

TARRAWONGA COAL MINE – MONTHLY MONITORING SUMMARY

Site Information

EPL No: 12365

EPA Website Link: <http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=55113&SYSUID=1&LICID=12365>

Licensee: Tarrawonga Coal Pty Ltd

Licensee Address: Tarrawonga Coal Mine, 469 Goonbri Road, BOGGABRI NSW 2382

EPL Monitoring Points: See Figure 1 below

Sampling Period: June 2024

Obtained Date: 17/07/2024

Publication Date: 18/07/2024

Table 1 - No 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	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
6	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

Table 2 - 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
1	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
2	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
3	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
24	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	

	pH	pH		-	-	-	-	-	-	-	
26	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
27	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	-
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	

Table 3 – Monitoring (Quarterly & 6 Monthly – 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
9	Conductivity	µS/cm	6 monthly – (Mar- Sep)	-	-	-	-	-	-	-
	Lead	mg/L		-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	
	Standing Water Level	metres		-	-	-	-	-	-	
10	Conductivity	µS/cm	6 monthly – (Mar- Sep)	-	-	-	-	-	-	-
	Lead	mg/L		-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	
	Standing Water Level	metres		-	-	-	-	-	-	
12	Conductivity	µS/cm	6 monthly – (Mar- Sep)	-	-	-	-	-	-	-
	Lead	mg/L		-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	
	Standing Water Level	metres		-	-	-	-	-	-	
13	Conductivity	µS/cm	Quarterly - (Feb, May, Aug, Nov)	-	-	-	-	-	-	-
	Oil & Grease	mg/L		-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	
	TSS	mg/L		-	-	-	-	-	-	

Table 4 – Quarterly Attended Noise Monitoring

(Noise Limits Apply -35dB LAeq(15min) -Day, Evening and Night;45dB LA1(1min) -Night)

Table 1				
TCM Operational Noise Monitoring Results – 17 June 2024 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC¹	Identified Noise Sources
Matong – TN2	8:20pm	28	0.5 / 133 / D	Birds (27), insects (22), TCM (<20)
Barbers Lagoon – TN3	6:30pm	25	1.1 / 273 / E	TCM (25) , traffic (21)
Bungalow – TN4	9:13pm	33	1.0 / 266 / E	TCM (30) , insects (29), traffic (22)

1. Coal trucks on private haul road

Table 2				
TCM Operational Noise Monitoring Results – 17-18 June 2024 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	1:06am	23	2.0 / 031 / D	Insects (23), TCM (<20)
Barbers Lagoon – TN3	11:40pm	25	1.8 / 031 / E	TCM (25)
Bungalow – TN4	10:24pm	29	1.6 / 078 / E	TCM (28) , insects (21)

Table 3				
TCM Operational Noise Monitoring Results – 18 June 2024 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	12:22pm	31	1.5 / 264 / A	Birds (30), traffic (24), TCM (<20)
Barbers Lagoon – TN3	3:53pm	48	1.4 / 264 / C	Traffic (48), birds (23), TCM (<20)
Bungalow – TN4	2:13pm	44	1.9 / 274 / C	Traffic (44), birds (27), TCM (<20)

Table 4 TCM Operational Noise Monitoring Results – 18 June 2024 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	8:23pm	29	2.3 / 029 / D	Insects (28), TCM (21)
Barbers Lagoon – TN3	6:53pm	47	1.5 / 026 / D	Traffic (47), birds (26), TCM (<20)
Bungalow – TN4	7:34pm	30	2.0 / 202 / E	Birds (29), TCM (24)

Table 5 TCM Operational Noise Monitoring Results – 18-19 June 2024 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:11pm	21	1.7 / 025 / D	Cows (21), TCM (<20)
Barbers Lagoon – TN3	1:50am	23	1.5 / 040 / E	Birds (23), TCM (<20)
Bungalow – TN4	12:05am	24	1.0 / 038 / E	Insects (24), TCM (<20)

Table 6 TCM Operational Noise Monitoring Results – 19 June 2024 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	12:19pm	34	1.8 / 212 / B	Birds (34), cows (23), TCM (<20)
Barbers Lagoon – TN3	3:56pm	48	1.0 / 198 / C	Traffic (48), birds (22), TCM (<20)
Bungalow – TN4	2:13pm	30	1.6 / 241 / B	Birds (28), aeroplane (25), TCM (<20)

Table 7 TCM Operational Noise Monitoring Results – 19 June 2024 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	7:51pm	28	1.5 / 028 / D	Cows (26), TCM (23)
Barbers Lagoon – TN3	6:14pm	54	1.4 / 087 / E	Traffic (54), birds (27), TCM (<20)
Bungalow – TN4	6:57pm	44	1.9 / 030 / D	Traffic (44), TCM (<20)

Table 8 TCM Operational Noise Monitoring Results – 19-20 June 2024 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:20pm	28	1.2 / 097 / E	Cows (27), TCM (22)
Barbers Lagoon – TN3	12:55am	24	1.4 / 064 / E	Birds (24), TCM (<20)
Bungalow – TN4	11:41pm	31	1.5 / 053 / E	Traffic (30), TCM (22)

Table 9 TCM Operational Noise Monitoring Results – 20 June 2024 (Day)				
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Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:53am	38	1.0 / 132 / B	Birds (37), TCM (30)
Barbers Lagoon – TN3	2:34pm	49	1.1 / 186 / C	Traffic (49), TCM (27) , birds (22)
Bungalow – TN4	12:50pm	42	1.6 / 206 / C	Traffic (42), birds (31), TCM (24)

Table 10 TCM Operational Noise Monitoring Results – 20 June 2024 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	7:40pm	38	1.1 / 263 / E	Cows (38), TCM (29)
Barbers Lagoon – TN3	6:05pm	56	1.0 / 103 / E	Traffic (56), TCM (24)
Bungalow – TN4	6:48pm	44	1.6 / 251 / E	Traffic (44), TCM (22)

Table 11 TCM Operational Noise Monitoring Results – 20-21 June 2024 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:18pm	25	0.9 / 066 / E	Cows (25), TCM (<20)
Barbers Lagoon – TN3	12:53am	35	1.6 / 067 / E	Traffic (34), TCM (27) , frogs (22)
Bungalow – TN4	11:40pm	34	1.0 / 114 / E	Traffic (32), TCM (28) , frogs (22)

Table 12 TCM Operational Noise Monitoring Results – 21 June 2024 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	11:02am	34	3.4 / 300 / C	Birds (32), residential (30), TCM (<20)
Barbers Lagoon – TN3	2:37pm	52	4.8 / 279 / D	Traffic (52), birds (30), TCM (<20)
Bungalow – TN4	12:56pm	48	5.4 / 282 / D	Traffic (48), birds (25), TCM (<20)

The results in Tables 1 to 12 indicate that, under the operational and atmospheric conditions at the time, the measured noise levels from TCM did not exceed the applicable noise criterion at any monitoring location

Table 13 TCM Sleep Disturbance Monitoring Results – 17-18 June 2024 (Night)					
Location	Time	dB(A) L1 (1 min) ¹	dB(A) L1 (1 min) ²	L1 Source	Wind speed / direction / PSC
Matong – TN2	1:06am	47	<20	Insects	2.0 / 031 / D
Barbers Lagoon – TN3	11:40pm	31	31	General mine hum	1.8 / 031 / E

Bungalow – TN4	10:24pm	35	35	General mine hum	1.6 / 078 / E
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1. L1 (1 min) – total measured level.
2. L1 (1 min) – TCM noise only.

Table 14					
TCM Sleep Disturbance Monitoring Results – 18-19 June 2024 (Night)					
Location	Time	dB(A) L1 (1 min)¹	dB(A) L1 (1 min)²	L1 Source	Wind speed / direction / PSC
Matong – TN2	10:11pm	31	<20	Cows	1.7 / 025 / D
Barbers Lagoon – TN3	1:50am	30	<20	Birds	1.5 / 040 / E
Bungalow – TN4	12:05am	41	<20	Insects	1.0 / 038 / E

Table 15					
TCM Sleep Disturbance Monitoring Results – 19-20 June 2024 (Night)					
Location	Time	dB(A) L1 (1 min)¹	dB(A) L1 (1 min)²	L1 Source	Wind speed / direction / PSC
Matong – TN2	10:20pm	37	25	Cows	1.2 / 097 / E
Barbers Lagoon – TN3	12:55am	29	<20	Bird	1.4 / 064 / E
Bungalow – TN4	11:41pm	39	26	Car	1.5 / 053 / E

Table 16					
TCM Sleep Disturbance Monitoring Results – 20-21 June 2024 (Night)					
Location	Time	dB(A) L1 (1 min)¹	dB(A) L1 (1 min)²	L1 Source	Wind speed / direction / PSC
Matong – TN2	10:18pm	41	<20	Cows	0.9 / 066 / E
Barbers Lagoon – TN3	12:53am	4	35	Traffic	1.6 / 067 / E
Bungalow – TN4	11:40pm	47	33	Traffic	1.0 / 114 / E

The results in Tables 13 to 16 show that the Tarrawonga Coal Mine measured L1 (1 min) noise levels did not exceed the sleep disturbance criterion during any of the night-time monitoring periods.

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
Coomalgah (TB2)	Blast Noise	dB (Lin Peak)	Every Blast	8	97.89	103.20	120	Nil	05/06/2024
	Blast Vibration	mm/s	Every Blast	8	0.18	0.31	10	Nil	12/06 & 26/06/2024

Table 6- Monthly Monitoring (Dust PM10 – No Limits apply)

Location	No. of samples required by licence	Lowest sample value	Mean of sample	Highest sample value
“Flixton” property* TEOM (µg/m ³)	Continuous	0.8	9.83	22.3

**Mine owned property – no limit apply*

Figure 1 – EPL 12365 Monitoring Locations

