

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 2025

Obtained Date: 14/07/2025

Publication Date: 14/07/2025

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		-	-	-	-	-	-	-	

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
	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 – 16 June 2025 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	8:03pm	31	1.6 / 035 / D	TCM (30) , insects (21)
Barbers Lagoon – TN3	9:30pm	27	1.1 / 041 / E	Traffic (24), insects (21), TCM (21)
Bungalow – TN4	8:53pm	26	0.8 / 161 / E	Insects (23), TCM (23)

Table 2 TCM Operational Noise Monitoring Results – 16-17 June 2025 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	12:34am	30	1.7 / 050 / E	TCM (29) , insects (21)
Barbers Lagoon – TN3	10:00pm	24	1.7 / 042 / E	TCM (22) , insects (20)
Bungalow – TN4	11:09pm	26	1.3 / 100 / E	Traffic (24), insects (22), TCM (<20)

Table 3 TCM Operational Noise Monitoring Results – 17 June 2025 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:24am	36	1.5 / 231 / C	Birds (34), TCM (32)
Barbers Lagoon – TN3	2:06pm	50	0.8 / 218 / B	Traffic (50), birds (38), TCM (<20)
Bungalow – TN4	12:19pm	46	1.2 / 223 / B	Traffic (45), birds (36), aeroplane (31), insects (24), TCM (<20)

Table 4				
---------	--	--	--	--

TCM Operational Noise Monitoring Results – 17 June 2025 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	7:48pm	33	2.2 / 035 / E	TCM (30) , aeroplane (29)
Barbers Lagoon – TN3	9:23pm	25	2.0 / 036 / E	Traffic (25), TCM (<20)
Bungalow – TN4	8:40pm	28	2.3 / 040 / E	TCM (27) , traffic (21)

Table 5 TCM Operational Noise Monitoring Results – 17-18 June 2025 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:11pm	32	1.2 / 041 / E	TCM (31) , mine (25)
Barbers Lagoon – TN3	12:33am	26	1.4 / 044 / E	Traffic (26), TCM (<20)
Bungalow – TN4	11:23pm	28	1.4 / 029 / E	Traffic (25), cows (22), mine (20), TCM (<20)

Table 6 TCM Operational Noise Monitoring Results – 18 June 2025 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:26am	52	1.9 / 241 / C	Traffic (51), birds (46), TCM (26)
Barbers Lagoon – TN3	1:54pm	59	2.6 / 221 / D	Traffic (59), birds (34), TCM (29)
Bungalow – TN4	12:13pm	31	2.5 / 228 / C	Birds (30), TCM (24)

Table 7 TCM Operational Noise Monitoring Results – 18 June 2025 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	6:11 pm	33	1.5 / 180 / D	Cattle (33), TCM (<20)
Barbers Lagoon – TN3	7:45 pm	31	1.5 / 52 / D	Dogs (31), TCM (<20)
Bungalow – TN4	7:03 pm	43	1.4 / 152 / D	Cars (43), TCM trucks (31), TCM (<20)

Table 8 TCM Operational Noise Monitoring Results – 18-19 June 2025 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	12:38am	40	0.2 / 261 / F	Insects (40), TCM (<20)
Barbers Lagoon – TN3	10.08pm	51	0.9 / 154 / F	Cars (51), TCM (<20)
Bungalow – TN4	11.19pm	34	2.0 / 30 / E	Birds (31), wind (31), TCM (<20)

Table 9 TCM Operational Noise Monitoring Results – 19 June 2025 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	11.08am	36	1.4 / 272 / B	Birds (46), TCM (<20)
Barbers Lagoon – TN3	2:38pm	48	2.7 / 211 / D	Birds (46), cars (42), TCM (23)
Bungalow – TN4	12:56pm	44	1.7 / 229 / D	Birds (44), TCM (24)

Table 10 TCM Operational Noise Monitoring Results – 19 June 2025 (Evening)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	9:17pm	31	0.7 / 38 / F	Cattle (30), TCM (25)
Barbers Lagoon – TN3	7:41pm	52	2.1 / 41 / E	Cars (52), TCM (<20)
Bungalow – TN4	8:26pm	42	2.0 / 102 / D	Cars (39), Tractor (38), TCM (<20)

Table 11 TCM Operational Noise Monitoring Results – 19-20 June 2025 (Night)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	10:03pm	24	1.5 / 72 / F	Cattle (24), TCM (<20)
Barbers Lagoon – TN3	12:43am	29	0.9 / 240 / E	Birds (26), TCM (<20)

Bungalow – TN4	11:22pm	31	0.7 / 296 / F	Car (31), TCM (<20)
----------------	---------	----	---------------	-------------------------------

Table 12 TCM Operational Noise Monitoring Results – 20 June 2025 (Day)				
Location	Time	Total dB(A), Leq (15 min)	Wind speed / direction / PSC	Identified Noise Sources
Matong – TN2	11:05am	51	1.8 / 233 / C	Birds (51), TCM (25)
Barbers Lagoon – TN3	7:33am	57	0.8 / 300 / D	Cars (57), birds (47), TCM (28)
Bungalow – TN4	9:14am	42	1.2 / 224 / C	Cars (40), birds (36), TCM (26)

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. Low-frequency analysis – Matong – TN2 10:24 am													
Hz/dB(Z)	One-third octave LZeq,15min threshold level												
Frequency (Hz)	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
TN2, dB(Z)	--	43	48	44	47	44	47	46	44	46	45	40	32
Threshold, dB(Z)	92	89	86	77	69	61	54	50	50	48	48	46	44
Exceedance, dB	--	0	0	0	0	0	0	0	0	0	0	0	0

The results in Tables 13 show no exceedance of the low-frequency criteria.

Table 14. Low-frequency analysis – Matong – TN2 10:11 pm	
Hz/dB(Z)	One-third octave LZeq,15min threshold level

Frequency (Hz)	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
TN2, dB(Z)	--	43	45	43	42	41	44	43	40	41	41	41	30
Threshold, dB(Z)	92	89	86	77	69	61	54	50	50	48	48	46	44
Exceedance, dB	--	0	0	0	0	0	0	0	0	0	0	0	0

The results in Tables 14 show no exceedance of the low-frequency criteria.

Table 15 TCM Sleep Disturbance Monitoring Results – 16-17 June 2025 (Night)					
Location	Time	dB(A) L1 (1 min) ¹	dB(A) L1 (1 min) ²	L1 Source	Wind speed / direction / PSC
Matong – TN2	12:34am	35	35	TCM	1.7 / 050 / E
Barbers Lagoon – TN3	10:00pm	30	26	Insects	1.7 / 042 / E
Bungalow – TN4	11:09pm	28	<20	Insects	1.3 / 100 / E

1. L1 (1 min) – total measured level.

2. L1 (1 min) – TCM noise only.

Table 16 TCM Sleep Disturbance Monitoring Results – 17-18 June 2025 (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	36	36	TCM	1.2 / 041 / E

Barbers Lagoon – TN3	12:33am	31	<20	Traffic	1.4 / 044 / E
Bungalow – TN4	11:23pm	35	<20	Traffic	1.4 / 029 / E

Table 17					
TCM Sleep Disturbance Monitoring Results – 18-19 June 2025 (Night)					
Location	Time	dB(A) L1 (1 min) ¹	dB(A) L1 (1 min) ²	L1 Source	Wind speed / direction / PSC
Matong – TN2	12:38am	42	<20	Insects	0.2 / 261 / F
Barbers Lagoon – TN3	10:08pm	55	<20	Traffic	0.9 / 154 / F
Bungalow – TN4	11:19pm	38	<20	Birds	2.0 / 30 / E

Table 18					
TCM Sleep Disturbance Monitoring Results – 19-20 June 2025 (Night)					
Location	Time	dB(A) L1 (1 min) ¹	dB(A) L1 (1 min) ²	L1 Source	Wind speed / direction / PSC
Matong – TN2	10:03pm	30	<20	Cattle	1.5 / 72 / F
Barbers Lagoon – TN3	12:43am	31	<20	Birds	0.9 / 240 / E
Bungalow – TN4	11:22pm	45	<20	Car	0.7 / 296 / F

The results in Tables 15 to 18 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	2	91.4	100.8	120	Nil	10/06/2025
	Blast Vibration	mm/s	Every Blast	2	0.48	0.64	10	Nil	10/06/2025

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	5.88	9.11	18.1

**Mine owned property – no limit apply*

Figure 1 – EPL 12365 Monitoring Locations

