



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 2022

Obtained Date: 15th December 2022

Publication Date: 16th December 2022

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 2nd August 2022 by the NSW Environment Protection Authority (EPA).



Monthly Monitoring Summary

Ground Water Monitoring

Table 1 – Groundwater Quality Monitoring

ID EPL (Bore)	Parameters	Units	Frequency	Samples	Date	Laboratory Results Received	Min	Mean	Max / Only Value
15 (BCM01)	pH	pH	Quarterly	Next sample in December 2022					
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly						
	Conductivity	µs/cm							
	TDS	mg/L							

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
12 (Mine Void)	TSS	mg/L	Every 2 months	1	21/11/2022	15/12/2022	NA	NA	670
	Conductivity	µs/cm							961
	Oil & Grease	mg/L							<5
	pH	pH							8.60

Table 3 – 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)	Conductivity	µs/cm	Special Frequency 1 - within 12 hours of discharge from EPL 3 or 36.							
	Nitrate	mg/L								
	Nitrogen (total)	mg/L								
	Oil & Grease	mg/L								
	pH	pH								
	Phosphorous	mg/L								
	Reactive Phosphorous	mg/L								
	TSS	mg/L								
36 (SD12)	Conductivity	µs/cm	Special Frequency 1 - within 12 hours of discharge from EPL 3 or 36.							
	Nitrate	mg/L								
	Nitrogen (total)	mg/L								
	Oil & Grease	mg/L								
	pH	pH								
	Phosphorous	mg/L								
	Reactive Phosphorous	mg/L								
	TSS	mg/L								
Conductivity	µs/cm									

No discharge at these locations this month

Table 4 – Clean Water Discharge - Surface Water Monitoring

ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value	
38 (Flow Meter Upstream)	Conductivity	µs/cm	Special Frequency 3 - within 12 hours of discharge from any discharge location.	1	1/11/2022	YES	NA	NA	NA	130	
	Nitrate	mg/L								0.079	
	Nitrogen (total)	mg/L								0.9	
	Oil & Grease	mg/L								<5	
	pH	pH								7.23	
	Phosphorous	mg/L								0.2	
	Reactive Phosphorous	mg/L								0.072	
	TSS	mg/L		14							
	Conductivity	µs/cm		1	14/11/2022	YES	NA	NA	NA	NA	150
	Nitrate	mg/L									0.04
	Nitrogen (total)	mg/L									0.9
	Oil & Grease	mg/L									<5
	pH	pH									7.26
	Phosphorous	mg/L									0.1
Reactive Phosphorous	mg/L	0.067									
TSS	mg/L	89									
39 (Flow Meter downstream)	Conductivity	µs/cm	Special Frequency 3 - within 12 hours of discharge from any discharge location.	1	1/11/2022	YES	NA	NA	NA	140	
	Nitrate	mg/L								0.077	
	Nitrogen (total)	mg/L								1	
	Oil & Grease	mg/L								<5	
	pH	pH								7.32	
	Phosphorous	mg/L								0.2	
	Reactive Phosphorous	mg/L								0.071	
	TSS	mg/L		10							
	Conductivity	µs/cm		1	14/11/2022	YES	NA	NA	NA	NA	130
	Nitrate	mg/L									0.077
	Nitrogen (total)	mg/L									1.0



	Oil & Grease	mg/L						<5
	pH	pH						7.28
	Phosphorous	mg/L						0.02
	Reactive Phosphorous	mg/L						0.092
	TSS	mg/L						89
40 (HWD8)	TSS	mg/L	Special Frequency 2 – prior to discharging from EPL 45 and/or 46 or within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period	No discharge occurred from this monitoring location during November 2022				
	Conductivity	µs/cm						
	Oil & Grease	mg/L						
	pH	pH						
41 (HWD9)	TSS	mg/L	Special Frequency 2 – prior to discharging from EPL 45 and/or 46 or within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period	1	1/11/2022	YES	NA	142
	Conductivity	µs/cm						170
	Oil & Grease	mg/L						<5
	pH	pH						7.06
	TSS	mg/L		1	14/11/2022	YES	NA	169
	Conductivity	µs/cm						180
	Oil & Grease	mg/L						<5
	pH	pH						7.09
42 (HWD10)	TSS	mg/L	Special Frequency 2	1	14/11/2022	YES	NA	62



	Conductivity	µs/cm	– prior to discharging from EPL 45 and/or 46 or within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period					100
	Oil & Grease	mg/L						<5
	pH	pH						6.90
43 (HWD11)	TSS	mg/L	Special Frequency 2 – prior to discharging from EPL 45 and/or 46 or within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period	1	1/11/2022	Yes	NA	118
	Conductivity	µs/cm						113
	Oil & Grease	mg/L						<5
	pH	pH						6.95
	TSS	mg/L		1	14/11/2022	YES	NA	109
	Conductivity	µs/cm						160
	Oil & Grease	mg/L						<5
	pH	pH						6.92
44 (WCWD)	TSS	mg/L	Special Frequency 2 – prior to discharging from EPL 45 and/or 46 or within 12hours of discharge caused by 38.4mm in a	1	1/11/2022	YES	NA	132
	Conductivity	µs/cm						660
	Oil & Grease	mg/L						<5
	pH	pH		8.32				
	TSS	mg/L		1	14/11/2022	YES	NA	80



	Conductivity	µs/cm	5 Day consecutive period					180
	Oil & Grease	mg/L						<5
	pH	pH						8.11
45 (ECWDP)	Oil & Grease	mg/L	not more than 12 hours after discharge commences	1	1/11/2022	YES	NA	<5
	pH	pH						7.17
	TSS	mg/L						157
	Oil & Grease	mg/L		1	14/11/2022		NA	<5
	pH	pH						7.30
	TSS	mg/L						51
46 (WCWDP)	Oil & Grease	mg/L	not more than 12 hours after discharge commences	1	1/11/2022	YES	NA	<5
	pH	pH						8.09
	TSS	mg/L						144
	Oil & Grease	mg/L		1	14/11/2022	YES	NA	<5
	pH	mg/L						7.29
	TSS	pH						80

Noise Monitoring

Table 6 – 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	10/11/2022	22:30	0.9	27	35	30	45	0.0	No
NM2	10/11/2022	23:30	0.8	<20	39	25	45	0.0	No
NM3	10/11/2022	23:51	0.5	<25	35	<25	45	0.0	No
NM4	10/11/2022	23:00	0.3	<20	35	<20	45	0.0	No
NM5	10/11/2022	22:00	0.5	IA	35	IA	45	0.0	No
NM6	10/11/2022	23:56	0.6	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 7 - 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.

Blast Monitoring

Table 8 – 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	91.8	102.7	120	No
	Vibration	mm/s		7	0.11	0.25	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).



Air Quality Monitoring

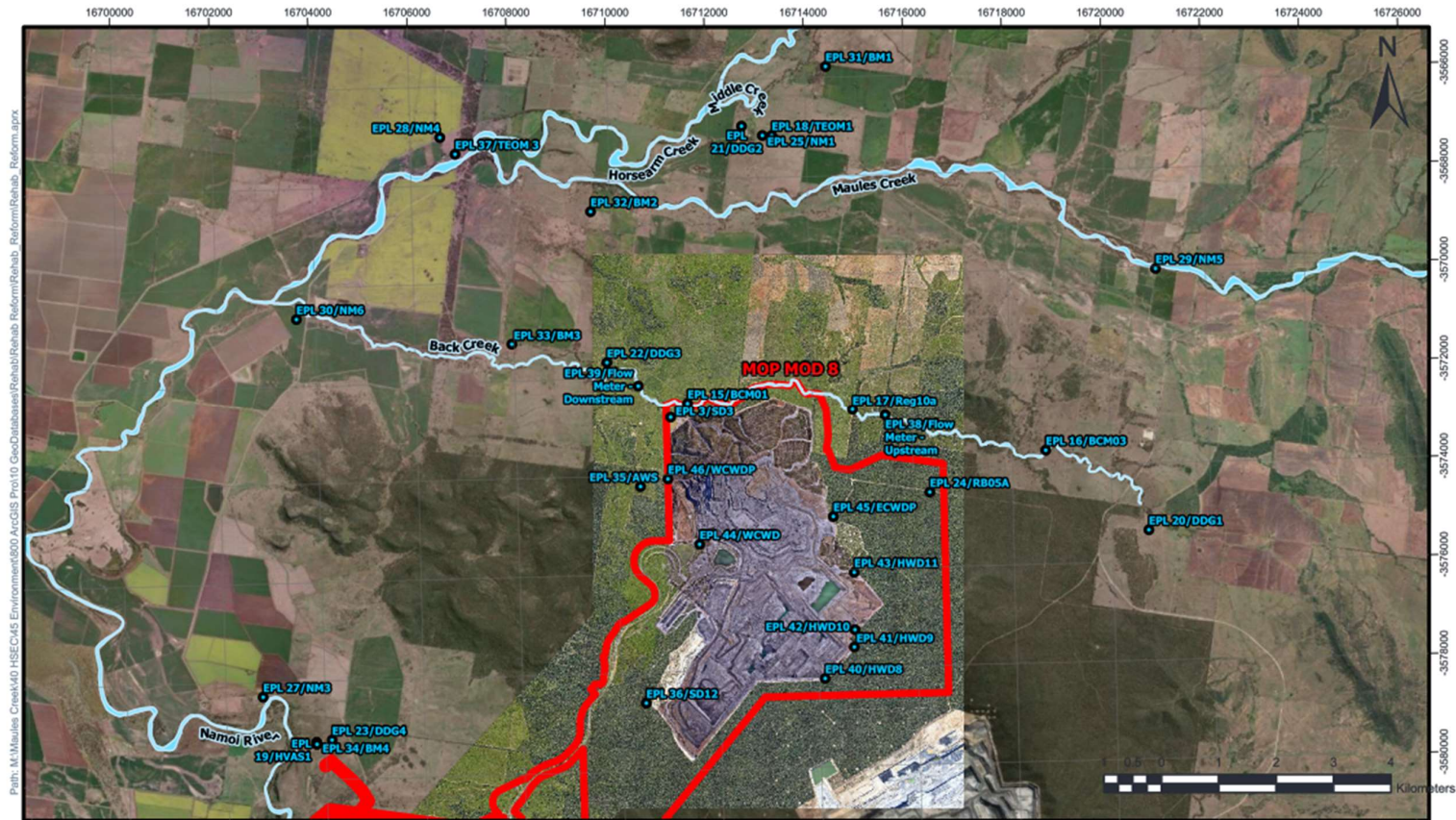
Table 9 – PM₁₀ (Limits Apply)

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	5.1	30	No
37 (TEOM3)	Continuous	µg/m ³ month	PM ₁₀	12.1	30	No
19 (HVAS)	5 days	µg/m ³	PM ₁₀	8.0	30	No

Table 10 – Depositional Dust (Limits Apply)

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	0.8	4	No
21 (DDG2/MC2)	Monthly	g/m ² month	0.9	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



EPL20221 Monitoring Locations - 2/08/2022

Legend

- EPL Monitoring locations
- 05 Project Boundary_Boundaries
- ▭ MCCM Project Boundary (Mod 8)

Maules Creek Coal

Scale: 1:88,442
 Author: shenanewman
 Date Exported: 18/09/2022 11:51 AM
 Spatial Reference
 Name: GDA2020 MGA Zone 56



Disclaimer: Map for reference only and subject to survey. MCC makes no guarantee of the accuracy of this map and data within. MCC shall have no liability for any decisions made or actions taken based upon this map.