

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: September 2023 Obtained Date: 16/10/2022 Publication Date: 18/10/2022

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		-	-	-	-	-	-	-	Low water
	Conductivity	μS/cm	Upon	-	-	-	-	-	-	-	level –
2	Oil & Grease	mg/L	discharge	-	-	-	-	-	-	-	sampling not
	рН	рН		-	-	-	-	-	-	-	possible
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Upon						-		Low water level –
3	Oil & Grease	mg/L	discharge	-	-	-	-	-	-	-	sampling not
	рН	рН	-	-	-	-	-	-	-	-	possible
	TSS	mg/L		1	25/09/23	-	-	-	-	260	
	Conductivity	μS/cm	Upon	1	25/09/23				-	472	-
9	Oil & Grease	mg/L	discharge	1	25/09/23	-	-	-	-	<5	
	рН	рН	-	1	25/09/23	-	-	-	-	8.2	
	TSS	mg/L		1	25/09/23	-	-	-	-	256	
	Conductivity	μS/cm	Upon	1	25/09/23	-	-	-	-	468	-
10	Oil & Grease	mg/L	discharge	1	25/09/23	-	-	-	-	<5	
	рН	pН		1	25/09/23	-	-	-	-	7.9	

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	pН		-	-	-	-	-	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	-	
24	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		-	-	-	-	-	-			
	Lead	mg/L	C m anthu	-	-	-	-	-	-			
15	рН	рН	6 monthly – (Apr- Oct)	-	-	-	-	-	-	-		
	Standing Water Level	metres		-	-	-	-	-	-			
	Conductivity	μS/cm		-	-	-	-	-	-			
	Lead	mg/L	6 monthly –	-	-	-	-	-	-			
16	рН	рН	6 monthly – (Apr- Oct)	-	-	-	-	-	-	-		
	Standing Water Level	metres	-	-	-	-	-	-	-			
	Conductivity	μS/cm				-	-	-	-	-	-	
47	Lead	mg/L	6 monthly –	-	-	-	-	-	-			
17	рН	рН	(Apr- Oct)	-	-	-	-	-	-	-		
	Standing Water Level	metres		-	-	-	-	-	-			
	Conductivity	μS/cm	6 monthly – (Apr- Oct)	-	-	-	-	-	-			
10	Lead	mg/L		-	-	-	-	-	-			
18	рН	рН		-	-	-	-	-	-	-		
	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	6 monthly –	-	-	-	-	-	-	
19	рН	рН	(Apr- Oct)	-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	

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

	VCM Operational Noise Monitoring Results Leq(15min) – 28 th September 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	Exceedan ce (Yes/No) ¹					
N-AT1 / 7	12:33pm	45	IA	40	3.3 / 197	В	Birds (44), traffic (37), insects (28), VCM (IA)	NA					
N-AT2 / 8	2:44pm	39	IA	40	3.2 / 193	В	Birds (36), traffic (36), VCM (IA)	NA					

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

	VCM Operational Noise Monitoring Results Leq(15min) – 28 th September 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	Exceedan ce (Yes/No) ¹						
N-AT1 / 7	8:54pm	57	25	35	4.5 / 144	E	Frogs 57), insects (43), traffic (36), VCM (25)	NA						
N-AT2 / 8	N-AT2 / 8 7:39pm 47 IA 37 5.5 / 158 D Birds (47), traffic (37), insects (26), VCM (IA) NA													

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

		VC	M Operational I	Noise Monito	ring Results L	eq(15min) ·	– 28 th September 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 Exceedan ce (Yes/No) ¹												
N-AT1 / 7	-AT1 / 7 10:00pm 42 25 35 2.9 / 129 E Traffic (39), frogs (39), insects (27), VCM (25) No											
N-AT2 / 8	-AT2 / 8 11:53pm 37 IA 37 1.8 / 123 E Frogs (37), traffic (26), insects (22), 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

	VCM Operational Noise Monitoring Results LA _{max} – 28 th September 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	59	29	52	2.9 / 129	Е	Insects	No						
N-AT2 / 8	N-AT2 / 8 11:53pm 47 IA 52 1.8 / 123 E Frog No													

Table 5 – Monthly Monitoring (Blasts – Limits Apply)

No Blast Monitoring data reported for September

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 (µg/m³)	Continuous	0.38	12.61	67.07
PM2 TEOM (μg/m³)	Continuous	0.02	14.21	83.79

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	0.02	5.18	19.9
PM2 TEOM (μg/m³)	Continuous	0.01	6.02	23.16

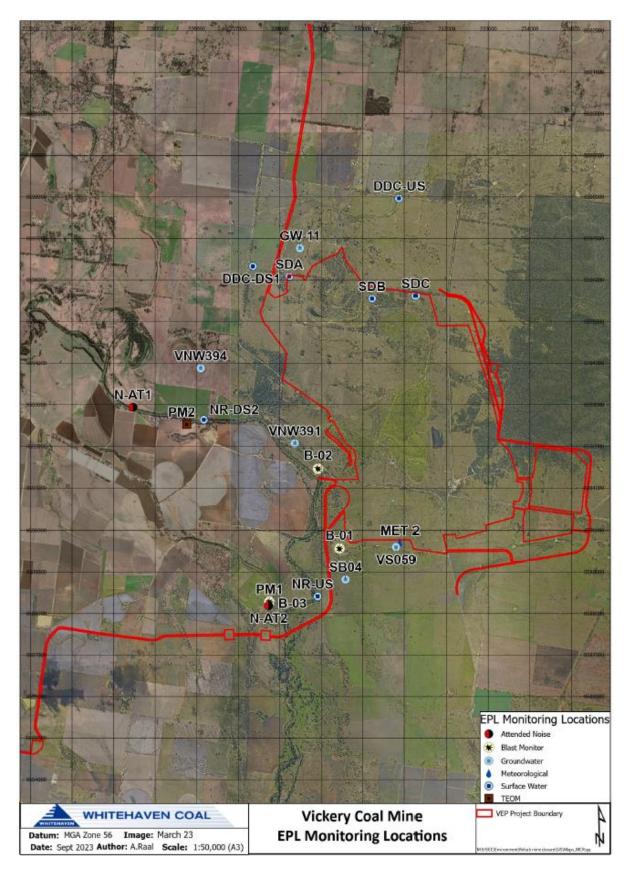


Figure 1 – EPL 21283 Monitoring Locations



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
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly	-	-	-	-	-	-	-	-
2	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	
	рН	pН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly						-		-
3	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	
	рН	pН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly	-	-	-	-	-	-	-	
9	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	-
	рН	рН		-	-	-	-	-	-	-	
	TSS	mg/L		1	25/10/2023	-	-	-	-	19.6	
	Conductivity µS/cm	Upon	1	25/10/2023	-	-	-	-	432		
10	Oil & Grease	mg/L	Upon discharge	1	25/10/2023	-	-	-	-	<5	
	рН	рН		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
	TSS	mg/L		-	-	-	-	-	50	-	
	Conductivity	μS/cm	Upon	-	-	-	-	-	NA	-	
14	Oil & Grease	mg/L	discharge	-	-	-	-	-	10	-	-
	рН	рН	-	-	-	-	-	-	8.5	-	
	TSS	mg/L		-	-	-	-	-	50	-	
	Conductivity	μS/cm	Upon	-	-	-	-	-	NA	-	
20	Oil & Grease	mg/L	discharge	-	-	-	-	-	10	-	-
	рН	pН		-	-	-	-	-	8.5	-	
	TSS	mg/L		-	-	-	-	-	50	-	
	Conductivity	μS/cm	Upon	-	-	-	-	-	NA	-	
21	Oil & Grease	mg/L	Upon 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		-	-	-	-	-	-	
	Lead	mg/L	Quarterly	-	-	-	-	-	-	To be used attack
15	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	To be reported in November
	Standing Water Level	metres		-	-	-	-	-	-	
	Conductivity	μS/cm		1	24/10/2023	-	-	-	-	2420
	Lead	mg/L	Quarterly	1	24/10/2023	-	-	-	-	<0.001
16	рН	pН	(Jan, April, Jul & Oct)	1	24/10/2023	-	-	-	-	7.34
	Standing Water Level	metres		1	24/10/2023	-	-	-	-	7.76
	Conductivity	μS/cm		-	24/10/2023	-	-	-	-	
	Lead	mg/L	Quarterly	-	24/10/2023	-	-	-	-	Logger Data
17	рН	рН	(Jan, April, Jul & Oct)	-	24/10/2023	-	-	-	-	available
	Standing Water Level	metres		-	24/10/2023	-	-	-	-	
	Conductivity	μS/cm		1	23/10/2023	-	-	-	-	2570
	Lead	mg/L	Quarterly	1	23/10/2023	-	-	-	-	<0.001
18	рН	pН	(Jan, April, Jul & Oct)	1	23/10/2023	-	-	-	-	7.5
	Standing Water Level	metres	1	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	
	Conductivity	μS/cm		1	27/10/2023	-	-	-	-	5960	
10	-	mg/L	Quarterly		1	27/10/2023	-	-	-	-	<0.001
19	рН	рН	(Jan, April, Jul & Oct)	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	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	в	Birds (51), traffic (35), insects (23), VCM (IA)	No					
N-AT2/8	3:01pm	39	IA	40	2.2 / 200	В	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) – 19th October 2023 (Evening)												
Location	Location Time dB(A), Leq Criterion dB(A),Leq Wind speed (m/s),dir Class Identified Noise Sources dB(A),Leq (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	/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) – 19th October 2023 (Night)										
							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 LAmax

Measured LAmax noise levels for each monitoring location are summarised in Table 7.

	Table 7											
VCM Operational Noise Monitoring Results LAmax – 19th October 2023												
Location	dB(A), VCM Criterion Wind speed											
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
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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	

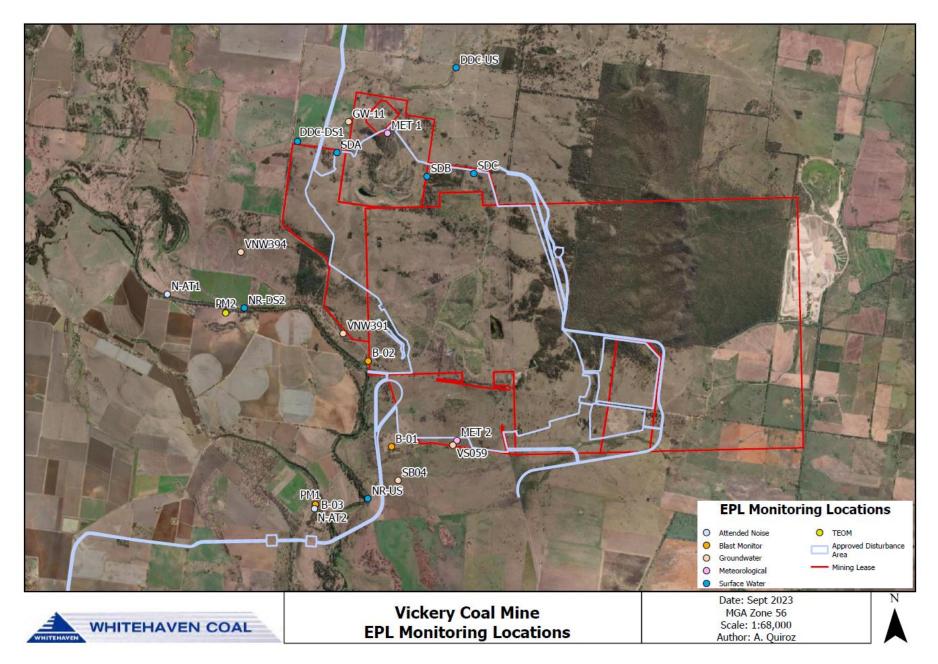
Table 6- Monthly Monitoring (Dust PM10 – Limits apply)

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
PM1 TEOM (µg/m³)	Continuous	0.14	14.9	85.73
PM2 TEOM (µg/m³)	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 (μg/m³)	Continuous	0.04	6.1	31.7
PM2 TEOM (μg/m³)	Continuous	0.01	6.7	30.03

Figure 1 – EPL 21283 Monitoring Locations





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: November 2023 Obtained Date: 18/12/2023 Publication Date: 27/12/2023

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
	TSS	mg/L		-	-	-	-	-	-	-	
2	Conductivity	μS/cm	Quarterly	-	-	-	-	-	-	-	
2	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	_
	рН	pН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly (Mar, Jun, Sep & Dec)						-		-
3	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	рН	pН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
	Conductivity	μS/cm	Quarterly						-		
9	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	_
	рН	pН		-	-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	-	
10	Conductivity	μS/cm	Upon discharge	-	-	-	-	-	-	-	
10	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	рН	рН		-	-	-	-	-	-	-	

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	pН		-	-	-	-	-	8.5	-	
	TSS	mg/L	Upon	-	-	-	-	-	50	-	
20	Conductivity	μS/cm							NA		
20	Oil & Grease	mg/L	discharge	-	-	-	-	-	10	-	-
	рН	рН		-	-	-	-	-	8.5	-	
	TSS	mg/L		-	-	-	-	-	50	-	
24	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		1	22/11/2023	-	-	-	-	3900	
	Lead	mg/L	Quarterly	1	22/11/2023	-	-	-	-	<0.001	
15	рН	рН	(Jan, April, Jul & Oct)	1	22/11/2023	-	-	-	-	7.42	
	Standing Water Level	metres		1	22/11/2023	-	-	-	-	6.49	
	Conductivity	μS/cm		-	-	-	-	-	-		
	Lead	mg/L	Quarterly	-	-	-	-	-	-		
16	рН	pН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-	
	Standing Water Level	metres		-	-	-	-	-	-		
	Conductivity	μS/cm	cm	-	-	-	-	-	-		
17	Lead	mg/L	Quarterly	-	-	-	-	-	-		
17	рН	рН	(Jan, April, Jul & Oct)	-	-	-	-	-	-	-	
	Standing Water Level	metres		-	-	-	-	-	-		
	Conductivity	μS/cm		-	-	-	-	-	-		
10	Lead	mg/L	Quarterly	-	-	-	-	-	-		
18	рН	pН	(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 (Jan, April, Jul & Oct)	-	-	-	-	-	-	
19	рН	рН		-	-	-	-	-	-	-
	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) – 27 th November 2023 (Day)												
LocationTimedB(A), LeqVCM Contribution dB(A),LeqCriterion dB(A),LeqWind speed (m/s),dirStability ClassIdentified Noise Sources dB(A),LeqExceedant (Yes/Not												
N-AT1 / 7	1:40pm	61	22	40	2.5 / 257	В	Birds (61), VCM (22)	No				
N-AT2 / 8	3:56pm	37	IA	40	1.8 / 256	A	Traffic (36), birds (31), insects (23), VCM (IA)	No				

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

	Table 5 VCM Operational Noise Monitoring Results Leq(15min) – 27 th November 2023 (Evening)												
Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	ldentified Noise Sources dB(A),Leq	Exceedance (Yes/No) ¹					
N-AT1 / 7	9:30pm	40	24	35	1.7 / 144	E	Insects (39), traffic (29), frogs (24), VCM (24)	No					
N-AT2 / 8	6:16pm	38	IA	37	0.8 / 200	E	Insects (33), birds (32), frogs (31), aeroplane (30), traffic (27), VCM (IA)	No					

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

					Table 6									
	VCM Operational Noise Monitoring Results Leq(15min) – 27 th November 2023 (Night)													
LocationTimedB(A), LeqVCM Contribution dB(A),LeqCriterion dB(A),LeqWind speed (m/s),dirStability ClassIdentified Noise Sources dB(A),LeqExceed (Yes/N														
N-AT1 / 7	10:00pm	.39	29	35	3.2 / 148	D	Insects (38), VCM (29) , traffic (23)	NA						
N-AT2 / 8	11:40pm	46	29	37	2.6 / 149	D	Insects (45), frogs (36), VCM (29), traffic (25)	No						

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

	Table 7												
VCM Operational Noise Monitoring Results LA _{max} – 27 th November 2023													
								Exceedance (Yes/No) ¹					
N-AT1 / 7	10:00pm	58	33	52	3.2 / 148	D	Insects	NA					
N-AT2 / 8	11:40pm	72	32	52	2.6 / 149	D	Insects	No					

Table 5 – Monthly Monitoring (Blasts – Limits Apply)

No Blast Monitoring data reported for November

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	

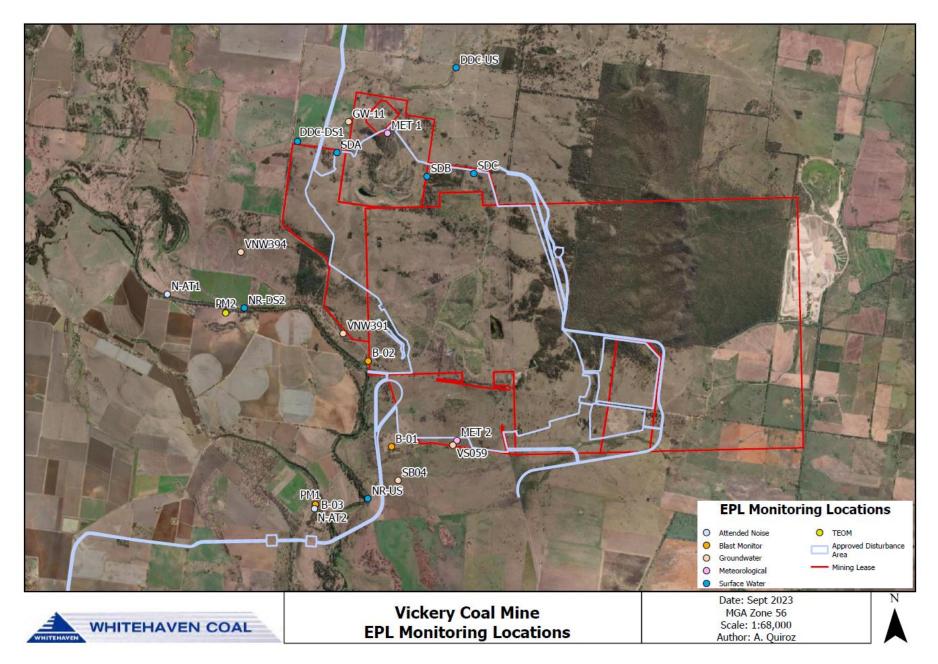
Table 6- Monthly Monitoring (Dust PM10 – Limits apply)

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
PM1 TEOM (µg/m³)	Continuous	0.08	12.38	58.98
PM2 TEOM (μg/m³)	Continuous	0.04	12.66	113.43

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	0.08	7.74	49.4
PM2 TEOM (μg/m³)	Continuous	0.05	7.13	58.46

Figure 1 – EPL 21283 Monitoring Locations





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: December 2023 Obtained Date: 8/01/2024 Publication Date: 19/01/2024

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		-	-	-	-	-	-	-	Low water
	Conductivity	μS/cm	Quarterly	-	-	-	-	-	-	-	level –
2	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	sampling not
	рН	pН		-	-	-	-	-	-	-	possible
	TSS	mg/L		-	-	-	-	-	-	-	1
	Conductivity	μS/cm	Quarterly						-		Low water level –
3	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	-	-	-	-	-	-	-	sampling not
	рН	рН		-	-	-	-	-	-	-	possible
	TSS	mg/L		1	18/12/2023	-	-	-	-	59.6	
	Conductivity	μS/cm	Quarterly	1	18/12/2023	-	-	-	-	419	
9	Oil & Grease	mg/L	(Mar, Jun, Sep & Dec)	1	18/12/2023	-	-	-	-	<5	_
	рН	pН		1	18/12/2023	-	-	-	-	8.04	
	TSS	mg/L		-	-	-	-	-	-	-	
10	Conductivity	μS/cm	Upon	-	-	-	-	-	-	-	
10	Oil & Grease	mg/L	discharge	-	-	-	-	-	-	-	
	рН	рН		-	-	-	-	-	-	-	

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	pН		-	-	-	-	-	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	-	
24	Conductivity	μS/cm	dischargo	-	-	-	-	-	NA	-	
21	Oil & Grease	mg/L		-	-	-	-	-	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		-	-	-	-	-	-	-		
	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		-	-	-	-	-	-			
10	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

					Table 4							
VCM Operational Noise Monitoring Results Leq(15min) – 12 th December 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	Exceedan ce (Yes/No) ¹				
N-AT1 / 7	1:17pm	52	IA	40	3.0 / 201	В	Cows (50), birds (48), VCM (IA)	No				
N-AT2 / 8	3:37pm	40	IA	40	4.1 / 213	С	Traffic (39), birds (32), VCM (IA)	NA				

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

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

					Table 5							
VCM Operational Noise Monitoring Results Leq(15min) – 12 th December 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	Excee dance (Yes/N o) ¹				
N-AT1 / 7	9:30pm	38	IA	35	2.4 / 159	E	Insects (39), traffic (29), frogs (24), VCM (IA)	No				
N-AT2 / 8	5:46pm	45	IA	37	3.7 / 231	D	Insects (44), birds (37), traffic (33), frogs (28), VCM (IA)	NA				

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

					Table 6								
	VCM Operational Noise Monitoring Results Leq(15min) – 12 th December 2023 (Night)												
Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	ldentified Noise Sources dB(A),Leq	Exceeda nce (Yes/No) 1					
N-AT1 / 7	10:00pm	.36	IA	35	1.7 / 172	E	Insects (36), traffic (25), VCM (IA)	No					
N-AT2 / 8	11:43pm	42	IA	37	2.4 / 090	E	Insects (41), frogs (33), traffic (27), VCM (IA)	No					

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

1.1.1 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} – 12 th December 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	52	IA	52	1.7 / 172	E	Insects	No				
N-AT2 / 8	11:43pm	65	IA	52	2.4 / 090	E	Insects	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 De
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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	0			120	Nil	-
	Blast Vibration	mm/s	Every Blast	0			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	0			120	Nil	-
	Blast Vibration	mm/s	Every Blast	0			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	0			120	Nil	-
	Blast Vibration	mm/s	Every Blast	0			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 (μg/m³)	Continuous	4.1	18.7	54.8	
PM2 TEOM (μg/m³)	Continuous	2.6	19.4	60.5	

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	2.5	11.8	41.2	
PM2 TEOM (μg/m³)	Continuous	0.7	11.6	46.4	

Figure 1 – EPL 21283 Monitoring Locations

