



#### **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 2024 Obtained Date: 16<sup>th</sup> April 2024 Publication Date: 17<sup>th</sup> April 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	Quarterly									
(BCM01)	Conductivity	μs/cm		0		Dry – Next sample in June 2024						
(BCIVIOI)	TDS	mg/L										
16	рН	рН	Quarterly	0								
16 (BCM03)	Conductivity	μs/cm			Dry – Next sample in June 2024							
	TDS	mg/L										
47	рН	рН		0								
17 (REG10A)	Conductivity	μs/cm	Quarterly		Dry – Next sample in June 2024							
(REGIUA)	TDS	mg/L										
24	рН	рН	Quarterly						7.54			
24	Conductivity	μs/cm		1	01/03/2024	Yes			1970			
(RB05A) –	TDS	mg/L							1450			



## 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									
12	Conductivity	μs/cm	Every 2								
(Mine Void)	Oil & Grease	mg/L	months		Next Sample April 2024						
	рН	рН									

#### 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	Creatial								
	Nitrogen (total)	mg/L	Special								
3	Oil & Grease	mg/L	Frequency 1 - within 12								
s (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 from this monitoring location during March 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 Phosphorous	mg/L	discharge from 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				1	1			1		
	Nitrate	mg/L										
	Nitrogen (total)	mg/L										
	Oil & Grease	mg/L										
	рН	рН										
	Phosphorous	mg/L	Special									
38	Reactive Phosphorous	mg/L	Frequency 3 - within 12									
(Flow Meter	TSS	mg/L	hours of									
Upstream)	Conductivity	μs/cm	discharge									
	Nitrate	mg/L	from any									
	Nitrogen (total)	mg/L	discharge									
	Oil & Grease	mg/L	location.									
	рН	рН										
	Phosphorous	mg/L										
	Reactive Phosphorous	mg/L										
	TSS	mg/L				No flow v	was recorded at th	iese sites.				
	Conductivity	μs/cm										
	Nitrate	mg/L										
	Nitrogen (total)	mg/L										
	Oil & Grease	mg/L										
	рН	рН	Special									
	Phosphorous	mg/L	Frequency 3 -									
39	Reactive Phosphorous	mg/L	within 12									
(Flow Meter	TSS	mg/L	hours of discharge									
downstream)	Conductivity	μs/cm	from any									
	Nitrate	mg/L	discharge									
	Nitrogen (total)	mg/L	location.									
	Oil & Grease	mg/L										
	рН	рН	1									
	Phosphorous	mg/L										
	Reactive Phosphorous	mg/L										



	TSS	mg/L	
	TSS	mg/L	Special
	155	111g/ L	Frequency 2
	Conductivity	μs/cm	– prior to
	Conductivity		discharging from EPL 45
			and/or 46 or
40	Oil & Grease	mg/L	within
(HWD8)			12hours of
(,			discharge
			caused by
	рН	рН	38.4mm in a
			5 Day
			consecutive
			period
	TSS	mg/L	
			Special
	Conductivity	μs/cm	Frequency 2
			– prior to
	Oil & Grease	mg/L	discharging
		-	from EPL 45
	рН	рН	and/or 46 or
41			within
(HWD9)	TSS	mg/L	12hours of discharge
		-	caused by
	Conductivity	μs/cm	38.4mm in a
			5 Day
	Oil & Grease	mg/L	consecutive
			period
	рН	pН	
	TSS	mg/L	Special
			Frequency 2
42	Conductivity	μs/cm	– prior to
(HWD10)			discharging from EPL 45
	Oil & Grease	mg/L	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	
	Oil & Grease	mg/L	<ul> <li>– prior to</li> <li>discharging</li> <li>from EPL 45</li> </ul>	
43	рН	рН	and/or 46 or within	
(HWD11)	TSS	mg/L	12hours of discharge	
	Conductivity	μs/cm	caused by 38.4mm in a	
	Oil & Grease	mg/L	5 Day consecutive period	
	рН	рН		
	TSS	mg/L	Special Frequency 2	
	Conductivity	μs/cm	– prior to discharging	
44	Oil & Grease	mg/L	from EPL 45 and/or 46 or	
(WCWD)	рН	рН	within 12hours of	
	TSS	mg/L	discharge caused by 38.4mm in a	
	Conductivity	μs/cm	5 Day	



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



#### **Noise Monitoring**

#### Table 5 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP LAeq 15min 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	18/03/2024	22:30	2.3	IA	35	IA	45	0.0	NA
NM2	18/03/2024	23:30	0.6	<20	39	25	45	0.0	NA
NM3	19/03/2024	00:22	1.0	<20	35	<25	45	0.0	NA
NM4	18/03/2024	23:00	2.0	IA	35	IA	45	0.0	NA
NM5	18/03/2024	22:00	3.0	IA	35	IA	45	0.0	NA
NM6	18/03/2024	23:55	1.2	IA	35	IA	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 6 - 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 7 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Overpressure	Db (Lin Peak)		11	93.43	108.80	120	No
Blasts	Vibration	mm/s	All	11	0.09	0.37	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 8 – PM<sub>10</sub> (Limits Apply)

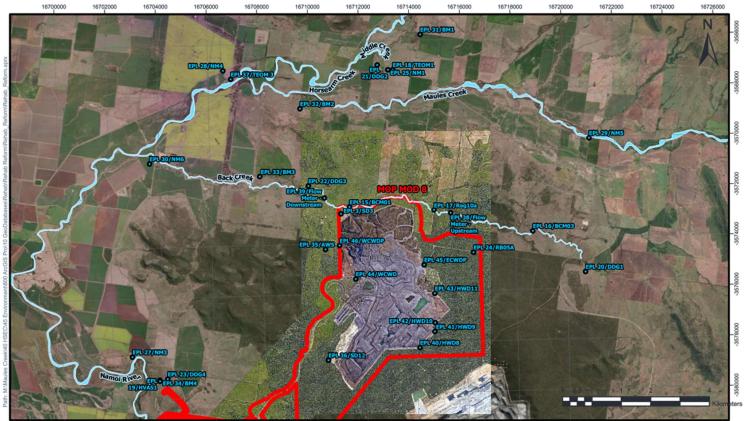
ID EPL (Site)	Sample period	Unit	Parameter	Rolling Annual Average	NEPM Annual Criteria	Exceedance (Yes / No)
18 (TEOM1)	Continuous	µg/m³ month	PM <sub>10</sub>	11.4	30	No
37 (TEOM3)	Continuous	µg/m³ month	PM <sub>10</sub>	14.1	30	No
19 (HVAS)	5 days	μg/m³	PM <sub>10</sub>	15.3	30	No

## Table 9 – 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	2.1	4	No
22 (DDG3/MC3)	Monthly	g/m² month	2.1	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.1	4	No



#### Figure 1 – EPL 20221 Monitoring Locations



# EPL20221 Monitoring Locations - 2/08/2022

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 lability for any decisions made or actions taken based upon this map.

#### 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

