



## 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 2022

**Obtained Date:** 15<sup>th</sup> January 2023

**Publication Date:** 20<sup>th</sup> January 2023

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 2<sup>nd</sup> 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	0	5/12/2022		Dry		
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	6/12/2022		Dry		
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	5/12/2022		Dry		
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	1	2/12/2022	YES	N/A	N/A	7.46
	Conductivity	µs/cm							1800
	TDS	mg/L							1060



## 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	9/12/2022	15/01/2022	NA	NA	<5
	Conductivity	µs/cm							1000
	Oil & Grease	mg/L							<5
	pH	pH							8.48

**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.	No discharge occurred from this monitoring location during December 2022													
	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															
	Nitrate	mg/L															
	Nitrogen (total)	mg/L															
	Oil & Grease	mg/L															
	pH	pH															
	Phosphorous	mg/L															
Reactive Phosphorous	mg/L																
TSS	mg/L																
39 (Flow Meter downstream)	Conductivity	µs/cm	Special Frequency 3 - within 12 hours of discharge from any discharge location.								No discharge occurred from this monitoring location during December 2022						
	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															
	Nitrate	mg/L															
	Nitrogen (total)	mg/L															
	Oil & Grease	mg/L															
	pH	pH															
	Phosphorous	mg/L															
Reactive Phosphorous	mg/L																



	TSS	mg/L	
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
	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
	Conductivity	µs/cm	
	Oil & Grease	mg/L	
	pH	pH	
	TSS	mg/L	
	Conductivity	µs/cm	
	Oil & Grease	mg/L	
	pH	pH	
42 (HWD10)	TSS	mg/L	Special Frequency 2 – prior to discharging from EPL 45 and/or 46 or
	Conductivity	µs/cm	
	Oil & Grease	mg/L	



	pH	pH	within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period
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
	Conductivity	µs/cm	
	Oil & Grease	mg/L	
	pH	pH	
	TSS	mg/L	
	Conductivity	µs/cm	
	Oil & Grease	mg/L	
	pH	pH	
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 5 Day
	Conductivity	µs/cm	
	Oil & Grease	mg/L	
	pH	pH	
	TSS	mg/L	
	Conductivity	µs/cm	



	Oil & Grease	mg/L	consecutive period
	pH	pH	
45 (ECWDP)	Oil & Grease	mg/L	not more than 12 hours after discharge commences
	pH	pH	
	TSS	mg/L	
	Oil & Grease	mg/L	
	pH	pH	
46 (WCWDP)	Oil & Grease	mg/L	not more than 12 hours after discharge commences
	pH	pH	
	TSS	mg/L	
	Oil & Grease	mg/L	
	pH	mg/L	
	TSS	pH	



## 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	20/12/2022	22:30	3.3	<20	35	27	45	0.0	NA
NM2	20/12/2022	23:30	2.8	29	39	32	45	0.0	No
NM3	20/12/2022	23:51	3.0	IA	35	IA	45	0.0	No
NM4	20/12/2022	23:00	3.5	26	35	30	45	0.0	NA
NM5	20/12/2022	22:00	4.2	IA	35	IA	45	0.0	NA
NM6	21/12/2022	0:00	3.4	<20	35	23	45	0.0	NA

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	10	93.1	105.3	120	No
	Vibration	mm/s		10	0.11	0.33	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

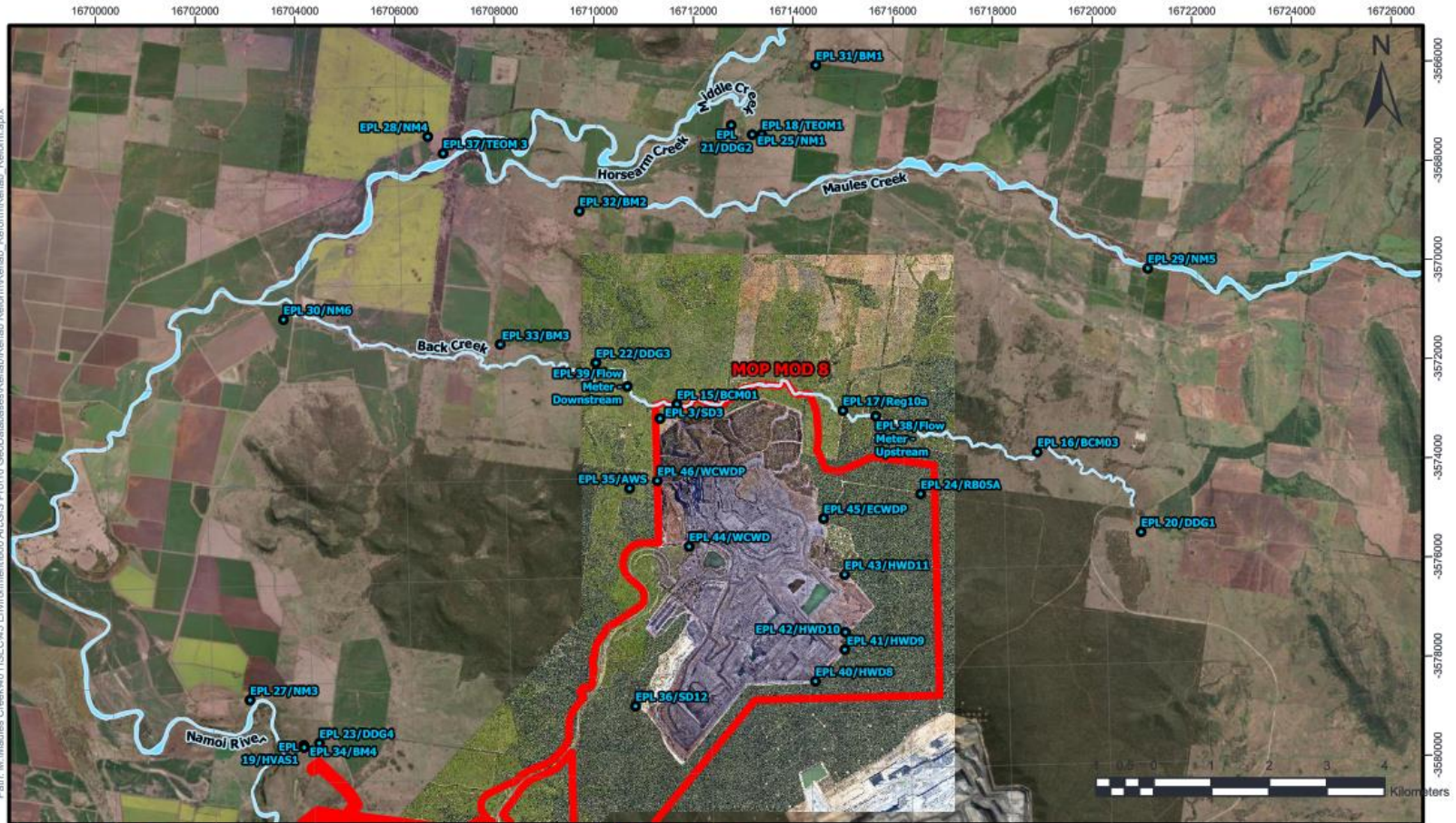
Table 9 – PM<sub>10</sub> (Limits Apply)

ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m <sup>3</sup> month	PM <sub>10</sub>	5.1	30	No
37 (TEOM3)	Continuous	µg/m <sup>3</sup> month	PM <sub>10</sub>	12.5	30	No
19 (HVAS)	5 days	µg/m <sup>3</sup>	PM <sub>10</sub>	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 <sup>2</sup> month	0.9	4	No
21 (DDG2/MC2)	Monthly	g/m <sup>2</sup> month	0.5	4	No
22 (DDG3/MC3)	Monthly	g/m <sup>2</sup> month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m <sup>2</sup> 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)

Scale: 1:88,442  
 Author: shenanewman  
 Date Exported: 16/09/2022 11:51 AM  
 Spatial Reference Name: GDA2020 MGA Zone 56

**Maules Creek Coal**



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.