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: November 2018
Obtained Date: 15 December 2018
Publication Date: 26 December 2018

Context: This Monthly Monitoring Summary aligns with the Environment Protection Licence (EPL) No. 20221 – Maules Creek Coal Mine issued 7th March 2018 by the NSW Environment Protection Authority (EPA).

Monthly Monitoring Summary

Table 1 – 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
2 (SD2)	TSS	mg/L	Special Frequency Discharge only	0	No discharge at this location this month.					
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
3 (SD3)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
5 (SD5)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
7 (SD7)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						
9 (SD9)	TSS	mg/L	Special Frequency Discharge only	0						
	Conductivity	µs/cm		0						
	Oil & Grease	mg/L		0						
	pH	pH		0						

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	Next Sample December				
	Conductivity	µs/cm		1					
	Oil & Grease	mg/L		1					
	pH	pH		1					

Table 3 – 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	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
16 (BCM03)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
17 (REG10A)	pH	pH	Quarterly	0	Bore dry since installation				
	Conductivity	µs/cm							
	TDS	mg/L							
24 (RB05A)	pH	pH	Quarterly	0	Next sample December				
	Conductivity	µs/cm							
	TDS	mg/L							

Table 4 – Noise Monitoring (Attended – Measured)

MCC ID	Date	Start Time	Wind Speed (m/s)	MCCP $L_{Aeq\ 15min}$ dB	Limit $L_{Aeq\ 15min}$ (dB) Operations Criteria	MCCP $L_{Aeq\ 1min}$ dB	Limit $L_{A1\ (1\ min)}$ (dB) Operations Criteria	Weather Rain (mm)	Exceedance (Yes / No)
NM1	15/10/2018	22:15	3.3	IA	35	IA	45	0	NA
NM2	15/10/2018	23:46	4.0	<25	39	<20	45	0	NA
NM3	15/10/2018	00:53	3.0	<25	35	IA	45	0	Nil
NM4	15/10/2018	23:22	3.5	<20	35	IA	45	0	NA
NM5	15/10/2018	22:45	3.7	IA	35	30	45	0	NA
NM6	16/10/2018	00:21	1.9	<25	35	IA	45	0	Nil

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.

Table 5 - 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.

Table 6 – Blast Monitoring (Blasts – Limits Apply)

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations Blasts	Noise	Db (Lin Peak)	All	7	96.9	112.1	120	No
	Vibration	mm/s		7	0.17	0.5	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).

Table 7 – Dust Monitoring (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}	15.0	30	No
19 (HVAS)	6 days	µg/m^3	PM_{10}	20.5	30	No

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	1.7	4	No
21 (DDG2/MC2)	Monthly	g/m^2 month	2.4	4	No
22 (DDG3/MC3)	Monthly	g/m^2 month	2.4	4	No
23 (DDG4/MC4)	Monthly	g/m^2 month	2.1	4	No

Figure 1 – EPL 20221 Monitoring Locations