

#### 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 2024

Obtained Date: 15<sup>th</sup> February 2024

Publication Date: 16<sup>th</sup> February 2024

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	рН	рН								
(BCM01)	Conductivity	μs/cm	Quarterly							
	TDS	mg/L								
16	рН	рН	Quarterly							
16 (BCM03)	Conductivity	μs/cm								
(BCM03)	TDS	mg/L		Next sample in March 2024						
17	рН	рН				ivext sample in	March 2024			
	Conductivity	μs/cm	Quarterly							
(REG10A)	TDS	mg/L								
24	рН	рН								
24 (BBOEA)	Conductivity	μs/cm	Quarterly							
(RB05A)	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
	TSS	mg/L		1	15/01/2024				<5
12	Conductivity	μs/cm	Every 2	1	15/01/2024				1250
(Mine Void)	Oil & Grease	mg/L	months	1	15/01/2024				<5
	рН	рН		1	15/01/2024				8.17

**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	
	Conductivity	μs/cm									
	Nitrate	mg/L	Constal								
	Nitrogen (total)	mg/L	Special								
3	Oil & Grease	mg/L	Frequency 1 - within 12								
(SD3)	рН	рН	hours of								
(303)	Phosphorous	mg/L	discharge from								
	Reactive Phosphorous	mg/L	EPL 3 or 36.								
	TSS	mg/L									
	Conductivity	μs/cm		No discharge occurred at these locations in January 2024							
	Nitrate	mg/L									
	Nitrogen (total)	mg/L	Special								
	Oil & Grease	mg/L	Frequency 1 -								
36	рН	рН	within 12								
(SD12)	Phosphorous	mg/L	hours of								
	Reactive	mg/L	discharge from								
	Phosphorous		EPL 3 or 36								
	TSS	mg/L									
	Conductivity	μs/cm									



**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
	Conductivity	μs/cm								
	Nitrate	mg/L								
	Nitrogen (total)	mg/L								
	Oil & Grease	mg/L								
	рН	рН								
	Phosphorous	mg/L	Special							
38 (Flow Meter Upstream)	Reactive Phosphorous	mg/L	Frequency 3 - within 12							
	TSS	mg/L	hours of							
	Conductivity	μs/cm	discharge							
	Nitrate	mg/L	from any							
	Nitrogen (total)	mg/L	discharge location.							
	Oil & Grease	mg/L								
	рН	рН								
	Phosphorous	mg/L								
	Reactive	mg/L								
	Phosphorous					No discharge occuri	red at these locati	ons in January 202	4	
	TSS	mg/L				Ü		,		
	Conductivity	μs/cm								
	Nitrate	mg/L								
	Nitrogen (total)	mg/L								
	Oil & Grease	mg/L								
	pH	pH	Special							
	Phosphorous	mg/L	Frequency 3 -							
39	Reactive Phosphorous	mg/L	within 12 hours of							
(Flow Meter	TSS	mg/L	discharge							
downstream)	Conductivity	μs/cm	from any							
	Nitrate	mg/L	discharge							
	Nitrogen (total)	mg/L	location.							
	Oil & Grease	mg/L								
	рН	рН								
	Phosphorous	mg/L								
	Reactive Phosphorous	mg/L								



	TSS	mg/L		
	TSS	mg/L	Special Frequency 2	
	Conductivity	μs/cm	<ul><li>prior to discharging</li></ul>	
40	Oil & Grease	mg/L	from EPL 45 and/or 46 or within	
(HWD8)	рН	рН	12hours of discharge caused by 38.4mm in a 5 Day consecutive period	
	TSS	mg/L		
	Conductivity	μs/cm	Special Frequency 2 - prior to discharging from EPL 45	
	Oil & Grease	mg/L		
41	рН	рН	and/or 46 or within	
(HWD9)	TSS	mg/L	12hours of discharge	
	Conductivity	μs/cm	caused by 38.4mm in a 5 Day	No discharge occurred at these locations in January 2024
	Oil & Grease	mg/L	consecutive period	
	рН	рН	·	
	TSS	mg/L	Special Frequency 2 – prior to discharging	
42 (HWD10)	Conductivity	μs/cm		
	Oil & Grease	mg/L	from EPL 45 and/or 46 or	



	рН	рН	within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period	
	TSS	mg/L		
	Conductivity	μs/cm	Special Frequency 2 – prior to	
	Oil & Grease	mg/L	discharging from EPL 45	
43	рН	рН	and/or 46 or within 12hours of discharge caused by 38.4mm in a 5 Day consecutive period	
(HWD11)	TSS	mg/L		
	Conductivity	μs/cm		
	Oil & Grease	mg/L		No discharge occurred at these locations in January 2024
	рН	рН	·	No discharge occurred at these locations in January 2024
	TSS	mg/L	Special Frequency 2	
	Conductivity	μs/cm	<ul><li>– prior to</li><li>– discharging</li></ul>	
44	Oil & Grease	mg/L	from EPL 45 and/or 46 or	
(WCWD)	рН	рН	within 12hours of discharge caused by 38.4mm in a	
	TSS	mg/L		
	Conductivity	μs/cm	5 Day	



Oil & Grease	mg/L	consecutive period
рН	рН	
рН	рН	
TSS	mg/L	
Oil & Grease	mg/L	
рН	mg/L	
TSS	рН	



### **Noise Monitoring**

Table 6 - Noise Monitoring (Attended - Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq <sub>15min</sub> dB	Limit L <sub>Aeq</sub> <sub>15min</sub> (dB) Operations Criteria	MCCP LAeq <sub>1min</sub> dB	Limit  L <sub>A1 (1 min)</sub> (dB)  Operations  Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	16/01/2024	22:30	2.9	IA	35	IA	45	0.0	No
NM2	16/01/2024	23:30	4.0	IA	39	IA	45	0.0	No
NM3	16/01/2024	23:30	4.0	IA	35	IA	45	0.0	No
NM4	16/01/2024	23:00	3.3	IA	35	IA	45	0.0	No
NM5	16/01/2024	22:00	3.8	IA	35	IA	45	0.0	No
NM6	16/01/2024	23:55	3.0	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	Overpressure	Db (Lin Peak)	ΔII	12	93.7	109.1	120	No
Blasts	Vibration	mm/s	All	12	0.09	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 –  $PM_{10}$  (Limits Apply)

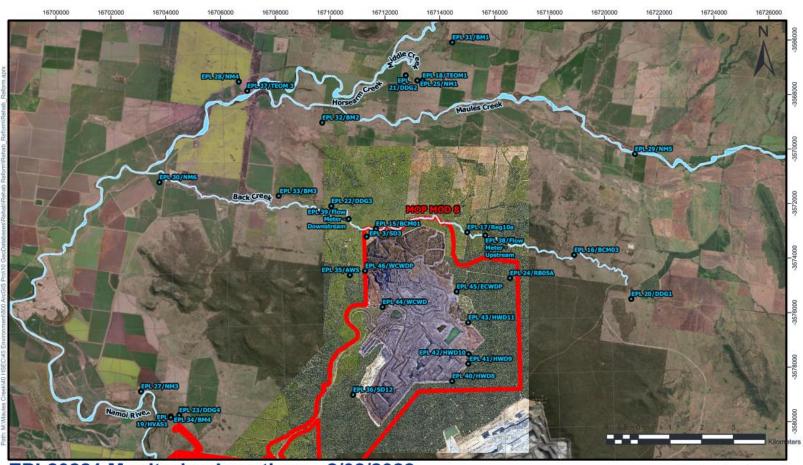
ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	μg/m³ month	PM <sub>10</sub>	11.8	30	No
37 (TEOM3)	Continuous	μg/m³ month	PM <sub>10</sub>	14.1	30	No
19 (HVAS)	5 days	μg/m³	PM <sub>10</sub>	15.6	30	No

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/m² month	2.2	4	No
21 (DDG2/MC2)	Monthly	g/m² month	1.8	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.9	4	No
23 (DDG4/MC4)	Monthly	g/m² 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: 16/09/2022 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.

