

#### 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: June 2024 Obtained Date: 15<sup>th</sup> July 2024 Publication Date: 16<sup>th</sup> July 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	0			Dry				
	TDS	mg/L									
16	рН	рН									
16 (PCM03)	Conductivity	μs/cm	Quarterly	0	Dry						
(BCM03)	TDS	mg/L									
17	рН	рН									
17	Conductivity	μs/cm	Quarterly	0			Dry				
(REG10A)	TDS	mg/L									
24	pН	рН							7.54		
24	Conductivity	μs/cm	Quarterly	1	05/06/2024	15/07/2024			1950		
(RB05A)	TDS	mg/L	1						1140		



## **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							5
12	Conductivity	μs/cm	Every 2	1	06/06/2024	15/07/2024	NIA	NA	1340
(Mine Void)	Oil & Grease	mg/L	months	1	06/06/2024	15/07/2024	NA	NA	<5
	рН	рН							8.35

**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	Conside							
	Nitrogen (total)	mg/L	Special							
3	Oil & Grease	mg/L	Frequency 1 -							
(SD3)	рН	рН	within 12 hours of							
(303)	Phosphorous	mg/L	discharge from							
	Reactive Phosphorous	mg/L	EPL 3 or 36.							
	TSS	mg/L								
	Conductivity	μs/cm				No discharge od	ccurred from this	monitoring locati	on	
	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											
	Nitrate	mg/L	Special										
20	Nitrogen (total)	mg/L	Frequency 3 -										
38 (Flow Meter	Oil & Grease	mg/L	within 12 hours of										
Upstream)	рН	рН	discharge										
Opstream)	Phosphorous	mg/L	from any										
	Reactive Phosphorous	mg/L	discharge location.										
	TSS	mg/L	location.			No disebence	and the second s						
	Conductivity	μs/cm				No discharge oc	curred during the	reporting month					
	Nitrate	mg/L	Special										
	Nitrogen (total)	mg/L	Frequency 3 -										
39	Oil & Grease	mg/L	within 12										
(Flow Meter	рН	рН	hours of discharge from any discharge										
downstream)	Phosphorous	mg/L											
	Reactive	mg/L											
	Phosphorous		location.										
	TSS	mg/L											
	TSS	mg/L	Special Frequency 2 - prior to										
40	Conductivity	μs/cm	discharging from EPL 45 and/or 46 or within										
(HWD8)	Oil & Grease	mg/L	12hours of discharge caused by 38.4mm in a		No discharge occurred from these monitoring locations								
	рН	рН	5 Day consecutive period										



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ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
	TSS	mg/L	Special Frequency 2 - prior to discharging							
41 (HWD9)	Conductivity	μs/cm	from EPL 45 and/or 46 or within							
	Oil & Grease	mg/L	12hours of discharge caused by 38.4mm in a							
	рН	рН	5 Day consecutive period							
	TSS	mg/L	Special Frequency 2 - prior to discharging							
42	Conductivity	μs/cm	from EPL 45 and/or 46 or within							
(HWD10)	Oil & Grease	mg/L	12hours of discharge caused by 38.4mm in a							
	рН	рН	5 Day consecutive period							
43	TSS	mg/L	Special Frequency 2 - prior to			N. 15. 1	16 11:			
(HWD11)	Conductivity	μs/cm	discharging from EPL 45 and/or 46 or within			No discharge occ	curred from this mo	onitoring location		



ID EPL (Site)	Parameter	Units	Frequency	Samples	Date	Laboratory Results Received	Min Value	Mean Value	Median Value	Max / Only Value
	Oil & Grease	mg/L	12hours of discharge caused by 38.4mm in a							
	рН	рН	5 Day consecutive period							
	TSS	mg/L	Special Frequency 2 - prior to							
44	Conductivity	μs/cm	discharging from EPL 45 and/or 46 or within	EPL 45 or 46 or ithin ours of charge sed by						
(WCWD)	Oil & Grease	mg/L	12hours of discharge caused by 38.4mm in a							
	рН	рН	5 Day consecutive period							
	Oil & Grease	mg/L	Not more							
45 (ECWDP)	рН	рН	than 12 hours after			No discharge occ	urred from this mo	onitoring location		
	TSS	mg/L	discharge commences							
	Oil & Grease	mg/L	Not more							
46 (WCWDP)	рН	рН	than 12 hours after	No discharge occurred from this monitoring location						
	TSS	mg/L	discharge commences							



#### **Noise Monitoring**

Table 5 – 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	10/06/2024	22:30	0.6	<25	35	<25	45	0.0	NA
NM2	10/06/2024	23:30	1.1	34	39	36	45	0.0	NA
NM3	11/06/2024	00:20	0.5	24	35	29	45	0.0	NA
NM4	10/06/2024	23:00	0.3	<25	35	<25	45	0.0	NA
NM5	10/06/2024	22:00	0.5	30	35	33	45	0.0	NA
NM6	10/06/2024	23:55	0.3	<20	35	23	45	0.0	NA

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 6 - Blast Monitoring (Blasts - Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Overpressure	Db (Lin Peak)		9	89.94	107.60	120	No
Blasts	Vibration	mm/s	All	9	0.08	0.17	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**

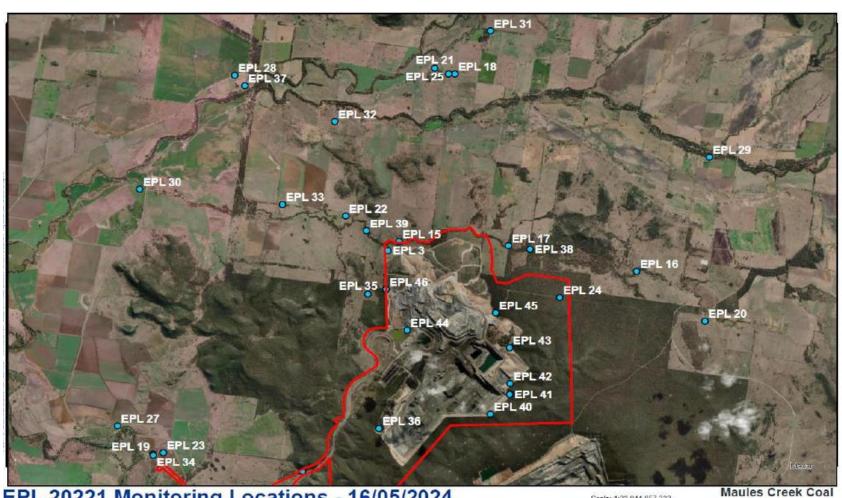
Table 7 –  $PM_{10}$  (Limits Apply)

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>	10.9	30	No
37 (TEOM3)	Continuous	μg/m³ month	PM <sub>10</sub>	13.6	30	No
19 (HVAS)	5 days	μg/m³	PM <sub>10</sub>	14.2	30	No

Table 8 – 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	2.0	4	No
21 (DDG2/MC2)	Monthly	g/m² month	1.8	4	No
22 (DDG3/MC3)	Monthly	g/m² month	1.7	4	No
23 (DDG4/MC4)	Monthly	g/m² month	1.0	4	No

Figure 1 – EPL 20221 Monitoring Locations



EPL 20221 Monitoring Locations - 16/05/2024

**EPL Monitoring Locations** 

MCCM Project Boundary MOD 9

Scale: 1:33,944,857,333 Author: EGibson Date Printed: 26/03/2021 Spatial Reference Name: WGS 1994 Web Mercator Auxiliary

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