



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: October 2023

Obtained Date: 29/11/2023

Publication Date: 30/11/2023

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
2	TSS	mg/L	Quarterly (Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
3	TSS	mg/L	Quarterly (Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
9	TSS	mg/L	Quarterly (Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
10	TSS	mg/L	Upon discharge	1	25/10/2023	-	-	-	-	19.6	-
	Conductivity	µS/cm		1	25/10/2023	-	-	-	-	432	
	Oil & Grease	mg/L		1	25/10/2023	-	-	-	-	<5	
	pH	pH		1	25/10/2023	-	-	-	-	8.3	

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
14	TSS	mg/L	Upon discharge	-	-	-	-	-	50	-	-
	Conductivity	µS/cm		-	-	-	-	-	NA	-	
	Oil & Grease	mg/L		-	-	-	-	-	10	-	
	pH	pH		-	-	-	-	-	8.5	-	
20	TSS	mg/L	Upon discharge	-	-	-	-	-	50	-	-
	Conductivity	µS/cm		-	-	-	-	-	NA	-	
	Oil & Grease	mg/L		-	-	-	-	-	10	-	
	pH	pH		-	-	-	-	-	8.5	-	
21	TSS	mg/L	Upon discharge	-	-	-	-	-	50	-	-
	Conductivity	µS/cm		-	-	-	-	-	NA	-	
	Oil & Grease	mg/L		-	-	-	-	-	10	-	
	pH	pH		-	-	-	-	-	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
15	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	-	-	-	-	-	-	To be reported in November
	Lead	mg/L		-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	
	Standing Water Level	metres		-	-	-	-	-	-	
16	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	24/10/2023	-	-	-	-	2420
	Lead	mg/L		1	24/10/2023	-	-	-	-	<0.001
	pH	pH		1	24/10/2023	-	-	-	-	7.34
	Standing Water Level	metres		1	24/10/2023	-	-	-	-	7.76
17	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	-	24/10/2023	-	-	-	-	Logger Data available
	Lead	mg/L		-	24/10/2023	-	-	-	-	
	pH	pH		-	24/10/2023	-	-	-	-	
	Standing Water Level	metres		-	24/10/2023	-	-	-	-	
18	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	23/10/2023	-	-	-	-	2570
	Lead	mg/L		1	23/10/2023	-	-	-	-	<0.001
	pH	pH		1	23/10/2023	-	-	-	-	7.5
	Standing Water Level	metres		1	23/10/2023	-	-	-	-	7.33

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
19	Conductivity	µS/cm	Quarterly (Jan, April, Jul & Oct)	1	27/10/2023	-	-	-	-	5960
	Lead	mg/L		1	27/10/2023	-	-	-	-	<0.001
	pH	pH		1	27/10/2023	-	-	-	-	6.70
	Standing Water Level	metres		1	27/10/2023	-	-	-	-	16.70

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) – 19 th October 2023 (Day)								
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) ¹
N-AT1 / 7	12:48pm	51	IA	40	2.9 / 230	B	Birds (51), traffic (35), insects (23), VCM (IA)	No
N-AT2 / 8	3:01pm	39	IA	40	2.2 / 200	B	Birds (38), traffic (31), insects (27), VCM (IA)	No

1. NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.
2. IA = Noise from Vickery was inaudible

Table 5 VCM Operational Noise Monitoring Results Leq(15min) – 19 th October 2023 (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) ¹
N-AT1 / 7	9:08pm	52	IA	35	1.9 / 116	E	Insects (52), frogs (33), VCM (IA)	No
N-AT2 / 8	7:52pm	55	IA	37	1.6 / 087	F	Insects (55), frogs (23), VCM (IA)	No

1. NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.
2. IA = Noise from Vickery was inaudible

Table 6 VCM Operational Noise Monitoring Results Leq(15min) – 19 th October 2023 (Night)								
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) ¹
N-AT1 / 7	10:00pm	44	22	35	2.8 / 096	E	Insects (44), frogs (30), traffic (30), VCM (22)	No
N-AT2 / 8	11:46pm	39	IA	37	2.2 / 159	E	Insects (39), traffic (24), VCM (IA)	No

1. NA in last column means atmospheric conditions outside those specified in EPL, therefore criterion was not applicable.
2. IA = Noise from Vickery was inaudible

4.1.2 LA_{max}

Measured LA_{max} noise levels for each monitoring location are summarised in Table 7.

Table 7 VCM Operational Noise Monitoring Results LA _{max} – 19 th October 2023								
Location	Time	dB(A), LA _{max}	VCM Contribution dB(A), LA _{max}	Criterion dB(A), LA _{max}	Wind speed (m/s),dir	Stability Class	LA _{max} Noise Source	Exceedance (Yes/No) ¹
N-AT1 / 7	10:00pm	57	25	52	2.8 / 096	E	Insect	No
N-AT2 / 8	11:46pm	49	IA	52	2.2 / 159	E	Insect	No

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

Table 5 – Monthly Monitoring (Blasts – Limits Apply)

No Blast Monitoring data reported for October

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				120	Nil	
	Blast Vibration	mm/s	Every Blast				10	Nil	

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				120	Nil	
	Blast Vibration	mm/s	Every Blast				10	Nil	

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				120	Nil	
	Blast Vibration	mm/s	Every Blast				10	Nil	

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 ($\mu\text{g}/\text{m}^3$)	Continuous	0.14	14.9	85.73
PM2 TEOM ($\mu\text{g}/\text{m}^3$)	Continuous	0.03	14.9	137.87

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 ($\mu\text{g}/\text{m}^3$)	Continuous	0.04	6.1	31.7
PM2 TEOM ($\mu\text{g}/\text{m}^3$)	Continuous	0.01	6.7	30.03

Figure 1 – EPL 21283 Monitoring Locations



EPL Monitoring Locations

● Atended Noise	● TEOM
● Blast Monitor	□ Approved Disturbance Area
● Groundwater	— Mining Lease
● Meteorological	
● Surface Water	



**Vickery Coal Mine
EPL Monitoring Locations**

Date: Sept 2023
MGA Zone 56
Scale: 1:68,000
Author: A. Quiroz

