0						
9	Conductivity	μs/cm	Special	0						
(SD9)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Granial	0						
10	Conductivity	μs/cm	Special	0		Nodi	iccharge at this las	ation this month		
(SD10)	Oil & Grease	mg/L	Discharge only	0		NO UI	ischarge at this loo	ation this month.		
	рН	рН	Discharge only	0						
	TSS	mg/L		0						
11	Conductivity	μs/cm	Special	0						
(SD11)	Oil & Grease	mg/L	Frequency	0	1					
	рН	рН	Discharge 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
	TSS	mg/L		0					
12	Conductivity	μs/cm	Even 2 months	0		Nevt Sam	nle February		
(Mine Void)	Oil & Grease	mg/L	Every 2 months	0					
(Wille Vold) p	рН	рН		0					

Table 3 - Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value	
12	рН	рН								
(RB01a)	Conductivity	μs/cm	Quarterly	0			Removed*			
(NDOIA)	TDS	mg/L								
14	рН	рН								
(PP02a)	Conductivity	μs/cm	Quarterly	0			Removed*			
(NDUZA)	TDS	mg/L								
15	рН	рН								
15 (PCM01)	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(BCIVIOT)	TDS	mg/L								
16	рН	рН								
	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(BCIVIUS)	TDS	mg/L			,					
17	рН	рН								
1/ (PEC10a)	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(NEG108)	TDS	mg/L								

* Removed by progress of mining.

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) L _{Aeq 15min} Evening	Measured Levels – dB(A) L _{Aeq 15min} Night	Limit L _{Aeq} _{15min} (dB) Operations Criteria	Measured Levels – dB(A) L _{A1 (1 min)} Night	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	29/01/2018	23:15	4.2	NM		35			0	NA
NM1	29/01/2018	23:30	3.7	NM		35			0	NA
NM1	30/01/2018	20:30	0.5		<25	35	NM	45	0	Nil
NM1	30/01/2018	20:45	1.1		<25	35	NM	45	0	Nil
NM2	29/01/2018	21:00	4.5	<30		39			0	NA
NM2	29/01/2018	21:15	4.9	<30		39			0	NA
NM2	30/01/2018	22:30	0.2		33	39	36	45	0	Nil
NM2	30/01/2018	22:45	0.3		32	39	36	45	0	Nil
NM3	29/01/2018	19:30	3.5	IA		35			0	NA
NM3	29/01/2018	19:45	4	IA		35			0	NA
NM3	31/01/2018	0:00	0.6		NM	35	NM	45	0	Nil
NM3	31/01/2018	0:15	0.7		NM	35	NM	45	0	Nil
NM4	29/01/2018	23:59	3.7	NM		NA			0	NA
NM4	30/01/2018	0:15	3	NM		NA			0	Nil
NM4	30/01/2018	21:15	0.7		30	NA	NM	NA	0	Nil
NM4	30/01/2018	21:30	0.4		30	NA	NM	NA	0	Nil
NM5	29/01/2018	22:32	4.6	IA		35			0	NA
NM5	29/01/2018	22:48	4.6	IA		35			0	NA
NM5	30/01/2018	19:45	1		IA	35	IA	45	0	Nil
NM5	30/01/2018	20:01	1		IA	35	IA	45	0	Nil
NM6	29/01/2018	20:15	3	IA		35			0	Nil
NM6	29/01/2018	20:30	3	IA		35			0	Nil
NM6	30/01/2018	23:12	0.6		NM	35	NM	45	0	Nil
NM6	30/01/2018	23:27	0.7		NM	35	NM	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

IA & NM = Inaudible & Not Measurable.

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

NA = NM4 is at mine owned land and results have been provided for informational purposes.

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.

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

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

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	A 11	14	91.86	107.50	120	No
Blasts	Vibration	mm/s	All	14	0.21	0.73	10	No

Note: In accordance with the requirements of EPL 20221 M7.4 blast monitoring results are for monitoring points BM2 and BM3.

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	9.2	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	14.3	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.4	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m² month	3.3	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.7	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations





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EPL No: 20221 EPA Website Link: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 March 2018 Publication Date: 29 March 2018

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

Monthly Monitoring Summary

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

Table 1 - Wet Weather Discharge - Surface Water Monitoring

EPL ID	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
	TSS	mg/L	Special	0						
9	Conductivity	μs/cm	Special	0						
(SD9)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Gradial	0						
10	Conductivity	μs/cm	Special	0		Nodi	iccharge at this la	astion this month		
(SD10)	Oil & Grease	mg/L	Discharge only	0		NO UI	ischarge at this lo			
	рН	рН	Discharge only	0						
	TSS	mg/L		0						
11	Conductivity	μs/cm	Special	0						
(SD11)	Oil & Grease	mg/L	Frequency	0						
	рН	рН	Discharge 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
	TSS	mg/L		1	19/02/2018	Yes			26
12	Conductivity	μs/cm	Every 2 months	1	19/02/2018	Yes			1840
(Mine Void)	Oil & Grease	mg/L	Every 2 months	1	19/02/2018	Yes			<5
	рН	рН		1	19/02/2018	Yes			7.58

Table 3 - Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value	
12	рН	рН								
(RB01a)	Conductivity	μs/cm	Quarterly	0			Removed*			
(NDOIA)	TDS	mg/L								
14	рН	рН								
(PP02a)	Conductivity	μs/cm	Quarterly	0			Removed*			
(NDUZA)	TDS	mg/L								
15	рН	рН								
15 (PCM01)	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(BCIVIOT)	TDS	mg/L								
16	рН	рН								
	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(BCIVIUS)	TDS	mg/L			,					
17	рН	рН								
1/ (PEC10a)	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(NEG108)	TDS	mg/L								

* Removed by progress of mining.

MCC ID	Date	Start Time	Wind Speed (m/s)	Measured Levels – dB(A) L _{Aeq 15min} Evening	Measured Levels – dB(A) L _{Aeq 15min} Night	Limit L _{Aeq} _{15min} (dB) Operations Criteria	Measured Levels – dB(A) L _{A1 (1 min)} Night	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	14/02/2018	20:15:00	1.4	22		35			0	Nil
NM1	14/02/2018	20:30:00	0.9	21		35			0	Nil
NM1	13/02/2018	22:45:00	0.4		31	35	36	45	0	Nil
NM1	13/02/2018	23:00:00	0.7		27	35	35	45	0	Nil
NM2	13/02/2018	20:45:00	3.3	<20		39			0	NA
NM2	13/02/2018	21:00:00	3.2	IA		39			0	NA
NM2	14/02/2018	22:15:00	1.9		21	39	25	45	0	Nil
NM2	14/02/2018	22:30:00	1		23	39	27	45	0	Nil
NM3	13/02/2018	19:15:00	4.2	IA		35			0	NA
NM3	13/02/2018	19:30:00	2.6	IA		35			0	Nil
NM3	14/02/2018	23:45:00	0.5		IA	35	IA	45	0	Nil
NM3	15/02/2018	0:00:00	0.6		IA	35	IA	45	0	Nil
NM4	14/02/2018	21:00:00	1.5	21		NA			0	NA
NM4	14/02/2018	21:15:00	1.6	23		NA			0	NA
NM4	13/02/2018	22:00:00	2.3		22	NA	28	NA	0	NA
NM4	13/02/2018	22:15:00	0.6		22	NA	27	NA	0	NA
NM5	14/02/2018	19:30:00	2.7	24		35			0	Nil
NM5	14/02/2018	19:45:00	2.3	21		35			0	Nil
NM5	13/02/2018	23:30:00	0.6		23	35	27	45	0	Nil
NM5	13/02/2018	23:45:00	0.7		25	35	31	45	0	Nil
NM6	13/02/2018	20:00:00	3.5	IA		35			0	NA
NM6	13/02/2018	20:15:00	3	IA		35			0	Nil
NM6	14/02/2018	23:00:00	1.3		NM	35	NM	45	0	Nil
NM6	14/02/2018	23:15:00	0.9		NM	35	NM	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

IA & NM = Inaudible & Not Measurable.

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

NA = NM4 is at mine owned land and results have been provided for informational purposes.

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.

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

One measurement was within 5 dB of the relevant criterion where meteorological conditions resulted in criteria applying (in accordance with the project approval). The measurement was assessed against the low frequency modification factors in accordance with the EPA's Noise Policy for Industry, and was determined to have remained compliant.

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	A 11	7	91.19	98.10	120	No
Blasts	Vibration	mm/s	All	7	0.20	0.38	10	No

Note: In accordance with the requirements of EPL 20221 M7.4 blast monitoring results are for monitoring points BM2 and BM3.

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	9.1	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	14.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.5	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.3	4	No
22 (DDG3/MC3)	Monthly	g/m² month	3.5	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.8	4	No

Figure

Figure 1 – EPL 20221 Monitoring Locations





MAULES CREEK COAL MINE - MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221 EPA Website Link: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 April 2018 Publication Date: 27 April 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value			
	TSS	mg/L	Special	0									
2	Conductivity	μs/cm	Eroquoncy	0									
(SD2)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Special	0									
3	Conductivity	μs/cm	Eroquoncy	0									
(SD3)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Creatial	0									
5 Con	Conductivity	μs/cm	Special	0			No discharge at this location this month						
(SD5)	Oil & Grease	mg/L	Discharge only	0			No discharge at this location this month.						
	рН	рН	Discharge only	0									
	TSS	mg/L	Creatial	0									
7	Conductivity	μs/cm	Special	0									
(SD7)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Guarial	0	0								
9	Conductivity	μs/cm	Special	0									
(SD9)	Oil & Grease	mg/L	- Frequency	0									
	рН	рН	Discharge offiy	0									

Table 1 - Wet Weather Discharge - Surface Water Monitoring

Table 2 - Surface Water Monitoring - Mine Void

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

Table 3 - Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
1 5	рН	рН									
Bore dry since installation (BCM01) Conductivity µs/cm Quarterly 0 Bore dry since installation				Illation							
(BCIVIOI)	TDS	mg/L									
16	рН	рН									
16 (BCM03)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation						
(BCIVIUS)	TDS	mg/L									
17	рН	рН									
	Conductivity	μs/cm	Quarterly	0	Bore dry since installation						
(REGIUA)	TDS	mg/L									
24	рН	рН							7.74		
24 (RB05A)	Conductivity	μs/cm	Quarterly	1	22/03/2018	Yes			1860		
	TDS	mg/L							973		

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	14/03/2018	22:28:00	0.4	IA	35	IA	45	0	Nil
NM2	14/03/2018	23:17:00	0.5	IA	39	IA	45	0	Nil
NM3	15/03/2018	0:09:00	2.6	IA	35	IA	45	0	Nil
NM4	14/03/2018	22:53:00	0.4	IA	35	IA	45	0	Nil
NM5	14/03/2018	22:00:00	0.5	IA	35	IA	45	0	Nil
NM6	14/03/2018	23:43:00	1.4	IA	35	IA	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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)

Measured MCCP only levels were assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. None of measurements occurred during which operational activities from MCCP were directly measurable (not "inaudible", "not measurable" or less than a maximum cutoff value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further assessment has been undertaken.

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	All	10	90.88	103.9	120	No
Blasts	Vibration	mm/s	All	10	0.26	1.11	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	9.7	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	15.7	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		1.5	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.5	4	No
22 (DDG3/MC3)	Monthly	g/m² month	3.4	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.8	4	No



Figure 1 – EPL 20221 Monitoring Locations



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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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value			
	TSS	mg/L	Special	0									
2	Conductivity	μs/cm	Frequency	0									
(SD2)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Special	0									
3	Conductivity	μs/cm	Frequency	0									
(SD3)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
TSS	TSS	mg/L	Special	0									
5	Conductivity	μs/cm	Special	0		No discharge at this location this month							
(SD5)	Oil & Grease	mg/L	Discharge only	0			NO UISCHAIge at ti	s location this month.					
	рН	рН	Discharge only	0									
	TSS	mg/L	Creasial	0									
7	Conductivity	μs/cm	Special	0									
(SD7)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge Uniy	0									
	TSS	mg/L	Creation	0	0 0								
9	Conductivity	μs/cm	Special	0									
(SD9)	Oil & Grease	Grease mg/L Discharge only 0											
	рН	рН	Discharge only	0									

Table 1 - Wet Weather Discharge - Surface Water Monitoring

 Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
	TSS	mg/L		1	11/04/2018	Yes		ĺ	<5
12	Conductivity	μs/cm	Every 2	1	11/04/2018	Yes			1400
(Mine Void)	Oil & Grease	mg/L	months	1	11/04/2018	Yes			<5
	рН	рН		1	11/04/2018	Yes			8.24

Table 3 - Groundwater	r Quality Monitoring
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ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value			
15	рН	рН										
15 (PCM01)	Conductivity	μs/cm	Quarterly	0		Bore dry since installation						
(BCIVIOI)	TDS	mg/L										
16	рН	рН										
16 (BCM03)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation							
(BCIVIUS)	TDS	mg/L										
17	рН	рН										
1/ (PEC10A)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation							
(REGIUA)	TDS	mg/L										
24	рН	рН										
	Conductivity	μs/cm	Quarterly	0	Next sample June							
(KBUSA)	TDS	mg/L										

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	10/04/2018	00:04:00	0.6	28	35	36	45	0	Nil
NM2	09/04/2018	23:09:00	0.4	24	39	39	45	0	Nil
NM3	09/04/2018	22:07:00	0.6	IA	35	IA	45	0	Nil
NM4	09/04/2018	23:37:00	0.3	<20	35	27	45	0	Nil
NM5	10/04/2018	00:34:00	0.7	27	35	32	45	0	Nil
NM6	09/04/2018	22:38:00	0.5	<20	35	<20	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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)

Measured MCCP only levels were assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. None of measurements occurred during which operational activities from MCCP were directly measurable (not "inaudible", "not measurable" or less than a maximum cutoff value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further assessment has been undertaken.

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	All	7	90.39	98.1	120	No
Blasts	Vibration	mm/s	All	7	0.20	0.52	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/m³ month	PM ₁₀	10.4	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	16.6	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.5	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.5	4	No
22 (DDG3/MC3)	Monthly	g/m² month	3.5	4	No
23 (DDG4/MC4)	Monthly	g/m² 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: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 14 June 2018 Publication Date: 19 June 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value			
	TSS	mg/L	Special	0									
2	Conductivity	μs/cm	Eroquoncy	0									
(SD2)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Special	0									
3	Conductivity	μs/cm	Eroquoncy	0									
(SD3)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Creatial	0									
5	Conductivity	μs/cm	Special	0		No discharge at this location this month							
(SD5)	Oil & Grease	mg/L	Discharge only	0		No discharge at this location this month.							
	рН	рН	Discharge only	0									
	TSS	mg/L	Creatial	0									
7	Conductivity	μs/cm	Special	0									
(SD7)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Guarial	0									
9	Conductivity	μs/cm	Special	0	0								
(SD9)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge offiy	0									

Table 1 – Wet Weather Discharge - Surface Water Monitoring

Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
	TSS	mg/L		0							
12	Conductivity	μs/cm	Every 2	0		Next Co	mala luna				
(Mine Void)	Oil & Grease	mg/L	months	0	Next Sample June						
	рН	рН		0							

Table 3 - Groundwater	r Quality Monitoring
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ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value			
15	рН	рН										
15 (PCM01)	Conductivity	μs/cm	Quarterly	0		Bore dry since installation						
(BCIVIOI)	TDS	mg/L										
16	рН	рН										
16 (BCM03)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation							
(BCIVIUS)	TDS	mg/L										
17	рН	рН										
1/ (PEC10A)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation							
(REGIUA)	TDS	mg/L										
24	рН	рН										
	Conductivity	μs/cm	Quarterly	0	Next sample June							
(KBUSA)	TDS	mg/L										

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	10/05/2018	00:00	0.5	28	35	34	45	0	Nil
NM2	09/05/2018	23:00	0.4	<20	39	26	45	0	Nil
NM3	09/05/2018	22:02	0.5	IA	35	IA	45	0	Nil
NM4	09/05/2018	23:30	0.4	<20	35	20	45	0	Nil
NM5	10/05/2018	00:30	0.4	29	35	38	45	0	Nil
NM6	09/05/2018	22:28	0.4	IA	35	IA	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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)

Measured MCCP only levels were assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. None of measurements occurred during which operational activities from MCCP were directly measurable (not "inaudible", "not measurable" or less than a maximum cutoff value of 30 dB), were within 5 dB of the relevant criterion and where meteorological conditions resulted in criteria applying (in accordance with the project approval). No further assessment has been undertaken.

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	A 11	9	91.05	102.8	120	No
Blasts	Vibration	mm/s	All	9	0.20	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/m³ month	PM ₁₀	11.1	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	17.8	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/m² month	2.2	4	No
22 (DDG3/MC3)	Monthly	g/m² month	3.6	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.7	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 2018 Obtained Date: 13 July 2018 Publication Date: 13 December 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value				
	TSS	mg/L	Special	0										
2	Conductivity	μs/cm	Eroquoncy	0										
(SD2)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										
	TSS	mg/L	Special	0										
3	Conductivity	μs/cm	Special	0										
(SD3)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										
5 Co	TSS	mg/L	Creatial	0										
	Conductivity	μs/cm	Special	0		No discharge at this logation this month								
(SD5)	Oil & Grease	mg/L	Discharge only	0		No discharge at this location this month.								
	рН	рН	Discharge only	0										
	TSS	mg/L	Creation	0										
7	Conductivity	μs/cm	Special	0										
(SD7)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0	0									
	TSS	mg/L	Special 0											
9	Conductivity	μs/cm	Special	0										
(SD9)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										

Table 1 - Wet Weather Discharge - Surface Water Monitoring

 Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
	TSS	mg/L		1	15/6/2018	Yes			12
12	Conductivity	μs/cm	Every 2	1	15/6/2018	Yes			1630
(Mine Void)	Oil & Grease	mg/L	months	1	15/6/2018	Yes			<5
	рН	рН		1	15/6/2018	Yes			7.79

Table 3 - Groundwater	r Quality Monitoring
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ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
15	рН	рН									
15 (PCM01)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation						
(BCIVIOI)	TDS	mg/L									
10	рН	рН		0							
16 (BCM03)	Conductivity	μs/cm	Quarterly		Bore dry since installation						
(BCIVIUS)	TDS	mg/L									
17	рН	рН									
	Conductivity	μs/cm	Quarterly	0	Bore dry since installation						
(REGIUA)	TDS	mg/L									
24	рН	рН			14/6/2018	Yes			7.9		
	Conductivity	μs/cm	Quarterly	1	14/6/2018 Yes				1820		
(ROUSA)	TDS	mg/L			14/6/2018	Yes			944		

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	19/06/2018	22:33	2.5	28	35	33	45	0	Nil
NM2	19/06/2018	23:30	0.5	34	39	39	45	0	Nil
NM3	20/06/2018	00:39	0.8	28	35	40	45	0	Nil
NM4	19/06/2018	23:03	1.4	28	35	37	45	0	Nil
NM5	19/06/2018	22:00	1.6	<25	35	28	45	0	Nil
NM6	19/06/2018	23:58	1.7	<20	35	<25	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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 modifying factors was needed to be undertaken.

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	All	10	91.68	104.4	120	No
Blasts	Vibration	mm/s	All	10	0.25	0.7	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	11.4	30	No
19 (HVAS)	6 days	µg/m³	PM ₁₀	18.2	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		1.5	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m² month	3.8	4	No
23 (DDG4/MC4)	Monthly	g/m² 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: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 August 2018 Publication Date: 27 August 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value				
	TSS	mg/L	Special	0										
2	Conductivity	μs/cm	Eroquoncy	0										
(SD2)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										
	TSS	mg/L	Special	0										
3	Conductivity	μs/cm	Eroquoncy	0										
(SD3)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										
5 Co	TSS	mg/L	Creatial	0										
	Conductivity	μs/cm	Special	0		No discharge at this location this menth								
(SD5)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										
	TSS	mg/L	Creatial	0										
7	Conductivity	μs/cm	Special	0										
(SD7)	Oil & Grease	mg/L	Discharge only	0										
	рН	рН	Discharge only	0										
	TSS	mg/L	Guarial	0	0									
9	Conductivity	μs/cm	Special	0										
(SD9)	Oil & Grease	mg/L	- Frequency	0										
	рН	рН	Discharge offiy	0										

Table 1 - Wet Weather Discharge - Surface Water Monitoring

Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
	TSS	mg/L		0		-					
12	Conductivity	μs/cm	Every 2	0		Novt Com	alo August				
(Mine Void)	Oil & Grease	mg/L	months	0	Next Sample August						
	рН	рН		0							

Table 3 - Groundwater	r Quality Monitoring
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ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
15	рН	рН									
15 (PCM01)	Conductivity	μs/cm	Quarterly	0		Bore dry since installation					
(BCIVIOT)	TDS	mg/L									
16	рН	рН									
16 (BCM03)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation						
(BCIVIUS)	TDS	mg/L									
17	рН	рН			Bore dry since installation						
1/ (PEC10A)	Conductivity	μs/cm	Quarterly	0							
(REGIUA)	TDS	mg/L									
24	рН	рН									
	Conductivity	μs/cm	Quarterly	0	Next sample August						
(RBUSA)	TDS	mg/L									

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	19/07/2018	23:57	0.3	IA	35	IA	45	0	Nil
NM2	19/07/2018	23:01	0.4	IA	39	IA	45	0	Nil
NM3	19/07/2018	22:00	0.8	IA	35	IA	45	0	Nil
NM4	19/07/2018	23:29	0.4	IA	35	IA	45	0	Nil
NM5	20/07/2018	00:29	0.7	IA	35	IA	45	0	Nil
NM6	19/07/2018	22:32	0.4	IA	35	IA	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	All	10	91.84	107.1	120	No
Blasts	Vibration	mm/s	All	10	0.27	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/m³ month	PM ₁₀	12.0	30	No
19 (HVAS)	6 days	μg/m³	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/m² month	1.3	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.5	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.8	4	No
23 (DDG4/MC4)	Monthly	g/m² 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: August 2018 Obtained Date: 14 September 2018 Publication Date: 20 September 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value			
	TSS	mg/L	Special	0									
2	Conductivity	μs/cm	Eroquoncy	0									
(SD2)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Special	0									
3	Conductivity	μs/cm	Frequency	0									
(SD3)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Creation	0									
5	Conductivity	μs/cm	Special	0		No discharge at this location this month							
(SD5)	Oil & Grease	mg/L	Discharge only	0			No discharge at this location this month.						
	рН	рН	Discharge only	0									
	TSS	mg/L	Creation	0									
7	Conductivity	μs/cm	Special	0									
(SD7)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Guarial	0									
9	Conductivity	μs/cm	Special	0									
(SD9)	Oil & Grease	mg/L	Discharge only	0									
	рН	pН	Discharge only	0									

Table 1 - Wet Weather Discharge - Surface Water Monitoring

 Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
	TSS	mg/L		1	17/8/2018	Yes			<5
12	Conductivity	μs/cm	Every 2	1	17/8/2018	Yes			1560
(Mine Void)	Oil & Grease	mg/L	months	1	17/8/2018	Yes			<5
	рН	рН		1	17/8/2018	Yes			7.72

Table 3 - Groundwater	r Quality Monitoring
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ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
15	рН	pH pH									
15 (PCM01)	Conductivity	μs/cm	Quarterly	0		Bore dry since installation					
(BCIVIOT)	TDS	mg/L									
16	рН	рН									
16 (BCM03)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation						
(BCIVIUS)	TDS	mg/L									
17	рН	рН			Bore dry since installation						
	Conductivity	μs/cm	Quarterly	0							
(REGIUA)	TDS	mg/L									
24	рН	рН									
	Conductivity	μs/cm	Quarterly	0	Next sample September						
(RBUSA)	TDS	mg/L									

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	06/08/2018	23:46	0.3	<20	35	<20	45	0	Nil
NM2	06/08/2018	22:56	0.4	IA	39	IA	45	0	Nil
NM3	06/08/2018	22:00	0.6	IA	35	IA	45	0	Nil
NM4	06/08/2018	23:21	0.3	IA	35	IA	45	0	Nil
NM5	07/08/2018	00:15	1.7	IA	35	IA	45	0	Nil
NM6	06/08/2018	22:27	0.6	IA	35	IA	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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 modifying factors was needed to be undertaken.

Table 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	All	10	93.15	111.10	120	No
Blasts	Vibration	mm/s	All	10	0.21	0.56	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	12.4	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	19.9	30	No

ID Sample period		Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.4	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.5	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.8	4	No
23 (DDG4/MC4)	Monthly	g/m² month	2.1	4	No



Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE - MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221 EPA Website Link: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 November 2018 Publication Date: 27 November 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
	TSS	mg/L	Special	0						
2	Conductivity	μs/cm	Frequency	0						
(SD2)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Special	0						
3	Conductivity	μs/cm	Special	0						
(SD3)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Creation	0						
5	Conductivity	μs/cm	Special	0						
(SD5)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Creation	0						
7	Conductivity	μs/cm	Special	0						
(SD7)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L		2*	21/10/18 & 22/10/18	Yes	59	95.5	95.5	132
9	Conductivity	μs/cm	Special	2*	21/10/18 & 22/10/18	Yes	556	611.5	611.5	667
(SD9)	Oil & Grease	mg/L	Discharge only	2*	21/10/18 & 22/10/18	Yes	<5	<5	<5	<5
	рН	рН		2*	21/10/18 & 22/10/18	Yes	7.82	7.86	7.86	7.91

Table 1 - Wet Weather Discharge - Surface Water Monitoring

* Administrative change to incorporate wet weather sampling, no evidence that discharge occurred

Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
	TSS	mg/L		1	18/10/2018	Yes			82
12	Conductivity	μs/cm	Every 2	1	18/10/2018	Yes			1580
(Mine Void)	Oil & Grease	mg/L	months	1	18/10/2018	Yes			<5
	рН	рН		1	18/10/2018	Yes			7.83

Table 3 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value	
15	рН	рН								
(PCM01)	Conductivity	μs/cm	Quarterly	0	Bore dry since installation					
(BCIVIOI)	TDS	mg/L								
10	рН	рН	Quarterly							
16 (BCM03)	Conductivity	μs/cm		0	Bore dry since installation					
(BCIVIUS)	TDS	mg/L								
17	рН	рН								
	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ation		
(REGIUA)	TDS	mg/L								
24	рН	рН								
	Conductivity	μs/cm	Quarterly	0	Next sample December					
(RB05A) TDS mg/L										

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq _{1min} dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	15/10/2018	22:15	3.3	IA	35	IA	45	0	NA
NM2	15/10/2018	23:46	4.0	<25	39	<30	45	0	NA
NM3	15/10/2018	00:53	3.0	<25	35	26	45	0	Nil
NM4	15/10/2018	23:22	3.5	<20	35	<20	45	0	NA
NM5	15/10/2018	22:45	3.7	IA	35	IA	45	0	NA
NM6	16/10/2018	00:21	1.9	<25	35	32	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	A 11	8	93.82	105.6	120	No
Blasts	Vibration	mm/s	All	8	0.23	0.56	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	13.2	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	20.3	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.6	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.3	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.9	4	No
23 (DDG4/MC4)	Monthly	g/m² month	2.1	4	No



Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221 EPA Website Link: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 December 2018 Publication Date: 26 December 2018

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value			
	TSS	mg/L	Special	0									
2	Conductivity	μs/cm	Eroquoncy	0									
(SD2)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
	TSS	mg/L	Special	0									
3	Conductivity	μs/cm	Eroquoncy	0									
(SD3)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0									
5 Co	TSS	mg/L	Special	0									
	Conductivity	μs/cm		0		No disebarra at this location this month							
(SD5)	Oil & Grease	mg/L	Discharge only	0		I	No discharge at this location this month.						
	рН	рН	Discharge only	0									
	TSS	mg/L	Creatial	0									
7	Conductivity	μs/cm	Special	0									
(SD7)	Oil & Grease	mg/L	Discharge only	0									
	рН	рН	Discharge only	0	0								
	TSS	mg/L	Guarial	0									
9	Conductivity	μs/cm	Special	0									
(SD9)	Oil & Grease	mg/L	- Frequency	0									
	рН	рН	Discharge only	0									

Table 1 - Wet Weather Discharge - Surface Water Monitoring

Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value		
	TSS	mg/L		1							
12	Conductivity	μs/cm	Every 2	1							
(Mine Void)	Oil & Grease	mg/L	months	1	Next Sample December						
	рН	рН		1							

Table 3 - Groundwater	r Quality Monitoring
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ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value	
15	рН	рН								
15 (PCM01)	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(BCIVIOT)	TDS	mg/L								
10	рН	рН								
	Conductivity	μs/cm	Quarterly	0		Bore dry since installation				
(BCIVIUS)	TDS	mg/L								
17	рН	рН								
	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition		
(REGIUA)	TDS	mg/L								
24	рН	рН								
	Conductivity	μs/cm	Quarterly	0			Next sample Decem	ber		
(REUSA)	TDS	mg/L								

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	15/10/2018	22:15	3.3	IA	35	IA	45	0	NA
NM2	15/10/2018	23:46	4.0	<25	39	<20	45	0	NA
NM3	15/10/2018	00:53	3.0	<25	35	IA	45	0	Nil
NM4	15/10/2018	23:22	3.5	<20	35	IA	45	0	NA
NM5	15/10/2018	22:45	3.7	IA	35	30	45	0	NA
NM6	16/10/2018	00:21	1.9	<25	35	IA	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	A 11	7	96.9	112.1	120	No
Blasts	Vibration	mm/s	All	7	0.17	0.5	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	15.0	30	No
19 (HVAS)	6 days	μg/m³	PM ₁₀	20.5	30	No

ID EPL (Site)	Sample period	Particulates Deposited Matter	Rolling Annual Average Insoluble Solids	Criteria	Exceedance (Yes / No)
20 (DDG1/MC1)	Monthly	g/m² month	1.7	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m² month	2.4	4	No
23 (DDG4/MC4)	Monthly	g/m² month	2.1	4	No



Figure 1 – EPL 20221 Monitoring Locations



MAULES CREEK COAL MINE - MONTHLY MONITORING SUMMARY

Site Information

EPL No: 20221 EPA Website Link: <u>Hyperlink to Maules Creek Coal, Environment Protection Licence</u> 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 2018 Obtained Date: 15 January 2019 Publication Date: 23 January 2019

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

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
	TSS	mg/L	Special	0						
2	Conductivity	μs/cm	Eroquoncy	0						
(SD2)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Special	0						
3	Conductivity	μs/cm	Frequency	0						
(SD3)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Creation	0						
5	Conductivity	μs/cm	Special	0			No dischargo at th	is location this m	onth	
(SD5)	Oil & Grease	mg/L	Discharge only	0			NO discharge at ti		Jiitii.	
	рН	рН	Discharge only	0						
	TSS	mg/L	Creation	0						
7	Conductivity	μs/cm	Special	0						
(SD7)	Oil & Grease	mg/L	Discharge only	0						
	рН	рН	Discharge only	0						
	TSS	mg/L	Guarial	0						
9	Conductivity	μs/cm	Special	0						
(SD9)	Oil & Grease	mg/L	Discharge only	0						
	рН	pН	Discharge only	0						

Table 1 - Wet Weather Discharge - Surface Water Monitoring

 Table 2 - Surface Water Monitoring - Mine Void

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
	TSS	mg/L		1	17/12/2018	Yes			7
12	Conductivity	μs/cm	Every 2	1	17/12/2018	Yes			898
(Mine Void)	Oil & Grease	mg/L	months	1	17/12/2018	Yes			<5
	рН	рН		1	17/12/2018	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	рН	рН							
15 (PCM01)	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition	
(BCIVIOI)	TDS	mg/L							
16	рН	рН							
10	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition	
(BCIVIUS)	TDS	mg/L							
17	рН	рН							
	Conductivity	μs/cm	Quarterly	0			Bore dry since installa	ition	
(REGIUA)	TDS	mg/L							
24	рН	рН			7/12/2018	Yes			8.56
	Conductivity	μs/cm	Quarterly	0	7/12/2018	Yes			1760
(KBUSA)	TDS	mg/L]		7/12/2018	Yes]		1020

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq _{15min} dB	Limit L _{Aeq} _{15min} (dB) Operations Criteria	MCCP LAeq 1min dB	Limit L _{A1 (1 min)} (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	22/11/2018	22:00:00	4.4	NM	35	NM	45	0	NA
NM2	22/11/2018	23:00:00	3.8	<25	39	35	45	0	NA
NM3	22/11/2018	0:00:00	4	IA	35	IA	45	0	Nil
NM4	22/11/2018	22:30:00	5.2	NM	35	NM	45	0	NA
NM5	22/11/2018	22:00:00	4.4	IA	35	IA	45	0	NA
NM6	22/11/2018	23:26:00	4.1	NM	35	NM	45	0	Nil

Table 4 - Noise Monitoring (Attended - Measured)

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	Мах	100% Limit	Exceedance (Yes / No)
Operations	Noise	Db (Lin Peak)	A 11	8	95.8	111.3	120	No
Blasts	Vibration	mm/s	All	8	0.23	0.96	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	16.7	30	No
19 (HVAS)	6 days	µg/m³	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/m² month	1.7	4	No
21 (DDG2/MC2)	Monthly	g/m² month	2.5	4	No
22 (DDG3/MC3)	Monthly	g/m² month	2.8	4	No
23 (DDG4/MC4)	Monthly	g/m² month	2.4	4	No



Figure 1 – EPL 20221 Monitoring Locations