

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 2022

Obtained Date: 4/07/2022

Publication Date: 5/07/2022

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	-	-	-	-	-	-	-	Creek not flowing during discharge event
	Conductivity	µS/cm		-	-	-	-	-	-	-	
	Oil & Grease	mg/L		-	-	-	-	-	-	-	
	pH	pH		-	-	-	-	-	-	-	
6	TSS	mg/L	Upon discharge	-	-	-	-	-	-	-	Creek not flowing during discharge event
	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	1	16/6	16/6	-	19	50	No	-
	Conductivity	µS/cm		1	16/6	16/6	-	277	NA	NA	
	Oil & Grease	mg/L		1	16/6	16/6	-	<5	10	No	
	pH	pH		1	16/6	16/6	-	7.5	6.5 – 8.5	No	
2	TSS	mg/L	Upon discharge	2	2/6, 20/6	20/6	<5	13	50	No	-
	Conductivity	µS/cm		2	2/6, 20/6	2/6	277	297	NA	NA	
	Oil & Grease	mg/L		2	2/6, 20/6	20/6	<5	<5	10	No	
	pH	pH		2	2/6, 20/6	20/6	6.82	7.91	6.5 – 8.5	No	
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		-	-	-	-	-	-	-	

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
	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)	Monitoring report not yet received, will be submitted next month.						
	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)

TN2 - Coomalga

Date	Time	Total Noise Levels (dB)						Mine noise level LAeq (dB)	Wind Speed (m/s)	Wind Direction (°)	Stability Category	Rain (mm)
		LAeq	LAmx	LCeq	LA1	LA10	LA90					
6/06/2022	10:11	42	61	68	52	44	36	36	3.3	308	D	0
	10:26	42	54	71	49	44	36	35	5.8	303	D	0
	10:41	40	54	70	47	42	36	35	4.4	288	D	0
	10:56	37	52	67	44	40	34	35	6.4	269	D	0
	11:11	41	56	70	48	43	36	35	7.2	281	D	0
	11:26	40	54	70	48	42	34	35	5.2	292	D	0
	21:30	31	47	50	36	33	28	30	1.7	297	E	0
	21:45	31	49	50	36	33	29	31	0.8	21	E	0
	22:00	32	49	50	38	34	28	32	1.3	13	E	0
	22:15	32	60	50	37	33	28	31	1.0	20	E	0
	22:30	34	55	51	39	36	31	34	2.0	23	E	0
22:45	33	59	51	37	34	30	33	1.9	27	E	0	
7/06/2022	9:33	45	66	55	57	46	32	33	1.8	303	D	0
	9:48	42	67	64	54	39	32	33	5.1	292	D	0
	10:03	42	69	66	48	41	33	33	3.4	290	D	0
	10:18	36	62	63	45	38	32	33	3.8	306	D	0
	10:33	41	65	66	52	42	33	33	4.0	307	C	0
	10:48	44	67	67	57	43	33	33	4.3	284	D	0
	21:30	36	48	53	41	38	34	35	3.5	321	D	0
	21:45	38	50	54	43	40	35	35	4.3	317	D	0
	22:00	38	47	54	44	40	35	35	2.9	297	D	0
	22:15	39	52	55	43	41	36	36	3.2	321	D	0
	22:30	39	51	55	45	41	36	36	4.2	309	D	0
22:45	38	51	54	43	40	36	36	3.4	303	D	0	
8/06/2022	9:50	37	60	55	49	38	26	<30	1.6	245	C	0
	10:05	31	50	60	40	32	25	<30	2.2	221	C	0

	10:20	36	59	59	48	35	26	<30	1.7	197	A	0
	10:35	37	57	60	48	39	27	<30	3.3	258	A	0
	10:50	33	48	61	40	35	28	<30	3.3	222	D	0
	11:05	44	75	66	52	45	30	<30	4.1	178	C	0
	21:30	37	47	53	41	39	35	35	0.3	19	F	0
	21:45	35	48	54	40	37	32	35	0.3	249	E	0
	22:00	35	49	53	40	37	32	34	0.3	215	F	0
	22:15	34	50	53	39	37	30	34	1.1	271	E	0
	22:30	35	45	52	40	37	32	34	0.8	238	F	0
	22:45	33	41	51	37	35	29	33	1.3	247	D	0
9/06/2022	10:11	35	54	59	46	37	28	<30	3.3	227	D	0
	10:26	32	54	60	40	34	28	<30	4.6	266	A	0
	10:41	40	62	61	54	38	28	<32	3.2	229	D	0
	10:56	33	50	61	42	35	28	<33	3.4	261	D	0
	11:11	32	50	61	40	34	27	<32	4.9	265	D	0
	11:26	35	51	65	44	38	30	<33	4.9	261	C	0
	21:30	34	52	51	39	36	31	<31	2.5	292	E	0
	21:45	34	44	51	40	37	30	32	2.4	273	E	0
	22:00	32	50	50	36	34	29	33	1.6	269	F	0
	22:15	33	61	50	36	34	29	32	1.7	252	E	0
	22:30	33	47	50	38	35	31	32	1.6	258	E	0
22:45	32	44	48	37	34	29	33	2.0	251	E	0	

TN3 – Barbers Lagoon

Date	Time	Total Noise Levels (dB)						Mine noise level L _{Aeq} (dB)	Wind Speed (m/s)	Wind Direction (°)	Stability Category	Rain (mm)
		L _{Aeq}	L _{Amax}	L _{Ceq}	L _{A1}	L _{A10}	L _{A90}					
6/06/2022	10:10	62	85	90	75	63	41	I/A	3.3	308	D	0
	10:25	58	83	88	70	59	40	I/A	5.8	303	D	0
	10:40	60	82	92	73	63	41	I/A	4.4	288	D	0
	10:55	62	87	87	74	59	38	I/A	6.4	269	D	0
	11:11	63	87	90	76	63	40	I/A	7.2	281	D	0
	11:26	58	80	87	70	59	37	I/A	5.2	292	D	0
	20:06	33	52	43	44	37	20	I/A	1.1	307	E	0
	20:21	25	46	41	35	28	19	I/A	0.9	336	D	0
	23:21	30	50	45	42	32	19	I/A	2.2	36	E	0
	23:36	27	49	43	37	30	18	I/A	2.1	52	E	0
	23:51	25	47	42	33	28	19	I/A	3.1	55	D	0
7/06/2022	0:06	24	53	41	32	22	17	I/A	1.2	12	E	0
	8:41	56	83	75	61	48	34	I/A	2.1	331	D	0
	8:56	64	89	78	77	56	35	I/A	3.0	329	C	0
	9:12	61	82	76	76	57	36	I/A	2.4	311	B	0
	9:27	59	86	78	65	52	33	I/A	1.8	303	D	0
	9:42	56	81	76	68	49	34	I/A	5.1	292	D	0
	9:57	54	80	82	62	52	33	I/A	3.4	290	D	0
	20:07	31	58	45	43	32	22	I/A	3.4	315	D	0
	20:22	28	49	44	39	32	21	I/A	4.3	316	E	0
	23:18	29	50	45	39	31	21	I/A	2.5	286	D	0
	23:33	27	46	45	38	29	20	I/A	3.3	277	E	0
23:48	24	48	37	36	24	18	I/A	2.6	283	E	0	
8/06/2022	0:03	20	48	32	28	20	17	I/A	1.5	229	E	0
	8:05	60	83	64	75	53	32	I/A	1.5	39	D	0

	8:20	60	83	64	75	51	32	I/A	1.6	63	D	0
	8:35	58	85	62	69	47	32	I/A	1.9	41	A	0
	8:50	54	79	60	64	45	29	I/A	0.4	224	A	0
	9:05	60	87	70	70	49	30	I/A	1.6	294	A	0
	9:20	60	81	71	74	59	35	I/A	0.1	30	A	0
	20:15	45	71	49	56	38	18	I/A	0.9	281	D	0
	20:30	23	45	41	34	23	18	I/A	0.9	234	E	0
	23:18	27	52	42	37	29	19	I/A	1.9	233	D	0
	23:33	22	43	40	33	24	17	I/A	2.1	217	D	0
	23:48	22	45	46	30	24	18	I/A	1.9	218	E	0
9/06/2022	0:03	22	48	40	27	23	19	I/A	1.7	207	E	0
	9:27	56	80	80	66	54	33	I/A	3.5	230	D	0
	9:42	57	77	87	69	59	32	I/A	3.8	263	C	0
	9:57	58	81	81	73	56	36	I/A	4.0	263	D	0
	10:12	60	86	83	71	55	35	I/A	3.3	227	D	0
	10:28	58	82	79	72	51	30	I/A	4.6	266	A	0
	10:43	59	80	88	70	61	34	I/A	3.2	229	D	0
	20:26	32	50	40	44	36	20	I/A	2.0	304	E	0
	20:41	32	56	42	44	33	20	I/A	2.3	307	E	0
	23:18	30	50	52	41	32	19	I/A	1.7	255	F	0
	23:33	24	47	43	36	23	18	I/A	1.4	267	D	0
23:48	23	49	43	32	22	18	I/A	1.5	252	D	0	
10/06/2022	0:03	21	48	40	29	20	17	I/A	1.9	266	E	0

TN4 – Bungalow

Date	Time	Total Noise Levels (dB)						Mine noise level LAeq (dB)	Wind Speed (m/s)	Wind Direction (°)	Stability Category	Rain (mm)
		LAeq	LAmx	LCeq	LA1	LA10	LA90					
6/06/2022	11:55	65	84	97	76	69	47	I/A	4.9	301	D	0
	12:10	62	82	94	73	65	44	I/A	5.6	299	D	0
	12:28	63	81	95	73	67	45	I/A	3.7	326	D	0
	12:43	58	76	92	69	62	42	I/A	4.3	300	D	0
	12:58	62	79	93	73	65	39	I/A	4.9	297	C	0
	13:14	58	76	91	69	62	41	I/A	4.4	329	D	0
	21:30	29	49	57	41	31	19	I/A	1.7	297	E	0
	21:45	24	48	56	35	25	19	I/A	0.8	21	E	0
	22:01	23	44	56	34	25	18	I/A	1.3	13	E	0
	22:16	22	48	57	33	22	18	I/A	1.0	20	E	0
	22:31	24	51	57	33	25	18	I/A	2.0	23	E	0
	22:46	27	55	56	37	21	17	I/A	1.9	27	E	0
7/06/2022	10:29	56	75	88	68	59	35	I/A	4.0	307	C	0
	10:44	57	77	90	68	61	40	I/A	4.3	284	D	0
	10:59	65	85	94	78	67	37	I/A	4.4	263	D	0
	11:14	68	93	96	79	70	44	I/A	4.2	267	D	0
	11:29	65	82	96	77	68	51	I/A	5.4	326	D	0
	11:44	69	87	98	78	73	52	I/A	5.9	267	D	0
	21:26	32	55	68	41	34	28	I/A	3.5	321	D	0
	21:41	29	55	64	36	30	24	I/A	4.3	317	D	0
	22:00	25	56	61	33	24	20	I/A	2.9	297	D	0
	22:15	29	55	62	38	31	21	I/A	3.2	321	D	0
	22:30	25	54	61	37	24	18	I/A	4.2	309	D	0
22:45	31	65	61	35	23	20	I/A	3.4	303	D	0	
8/06/2022	9:48	45	74	74	57	46	26	I/A	1.6	245	C	0

	10:03	51	72	81	64	52	29	I/A	2.2	221	C	0
	10:19	50	70	81	62	54	30	I/A	1.7	197	A	0
	10:35	57	77	90	69	60	34	I/A	3.3	258	A	0
	10:50	54	72	87	65	58	40	I/A	3.3	222	D	0
	21:26	30	56	55	42	30	18	I/A	0.3	19	F	0
	21:41	26	58	55	36	21	18	I/A	0.3	249	E	0
	22:00	33	63	69	45	33	19	I/A	0.3	215	F	0
	22:15	30	57	66	42	29	20	I/A	1.1	271	E	0
	22:30	37	60	67	52	35	23	I/A	0.8	238	F	0
	22:45	45	70	80	56	48	25	I/A	1.3	247	D	0
9/06/2022	11:13	56	75	89	67	60	36	I/A	4.9	265	D	0
	11:29	57	78	90	69	60	38	I/A	4.9	261	C	0
	11:44	59	81	92	70	62	39	I/A	5.4	224	A	0
	11:59	59	79	92	71	63	38	I/A	2.0	243	D	0
	12:15	60	79	93	71	63	40	I/A	5.6	286	C	0
	12:30	52	72	85	63	56	29	I/A	3.4	268	D	0
	12:45	58	82	90	70	60	35	I/A	2.9	267	C	0
	21:25	27	53	55	39	29	18	I/A	2.5	292	E	0
	21:40	32	60	57	47	29	18	I/A	2.4	273	E	0
	22:00	46	74	70	57	39	18	I/A	1.6	269	F	0
	22:15	43	71	76	54	42	30	I/A	1.7	252	E	0
	22:30	40	67	69	53	39	23	I/A	1.6	258	E	0
22:45	26	55	61	37	23	19	I/A	2.0	251	E	0	

Note 1: Acronyms used: I/A = Inaudible, m/s = metres/second, dB = decibel.

Note 2: **Bold values in red** = non-compliant weather conditions not included in calculation of average for that period. Non-compliant weather conditions are any:

- Wind speeds greater than 3m/s at 10m above ground level
- Stability Category F temperature inversion conditions and wind speeds greater than 2m/s, 10m above the ground
- Stability category G temperature inversions.

Note 3: Real time weather conditions retrieved from the mine, after monitoring occurs.

Attended noise monitoring was conducted at the “Bungalow” (TN4), “Barbers Lagoon” (TN3) and “Coomalgah” (TN2) properties from 6th to the 9th of June 2022. The summary table (Table 4) displays a comprehensive results table displaying all measurements. The noise criterion for the mine is 35dB(A) Leq (15 min) for all operating times.

Noise from the mine must not exceed 45 dB(A) L1 (1 min) between 10 pm and 7 am. This is to minimise the potential for sleep disturbance as a result of individual loud noises from the mine. The results of the sleep disturbance monitoring show that the measured LA1 (1 min) noise level did not exceed the sleep disturbance criterion. The results above show that noise emissions from the mine did not exceed the operational noise criterion at the “Barbers Lagoon”, “Bungalow” or “Coomalgah” monitoring locations during the monitoring event during the entire monitoring period.

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	9	96.9	105.2	120	Nil	3/06/22
	Blast Vibration	mm/s	Every Blast	9	0.2	0.36	10	Nil	16/06/22

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	0.85	11.16	272.88

**Mine owned property – no limit apply*

Figure 1 – EPL 12365 Monitoring Locations

