

## **VICKERY COAL MINE – MONTHLY MONITORING SUMMARY**

## **Site Information**

EPL No: 21283 EPA Website Link:

Licensee: Vickery Coal Pty Ltd

Licensee Address: Vickery Coal Mine, Blue Vale Road, BOGGABRI NSW 2382

**EPL Monitoring Points:** See Figure 1 below

Sampling Period: February 2024 Obtained Date: 18/02/2024 Publication Date: 18/02/2024

Table 1: Surface Water – No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date of Max. Value Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comment/s
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly	-	-	-	-	-	-	-	
2	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	-
	рН	рН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly						-		_
3	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	
	рН	рН	, ,	-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly						-		
9	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	-
	рН	рН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Upon	-	-	-	-	-	-	-	
10	Oil & Grease	mg/L	discharge	-	-	-	-	-	-	-	-
	рН	рН		-	-	-	-	-	-	-	$\dashv$

**Table 2: Surface Water - Pollutant Limits Apply** 

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date of Max. Value Obtained	Min Value	Max or Only Value	100%ile Limit	Exceed -ance (Yes/ No)	Comment/s
	TSS	mg/L		-	-	-	-	-	50	-	
	Conductivity	μS/cm	Upon						NA		
14	Oil & Grease	mg/L	discharge	-	-	-	-	-	10	-	-
	рН	рН		-	-	-	-	-	8.5	-	
	TSS	mg/L		-	-	-	-	-	50	-	
20	Conductivity	μS/cm	Upon						NA		
20	Oil & Grease	mg/L	discharge	-	-	-	-	-	10	-	-
	рН	рН		-	-	-	-	-	8.5	-	
	TSS	mg/L		-	-	-	-	-	50	-	
	Conductivity	μS/cm	Upon	-	-	-	-	-	NA	-	
21	Oil & Grease	mg/L	discharge	-	-	-	-	-	10	-	-
	рН	рН		-	-	-	-	-	8.5	-	

Table 3: Groundwater – No Limits apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date of Max. Value Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	μS/cm		-	ı	-	-	-	-	1
	Lead	mg/L	Quarterly	-	-	-	-	-	-	-
15	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	-
	Conductivity	μS/cm		-	-	-	-	-	-	-
	Lead	mg/L	Quarterly	-	-	-	-	-	-	-
16	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	-
	Conductivity	μS/cm		-	-	-	-	-	-	
47	Lead	mg/L	Quarterly	-	-	-	-	-	-	
17	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	
	Conductivity	μS/cm		-	-	-	-	-	-	-
40	Lead	mg/L	Quarterly	-	-	-	-	-	-	-
18	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	-

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Period	Date Sampled	Date of Max. Value Obtained	Min Value	Mean Value	Median Value	Max or Only Value
	Conductivity	μS/cm		-	-	-	-	-	-	-
10	Lead	mg/L	Quarterly	-	-	-	-	-	-	-
19	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	-

Table 4 - Monthly Attended Noise Monitoring

(Noise Limits Apply - 40dB LAeq(15min) -Day, 37dB LAeq(15min) Evening and Night; 52dB LA1(1min) -Night)

Table 4 VCM Operational Noise Monitoring Results Leq(15min) – 26th & 27th February 2024 (Day) dB(A), VCM Criterion Exceedan Contribution **Stability** Location Time dB(A),Leq Wind **Identified Noise Sources** Leq dB(A),Leq се Class speed dB(A),Leq (Yes/No)1 (m/s),dir N-AT1 / 7 11:47am Birds (42), aeroplane (27), insects 42 ΙA 40 4.0 / 261 В (26), VCM (IA) NA (27/02/24)

2.8 / 247

В

VCM (IA)

Birds (40), traffic (26), insects (22),

No

ΙA

40

40

N-AT2 / 8

4:30pm

(26/02/24)

	Table 5									
	VCM Operational Noise Monitoring Results Leq(15min) – 26 <sup>th</sup> February 2024 (Evening)									
Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No) <sup>1</sup>		
N-AT1 / 7	9:30pm	44	24	35	2.8 / 147	D	Insects (43), birds (35), <b>VCM (24)</b>	No		
N-AT2 / 8	6:00pm	52	IA	37	3.9 / 134	D	Residential (51), birds (45), traffic (29), frogs (28), <b>VCM (IA)</b>	NA		

<sup>1.</sup> NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.

<sup>1.</sup> NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.

Table 6 VCM Operational Noise Monitoring Results Leg(15min) – 26th February 2024 (Night) dB(A), VCM Criterion Contribution **Stability** Exceedance **Identified Noise Sources** dB(A),Leq Location Wind Time Leq dB(A),Leq Class (Yes/No)1 speed dB(A),Leq (m/s),dir N-AT1 / 7 35 10:00pm 42 22 4.5 / 127 D Insects (42), **VCM (22)** NA N-AT2 / 8 Insects (46), traffic (28), frogs 37 12:06am 44 29 5.5 / 141 D NA (21), VCM (29)

Measured LA<sub>max</sub> noise levels for each monitoring location are summarised in **Table 7**.

	Table 7										
	VCM Operational Noise Monitoring Results LA <sub>max</sub> – 26 <sup>th</sup> February 2024										
Location	Time	dB(A), LA <sub>max</sub>	VCM Contribution dB(A), LA <sub>max</sub>	Criterion dB(A), LA <sub>max</sub>	Wind speed (m/s),dir	Stability Class	LA <sub>max</sub> Noise Source	Exceedance (Yes/No) <sup>1</sup>			
N-AT1 / 7	10:00pm	57	25	52	4.5 / 127	D	Insects	NA			
N-AT2 / 8	12:06am	64	33	52	5.5 / 141	D	Insects	NA			

<sup>1.</sup> NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.

<sup>1.</sup> NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.

## Table 5 – Monthly Monitoring (Blasts – Limits Apply)

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non- compliance /breach	Date of Max. Value Obtained
B-01	Blast Noise	dB (Lin Peak)	Every Blast	4	103.4	105.80	133	Nil	1/02/2024
	Blast Vibration	mm/s	Every Blast	4	0.37	0.55	10	Nil	16/02/2024

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non- compliance /breach	Date of Max. Value Obtained
B-02	Blast Noise	dB (Lin Peak)	Every Blast	4	105.58	109.80	N/A	N/A	1/02/2024
	Blast Vibration	mm/s	Every Blast	4	0.53	0.63	80	N/A	16/02/2024

Location	Parameter	Units of Measure	Frequency	No. of Blasts for the Month	Average Value	Max Value	100%ile Limit	(Potential) Non- compliance /breach	Date of Max. Value Obtained
B-03	Blast Noise	dB (Lin Peak)	Every Blast	4	97.03	101.40	120	N/A	1/02/2024
	Blast Vibration	mm/s	Every Blast	4	0.21	0.29	10	N/A	12/02/2024

**Table 6- Monthly Monitoring (Dust PM10 – Limits apply)** 

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
PM1 TEOM (µg/m³)	Continuous	4.8	12.4	27.8
PM2 TEOM (µg/m³)	Continuous	3.9	12.3	25.5

Table 7- Monthly Monitoring (Dust PM2.5 – Limits apply)

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
PM1 TEOM (μg/m³)	Continuous	0.5	4.9	11.4
PM2 TEOM (μg/m³)	Continuous	1	5.2	10.2

Figure 1 – EPL 21283 Monitoring Locations

