

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 and 2 below

Sampling Period: January 2019

Obtained Date: 5/02/2019

Publication Date: 5/02/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	ms/cm	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

Next Quarterly Monitoring to be conducted in March 2019

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 Obtained
Tarrawonga*	Blast Noise	dB (Lin Peak)	Every Blast	6	98.2	110.9	N/A	N/A	04/01/19
	Blast Vibration	mm/s	Every Blast	6	0.13	0.18	N/A	N/A	16/01/19
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	6	91.5	99.6	120	Nil	23/01/19
	Blast Vibration	mm/s	Every Blast	6	0.1	0.17	10	Nil	07/01/19

**Mine owned property – no limit apply*

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	11.7	29.1	65.7

**Mine owned property – no limit apply*

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 and 2 below

Sampling Period: February 2019

Obtained Date: 04/03/2019

Publication Date: 4/03/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	ms/cm	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	ms/cm	Quarterly - (Feb, May, Aug, Nov)	1	-	-	-	-	-	3,720
	Oil & Grease	mg/L		1	-	-	-	-	-	<5
	pH	pH		1	-	-	-	-	-	8.6
	TSS	mg/L		1	-	-	-	-	-	19

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

Next Quarterly Monitoring was conducted end of February and data will be available next month

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 Obtained
Tarrawonga*	Blast Noise	dB (Lin Peak)	Every Blast	6	0.49	1.67	N/A	N/A	11/02/19
	Blast Vibration	mm/s	Every Blast	6	0.32	0.87	N/A	N/A	11/02/19
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	6	102.9	109.5	120	Nil	11/02/19 and 14/02/19
	Blast Vibration	mm/s	Every Blast	6	101.7	112.7	10	Nil	1/02/19

*Mine owned property – no limit apply

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	45.5	215 [#]

*Mine owned property – no limit apply

Dust storm event

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Licensee: Tarrawonga Coal Pty Ltd

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

EPL Monitoring Points: See Figure 1 and 2 below

Sampling Period: March 2019

Obtained Date: 04/04/2019

Publication Date: 10/04/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	1	14/03/19	-	-	-	-	3,640
	Lead	mg/L		1	14/03/19	-	-	-	-	0.005
	pH	pH		1	14/03/19	-	-	-	-	8.1
	Standing Water Level	metres		1	14/03/19	-	-	-	-	7.78
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	1	14/03/19	-	-	-	-	532
	Lead	mg/L		1	14/03/19	-	-	-	-	0.002
	pH	pH		1	14/03/19	-	-	-	-	7.1
	Standing Water Level	metres		1	14/03/19	-	-	-	-	4.34
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	-	-	-	-	-	-	-
	Lead	mg/L		-	-	-	-	-	-	-
	pH	pH		-	-	-	-	-	-	-
	Standing Water Level	metres		-	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	1	14/03/19	-	-	-	-	4,840
	Lead	mg/L		1	14/03/19	-	-	-	-	
	pH	pH		1	14/03/19	-	-	-	-	7.2
	Standing Water Level	metres		1	14/03/19	-	-	-	-	10.2
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(Extract from the independent noise consultant report)

EPL ID	Location	Date	Tarrawonga Coal Mine Contribution dBA				Criteria	Measurement Periods	Weather Compliant			Compliant
			LAeq(15minute) Day	LAeq(15minute) Evening	LAeq(15minute) Night	LA1(1minute) Night			Day	Eve	Night	
79a	Barbers Lagoon	25/02/2019	26	N/M	I/A	I/A	Day, Evening and Night – 35 dBA LAeq(15minute)	Day - 1.5 hrs Evening - 0.5 hrs Night – 1hrs	N	N	N	Y
		26/02/2019	I/A	I/A	25	27			Y	Y	Y	Y
		27/02/2019	26	I/A	N/M	N/M			Y	N	N	Y
		28/02/2019	I/A	N/M	31	33			Y	N	N	Y
89	Bungalow	25/02/2019	I/A	N/M	27	29	Night – 45 dBA LA1(1minute)		N	N	N	Y
		26/02/2019	I/A	I/A	I/A	I/A	Y		Y	Y	Y	
		27/02/2019	I/A	I/A	N/M	N/M	Cumulative Day, Evening, Night 40 dBA LAeq(15minute)		Y	N	Y	Y
		28/02/2019	<25	I/A	I/A	I/A	Y		N	N	Y	
60a	Coomalgah/ Matong	25/02/2019	25	N/M	I/A	I/A	Y	N	N	Y		
		26/02/2019	26	<25	<25	25	Y	Y	N	Y		
		27/02/2019	31	I/A	I/A	I/A	Y	N	N	Y		
		28/02/2019	26	N/M	I/A	I/A	Y	N	Y	Y		

Note:

I/A = Inaudible

N/M = Not Measurable

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 Obtained
Tarrawonga*	Blast Noise	dB (Lin Peak)	Every Blast	6	101.3	113.3	N/A	N/A	1/03/2019
	Blast Vibration	mm/s	Every Blast	6	0.33	1.12	N/A	N/A	1/03/2019
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	6	96.7	104.2	120	Nil	27/03/2019
	Blast Vibration	mm/s	Every Blast	6	0.42	1.79	10	Nil	1/03/2019

**Mine owned property – no limit apply*

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 24 hr average ($\mu\text{g}/\text{m}^3$)	Continuous	4.2	34.4	99.3

**Mine owned property – no limit apply*

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Licensee: Tarrawonga Coal Pty Ltd

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

EPL Monitoring Points: See Figure 1 and 2 below

Sampling Period: April 2019

Obtained Date: 04/05/2019

Publication Date: 06/05/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(Next Quarterly noise monitoring will be undertaken in May 2019)

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 Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	4	91.1	94.5	N/A	N/A	18/04/2019
	Blast Vibration	mm/s	Every Blast	4	0.17	0.2	N/A	N/A	04/04/2019
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	4	94.9	101.3	120	Nil	18/04/2019
	Blast Vibration	mm/s	Every Blast	4	0.18	0.31	10	Nil	04/04/2019

**Mine owned property – no limit apply*

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 24 hr average ($\mu\text{g}/\text{m}^3$)	Continuous	0.0	26.6	77.6

**Mine owned property – no limit apply*

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 and 2 below

Sampling Period: May 2019

Obtained Date: 04/06/2019

Publication Date: 06/06/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin g Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	1	23/05/19	-	-	-	-	3,070
	Oil & Grease	mg/L		1	23/05/19	-	-	-	-	<5
	pH	pH		1	23/05/19	-	-	-	-	8.0
	TSS	mg/L		1	23/05/19	-	-	-	-	<5

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(Next Quarterly noise monitoring will be undertaken in early June 2019)

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 Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	8	97.1	100.1	N/A	N/A	06/05/2019
	Blast Vibration	mm/s	Every Blast	8	0.25	0.52	N/A	N/A	30/05/2019
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	8	94.45	98.9	120	Nil	30/05/2019
	Blast Vibration	mm/s	Every Blast	8	0.19	0.26	10	Nil	06/05/2019

**Mine owned property – no limit apply*

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 24 hr average ($\mu\text{g}/\text{m}^3$)	Continuous	4.6	25.3	55.5

**Mine owned property – no limit apply*

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 and 2 below

Sampling Period: June 2019

Obtained Date: 12/07/2019

Publication Date: 12/07/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	Data available in July	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(Table extracted from SLR quarterly report 2019)

Table 1 Performance Assessment – Operations

EPL ID	Location	Date	Tarrawonga Coal Mine Contribution dBA				Criteria	Measurement Periods	Weather Compliant			Compliant
			LAeq(15minute) Day	LAeq(15minute) Evening	LAeq(15minute) Night	LA1(1minute) Night			Day	Eve	Night	
79a	Barbers Lagoon	04/06/2019	I/A	I/A	I/A	I/A	Day, Evening and Night – 35 dBA LAeq(15minute)	Day - 1.5 hrs Evening - 0.5 hrs Night – 1hrs	N	Y	Y	Y
		05/06/2019	I/A	I/A	23	25			N	Y	Y	Y
		06/06/2019	I/A	22	25	25			Y	Y	Y	Y
		07/06/2019	34	33	33	38			Y	Y	Y	Y
89	Bungalow	04/06/2019	I/A	I/A	I/A	I/A	Night – 45 dBA LA1(1minute)		N	Y	Y	Y
		05/06/2019	I/A	I/A	21	25	Y		Y	Y	Y	
		06/06/2019	<25	I/A	<25	<25	Cumulative Day, Evening, Night 40 dBA		Y	Y	Y	Y
		07/06/2019	35	29	30	35	LAeq(15minute)		Y	Y	Y	Y
60a	Coomalgah/ Matong	04/06/2019	34	34	24	27	N		Y	Y	Y	
		05/06/2019	N/M	I/A	I/A	I/A	N		Y	Y	Y	
		06/06/2019	24	22	29	34	Y		Y	Y	Y	
		07/06/2019	42 ¹	<25	27	30	Y		Y	Y	N	

Note 1: A +2dB modifying factor correction for low frequency noise has been applied in accordance with the NPF.

I/A = Inaudible

N/M = Not Measurable

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 Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	7	100.17	108.00	N/A	N/A	20/06/19
	Blast Vibration	mm/s	Every Blast	7	0.25	0.61	N/A	N/A	21/06/19
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	7	97.21	113.20	120	Nil	20/06/19
	Blast Vibration	mm/s	Every Blast	7	0.32	1.20	10	Nil	21/06/19

**Mine owned property – no limit apply*

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 24 hr average (µg/m ³)	Continuous	0	17.2	48.9

**Mine owned property – no limit apply*

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 and 2 below

Sampling Period: July 2019

Obtained Date: 13/08/2019

Publication Date: 14/08/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(No Monitoring for July)

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 Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	7	102.54	110.80	N/A	N/A	14/08/19
	Blast Vibration	mm/s	Every Blast	7	0.50	0.73	N/A	N/A	14/08/19
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	7	97.60	103.60	120	Nil	14/08/19
	Blast Vibration	mm/s	Every Blast	7	0.50	1.82	10	Nil	14/08/19

**Mine owned property – no limit apply*

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 24 hr average ($\mu\text{g}/\text{m}^3$)	Continuous	6.04	18.16	44.5

**Mine owned property – no limit apply*

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 and 2 below

Sampling Period: August 2019

Obtained Date: 1/09/2019

Publication Date: 14/09/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	1	13/08/19	-	-	-	-	3,000
	Oil & Grease	mg/L		1	13/08/19	-	-	-	-	<5
	pH	pH		1	13/08/19	-	-	-	-	8.6
	TSS	mg/L		1	13/08/19	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(No Monitoring for August)

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 Max. Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	6	104.3	114.8	N/A	N/A	8/8/2019
	Blast Vibration	mm/s	Every Blast	6	0.15	0.26	N/A	N/A	29/08/19
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	6	97.9	110.0	120	Nil	8/8/2019
	Blast Vibration	mm/s	Every Blast	6	0.16	0.3	10	Nil	29/08/19

**Mine owned property – no limit apply*

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 24 hr average (µg/m ³)	Continuous	7.4	29.4	83.5

**Mine owned property – no limit apply*

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 and 2 below

Sampling Period: September 2019

Obtained Date: 2/10/2019

Publication Date: 14/10/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	1	11/09/19	-	-	-	-	3,430
	Lead	mg/L		1	11/09/19	-	-	-	-	0.003
	pH	pH		1	11/09/19	-	-	-	-	8.0
	Standing Water Level	metres		1	11/09/19	-	-	-	-	7.99
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	1	11/09/19	-	-	-	-	530
	Lead	mg/L		1	11/09/19	-	-	-	-	0.006
	pH	pH		1	11/09/19	-	-	-	-	6.9
	Standing Water Level	metres		1	11/09/19	-	-	-	-	4.80
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	1	11/09/19	-	-	-	-	3,460
	Lead	mg/L		1	11/09/19	-	-	-	-	0.002
	pH	pH		1	11/09/19	-	-	-	-	7.4
	Standing Water Level	metres		1	11/09/19	-	-	-	-	10.24
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)- (Extracts from Wilkinson Murray -Attended Noise report Q3 2019)

Table 4-1 Comparison of noise levels between TN2 and 573b Coomalgalah

Date	Time	Noise Limits	TN2 Mine L _{Aeq} Noise Level (dB)	573b Coomalgalah Mine L _{Aeq} Noise Level (dB)	
		LA _{eq,15 min}	Measured Mine Contribution	Commensurate Mine Compliance Level	Exceedance
16/09/19	15:19	35	<35	<26	0
	15:35	35	<35	<26	0
	15:52	35	<35	<26	0
	21:50	35	33	24	0
	22:06	35	34	25	0
	22:23	35	34	25	0
	02:39	35	33	24	0
	22:55	35	33	24	0
	23:11	35	32	23	0
17/09/19	21:33	35	23	14	0
	21:50	35	26	17	0
	22:01	35	21	12	0
	22:19	35	20	11	0
	22:36	35	19	10	0
18/09/19	13:57	35	NM	NM	0
	14:16	35	NM	NM	0
	21:37	35	19	10	0
	21:50	35	18	9	0

Date	Time	Noise Limits	TN2	573b Coomalgalah	
		LA _{eq,15 min}	Mine L _{eq} Noise Level (dB)	Mine L _{eq} Noise Level (dB)	
			Measured Mine Contribution	Commensurate Mine Compliance Level	Exceedance
19/09/19	22:07	35	20	11	0
	22:18	35	20	11	0
	22:33	35	NM	NM	0
	22:53	35	IA	IA	0
	11:24	35	29	20	0
	11:42	35	28	19	0
	12:00	35	27	18	0
	12:16	35	28	19	0
	12:41	35	28	19	0
	12:58	35	29	20	0

Table 4-2 Comparison of maximum noise events between TN2 and 573b Coomalgalah

Date	Time	Noise Limits	TN2		573b Coomalgalah	
		LA _{1,1 min}	Noise Source	Mine L _{max} Noise Level (dB)	Mine L _{max} Noise Level (dB)	
			Measured Level	Commensurate Mine Compliance Level	Exceedance	
16/09/19	22:23	45	Engine	42	33	0
	02:39	45	Engine	41	32	0
	22:55	45	Engine	39	30	0
	23:11	45	Engine	41	32	0
17/09/19	22:01	45	Horn	28	19	0
	22:19	45	-	NM	-	0
	22:36	45	Engine	26	17	0
18/09/19	22:07	45	-	NM	-	0
	22:18	45	-	NM	-	0
	22:33	45	-	NM	-	0
	22:53	45	-	IA	-	0

Table 4-3 Summary of noise assessment at TN3

Date	Time	Noise Limits $LA_{eq,15 min}$	TN3 Mine L_{Aeq} Noise Level (dB)		
			Measured Mine Contribution	Additional LF Penalty	Exceedance
16/09/19	17:17	35	IA	-	0
	17:30	35	IA	-	0
	17:40	35	IA	-	0
	17:51	35	IA	-	0
	20:18	35	IA	-	0
	20:37	35	IA	-	0
	01:12	35	NM	-	0
	01:44	35	23	-	0
	02:01	35	24	-	0
	17/09/19	20:07	35	31	-
20:25		35	26	-	0
23:41		35	18	-	0
23:58		35	17	-	0
00:15		35	18	-	0
00:34		35	19	-	0
18/09/19		11:15	35	IA	-
	11:30	35	IA	-	0
	01:21	35	33	2 dB	0
	01:38	35	31	-	0
	01:55	35	32	-	0
19/09/19	09:22	35	IA	-	0
	09:44	35	IA	-	0
	10:00	35	IA	-	0
	10:15	35	IA	-	0
	10:30	35	IA	-	0
	10:47	35	IA	-	0
	19:40	35	IA	-	0
	19:57	35	IA	-	0

Table 4-4 Summary of maximum noise events at TN3

Date	Time	TN3			
		Noise Limits	Mine L_{Amax}	Noise Level (dB)	
		$LA_{1,1min}$	Noise Source	Measured Level	Exceedance
16/09/19	01:12	45	-	NM	0
	01:44	45	Engine	33	0
	02:01	45	Engine	32	0
17/09/19	23:41	45	-	NM	0
	23:58	45	-	NM	0
	00:15	45	-	NM	0
	00:34	45	-	NM	0
18/09/19	01:21	45	Engine	42	0
	01:38	45	Engine	38	0
	01:55	45	Engine	38	0

Table 4-5 Summary of noise assessment at TN4

Date	Time	TN4			
		Noise Limits		Mine L_{Aeq} Noise Level (dB)	
		$L_{Aeq,15 min}$	Measured Mine Contribution	Additional LF Penalty	Exceedance
16/09/19	21:10	35	IA	-	0
	21:23	35	IA	-	0
	23:49	35	IA	-	0
	00:04	35	IA	-	0
	00:19	35	IA	-	0
	00:35	35	IA	-	0
17/09/19	21:00	35	20	-	0
	21:15	35	20	-	0
	01:07	35	IA	-	0
	01:26	35	IA	-	0
	01:41	35	IA	-	0
18/09/19	01:57	35	IA	-	0
	13:12	35	IA	-	0
	13:30	35	IA	-	0
	14:03	35	IA	-	0
	14:20	35	IA	-	0
19/09/19	14:37	35	IA	-	0
	23:35	35	IA	-	0
	13:43	35	IA	-	0
	14:05	35	IA	-	0
	14:21	35	IA	-	0
	14:38	35	IA	-	0
	14:56	35	IA	-	0
	15:11	35	IA	-	0
20/09/19	20:39	35	IA	-	0
	20:54	35	IA	-	0
	09:18	35	IA	-	0
	09:33	35	IA	-	0
20/09/19	10:05	35	IA	-	0
	10:21	35	IA	-	0
	10:36	35	IA	-	0

Table 4-6 Summary of maximum noise events at TN4

Date	Time	TN4			
		Noise Limits	Mine L_{Amax}	Noise Level (dB)	Exceedance
		$LA_{1,1min}$	Noise Source	Measured Level	
16/09/19	23:49	45	-	IA	0
	00:04	45	-	IA	0
	00:19	45	-	IA	0
	00:35	45	-	IA	0
17/09/19	01:07	45	-	IA	0
	01:26	45	-	IA	0
	01:41	45	-	IA	0
	01:57	45	-	IA	0
18/09/19	23:35	45	-	IA	0

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 Max. Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	8	96.2	104.7	N/A	N/A	11/09/19
	Blast Vibration	mm/s	Every Blast	8	0.28	0.45	N/A	N/A	11/09/19
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	8	96.4	102.7	120	Nil	10/09/19
	Blast Vibration	mm/s	Every Blast	8	0.19	0.38	10	Nil	18/09/19

**Mine owned property – no limit apply*

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 24 hr average ($\mu\text{g}/\text{m}^3$)	Continuous	10.4	42.4	266.8 [#]

**Mine owned property – no limit apply*

Dust Storm in early August

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 and 2 below

Sampling Period: October 2019

Obtained Date: 2/11/2019

Publication Date: 04/11/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitorin & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
25	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(Next quarterly attended noise monitoring will be conducted in December 2019)

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 Max. Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	5	102.5	116.6*	N/A	N/A	5/10/2019
	Blast Vibration	mm/s	Every Blast	5	0.43	0.64	N/A	N/A	10/10/2019
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	5	95.0	102.2	120	Nil	10/10/2019
	Blast Vibration	mm/s	Every Blast	5	0.44	1.32	10	Nil	10/10/2019

**Mine owned property – no limit apply*

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 24 hr average (µg/m ³)	Continuous	0	55.1	243 [#]

**Mine owned property – no limit apply*

Bushfire and smoke haze in surrounding areas

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 and 2 below

Sampling Period: November 2019

Obtained Date: 2/12/2019

Publication Date: 04/12/2019

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	1	18/11/12	-	-	-	-	3,700
	Oil & Grease	mg/L		1	18/11/12	-	-	-	-	<5
	pH	pH		1	18/11/12	-	-	-	-	8.6
	TSS	mg/L		1	18/11/12	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

(Next quarterly attended noise monitoring will be conducted in December 2019)

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 Max. Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	8	99.3	113.7	N/A	N/A	3/12/2019
	Blast Vibration	mm/s	Every Blast	8	0.47	0.9	N/A	N/A	3/12/2019
Coomalgah	Blast Noise	dB (Lin Peak)	Every Blast	8	100.7	110.8	120	Nil	3/12/2019
	Blast Vibration	mm/s	Every Blast	8	0.41	1.36	10	Nil	3/12/2019

**Mine owned property – no limit apply*

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

Location	No. of samples required by license	Lowest sample value	Mean of sample	Highest sample value
"Flixton" property* TEOM 24 hr average (µg/m ³)	Continuous	0	72.1	376.2 [#]

**Mine owned property – no limits apply*

Bushfire and smoke haze in surrounding areas

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 and 2 below

Sampling Period: December 2019

Obtained Date: 20/01/2020

Publication Date: 20/01/2020

Table 1 - No Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Mean Value	Median Value	Max or Only Value	Comments
5	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
6	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
7	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	--
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
8	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Conductivity	ms/cm		0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

Table 2 - Pollutant Limits Apply

EPL ID	Pollutant	Units of Measure	Monitoring & Frequency	No. of Samples for the Month	Date Sampled	Date Obtained	Min Value	Max or Only Value	100%ile Limit	Exceedance (Yes/No)	Comments
1	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
2	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
3	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
24	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
26	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-
27	TSS	mg/L	Upon discharge	0	-	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-	-

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 Obtained	Min Value	Mean Value	Median Value	Max or Only Value
9	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
10	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
11	Conductivity	µS/cm*	6 monthly – (Jun- Dec)	1	25/11/2019	20/01/2020	-	-	-	2,097
	Lead	mg/L		1	25/11/2019	20/01/2020	-	-	-	<0.001
	pH	pH		1	25/11/2019	20/01/2020	-	-	-	7.85
	Standing Water Level	metres		1	25/11/2019	20/01/2020	-	-	-	9.98
12	Conductivity	µS/cm*	6 monthly – (Mar- Sep)	0	-	-	-	-	-	-
	Lead	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	Standing Water Level	metres		0	-	-	-	-	-	-
13	Conductivity	µS/cm*	Quarterly - (Feb, May, Aug, Nov)	0	-	-	-	-	-	-
	Oil & Grease	mg/L		0	-	-	-	-	-	-
	pH	pH		0	-	-	-	-	-	-
	TSS	mg/L		0	-	-	-	-	-	-

*Note: From April 2012 to February 2019, Electrical Conductivity was reported with the incorrect unit of measure (mS/cm).

Table 4 – Quarterly Monitoring (Noise – Limits Apply)-

Table 4-1 Comparison of noise levels between TN2 and 573b Coomalgalah

Date	Time	Noise	TN2	573b Coomalgalah	
		Limits	Mine LAeq Noise Level (dB)	Mine LAeq Noise Level (dB)	
		LAeq,15 min	Measured Mine Contribution	Commensurate Mine Compliance Level	Exceedance
02/12/2019	22:39	35	34	25	0
	22:55	35	37	28	0
	11:46	35	32	23	0
	12:03	35	35	26	0
	12:21	35	32	23	0
03/12/2019	12:53	35	33	24	0
	21:38	35	38	29	0
	22:00	35	37	28	0
	22:15	35	36	27	0
	22:31	35	32	23	0
04/12/2019	22:48	35	27	18	0
	11:07	35	33	24	0
	11:25	35	33	24	0
	11:43	35	33	24	0
	11:59	35	30	21	0
	21:10	35	42	33	0
	22:00	35	39	30	0

Date	Time	Noise	TN2	573b Coomalgalah		
		Limits	Mine LAeq	Noise Level (dB)	Mine LAeq	Noise Level (dB)
		LAeq,15 min	Measured Mine Contribution	Commensurate Mine Compliance Level	Exceedance	
05/12/2019	22:18	35	37	28	0	
	22:35	35	37	28	0	
	22:51	35	38	29	0	
	13:14	35	<30	<21	0	
	13:30	35	32	23	0	
	14:32	35	32	23	0	
	21:19	35	41	32	0	
	21:34	35	41	32	0	
	22:00	35	38	29	0	
	22:16	35	37	28	0	
	22:32	35	36	27	0	
	22:48	35	<35	<26	0	

Table 4-2 Comparison of maximum noise events between TN2 and 573b Coomalgah

Date	Time	Noise Limits		TN2 Mine L _{Amax} Noise Level (dB)		573b Coomalgah Mine L _{Amax} Noise Level (dB)	
		LA _{1,1} min	Noise Source	Measured Level	Commensurate Mine Compliance Level	Exceedance	
02/12/2019	22:39	45	Horn	46	37	0	
	22:55	45	Horn	43	34	0	
03/12/2019	22:00	45	Horn	44	35	0	
	22:15	45	Horn	50	41	0	
	22:31	45	Horn	44	35	0	
	22:48	45	-	NM	-	0	
	22:00	45	Horn	48	39	0	
04/12/2019	22:18	45	Horn	45	36	0	
	22:35	45	Horn	45	36	0	
	22:51	45	Digger	50	41	0	
05/12/2019	22:00	45	-	NM	-	0	
	22:16	45	Engine	44	35	0	
	22:32	45	-	NM	-	0	
	22:48	45	-	NM	-	0	

Table 4-3 Summary of noise assessment at TN3

Date	Time	TN3			
		Noise Limits	Mine L_{Aeq} Noise Level (dB)		
		$L_{Aeq,15 min}$	Measured Mine Contribution	Additional LF Penalty	Exceedance
02/12/2019	00:44	35	<7 (IA) ¹	-	0
	00:59	35	<7 (IA) ¹	-	0
	01:14	35	<7 (IA) ¹	-	0
	01:29	35	<7 (IA) ¹	-	0
03/12/2019	10:52	35	<14 (IA) ¹	-	0
	01:00	35	<7 (IA) ¹	-	0
	01:15	35	<7 (IA) ¹	-	0
	01:30	35	<7 (IA) ¹	-	0
04/12/2019	01:45	35	<7 (IA) ¹	-	0
	10:30	35	<16 (IA) ¹	-	0
	00:49	35	<7 (IA) ¹	-	0
	01:05	35	<7 (IA) ¹	-	0
	01:22	35	<6 (IA) ¹	-	0
05/12/2019	01:39	35	<7 (IA) ¹	-	0
	09:10	35	<19 (IA) ¹	-	0
	09:25	35	<19 (IA) ¹	-	0
	09:40	35	<18 (IA) ¹	-	0
	09:55	35	<20 (IA) ¹	-	0
	10:10	35	<17 (IA) ¹	-	0
	10:25	35	<17 (IA) ¹	-	0
	19:58	35	<19 (IA) ¹	-	0
	00:45	35	<13 (IA) ¹	-	0
	01:01	35	<12 (IA) ¹	-	0
06/12/2019	01:18	35	<13 (IA) ¹	-	0
	01:34	35	<13 (IA) ¹	-	0
	09:30	35	<14 (IA) ¹	-	0
	09:46	35	<13 (IA) ¹	-	0
	10:00	35	<12 (IA) ¹	-	0
	10:16	35	<12 (IA) ¹	-	0
	10:33	35	<12 (IA) ¹	-	0

¹ Where mine noise was inaudible throughout the entire measurement, it is assumed that the contribution is less than 10 dB below the measured L_{Aeq} .

Table 4-4 Summary of maximum noise events at TN3

Date	Time	TN3			
		Noise Limits		Mine L _{max} Noise Level (dB)	
		LA _{L,1 min}	Noise Source	Measured Level	Exceedance
02/12/2019	00:44	45	-	I/A	0
	00:59	45	-	I/A	0
	01:14	45	-	I/A	0
	01:29	45	-	I/A	0
03/12/2019	01:00	45	-	I/A	0
	01:15	45	-	I/A	0
	01:30	45	-	I/A	0
	01:45	45	-	I/A	0
04/12/2019	00:49	45	-	I/A	0
	01:05	45	-	I/A	0
	01:22	45	-	I/A	0
	01:39	45	-	I/A	0
05/12/2019	00:45	45	-	I/A	0
	01:01	45	-	I/A	0
	01:18	45	-	I/A	0
	01:34	45	-	I/A	0

Table 4-5 Summary of noise assessment at TN4

Date	Time	Noise Limits $LA_{eq,15 min}$	TN4 Mine L_{Aeq} Noise Level (dB)		
			Measured Mine Contribution	Additional LF Penalty	Exceedance
02/12/2019	23:32	35	<13 (IA) ¹	-	0
	00:11	35	<6 (IA) ¹	-	0
	00:27	35	<7 (IA) ¹	-	0
03/12/2019	13:32	35	<20 (IA) ¹	-	0
	23:36	35	<7 (IA) ¹	-	0
	23:48	35	<7 (IA) ¹	-	0
	00:04	35	<6 (IA) ¹	-	0
04/12/2019	00:21	35	<6 (IA) ¹	-	0
	23:27	35	<7 (IA) ¹	-	0
	23:43	35	<7 (IA) ¹	-	0
05/12/2019	23:58	35	<6 (IA) ¹	-	0
	10:38	35	<13 (IA) ¹	-	0
	10:52	35	<13 (IA) ¹	-	0
	11:13	35	<13 (IA) ¹	-	0
	11:30	35	<12 (IA) ¹	-	0
	11:46	35	<14 (IA) ¹	-	0
	12:02	35	<18 (IA) ¹	-	0
	20:25	35	<42 (IA) ¹	-	0
	20:41	35	<42 (IA) ¹	-	0
	23:30	35	<19 (IA) ¹	-	0
23:46	35	<17 (IA) ¹	-	0	
00:02	35	<13 (IA) ¹	-	0	

¹ Where mine noise was inaudible throughout the entire measurement, it is assumed that the contribution is less than 10 dB below the measured L_{Aeq} .

Table 4-6 Summary of maximum noise events at TN4

Date	Time	TN4			
		Noise Limits	Mine $L_{A,max}$ Noise Level (dB)		
		$LA_{1,1min}$	Noise Source	Measured Level	Exceedance
02/12/2019	23:32	45	-	IA	0
	00:11	45	-	IA	0
	00:27	45	-	IA	0
03/12/2019	23:36	45	-	IA	0
	23:48	45	-	IA	0
	00:04	45	-	IA	0
	00:21	45	-	IA	0
04/12/2019	23:27	45	-	IA	0
	23:43	45	-	IA	0
	23:58	45	-	IA	0
05/12/2019	23:30	45	-	IA	0
	23:46	45	-	IA	0
	00:02	45	-	IA	0
	00:17	45	-	IA	0

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 Max. Obtained
Tarrawonga* (TB1)	Blast Noise	dB (Lin Peak)	Every Blast	8	104.90	117.10*	N/A	N/A	20/12/2019
	Blast Vibration	mm/s	Every Blast	8	0.31	1.12	N/A	N/A	01/03/2019
Coomalgah (TB2)	Blast Noise	dB (Lin Peak)	Every Blast	8	100.21	117.50 [#]	120	Nil	06/12/2019
	Blast Vibration	mm/s	Every Blast	8	0.31	1.82	10	Nil	15/07/2019

*Mine owned property – no limit apply.

[#] Overpressure exceedance (>115dB) but in accordance with PA11_0047, EPL12365 and MLs since it was recorded at privately owned property (Coomalgah - TB2) and it was the first exceedance over 76 blast in 12 months (1.3%<5% allowed by approvals above) at this site - Not reported to agencies.

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

Location	No. of samples required by license	Lowest sample value	Mean of sample	Highest sample value
“Flixton” property* TEOM 24 hr average (µg/m ³)	Continuous	0	75.57	270.4

*Mine owned property – no limits apply

[#] Bushfire and smoke haze in surrounding areas

Figure 1 – EPL 12365 Onsite Monitoring Locations

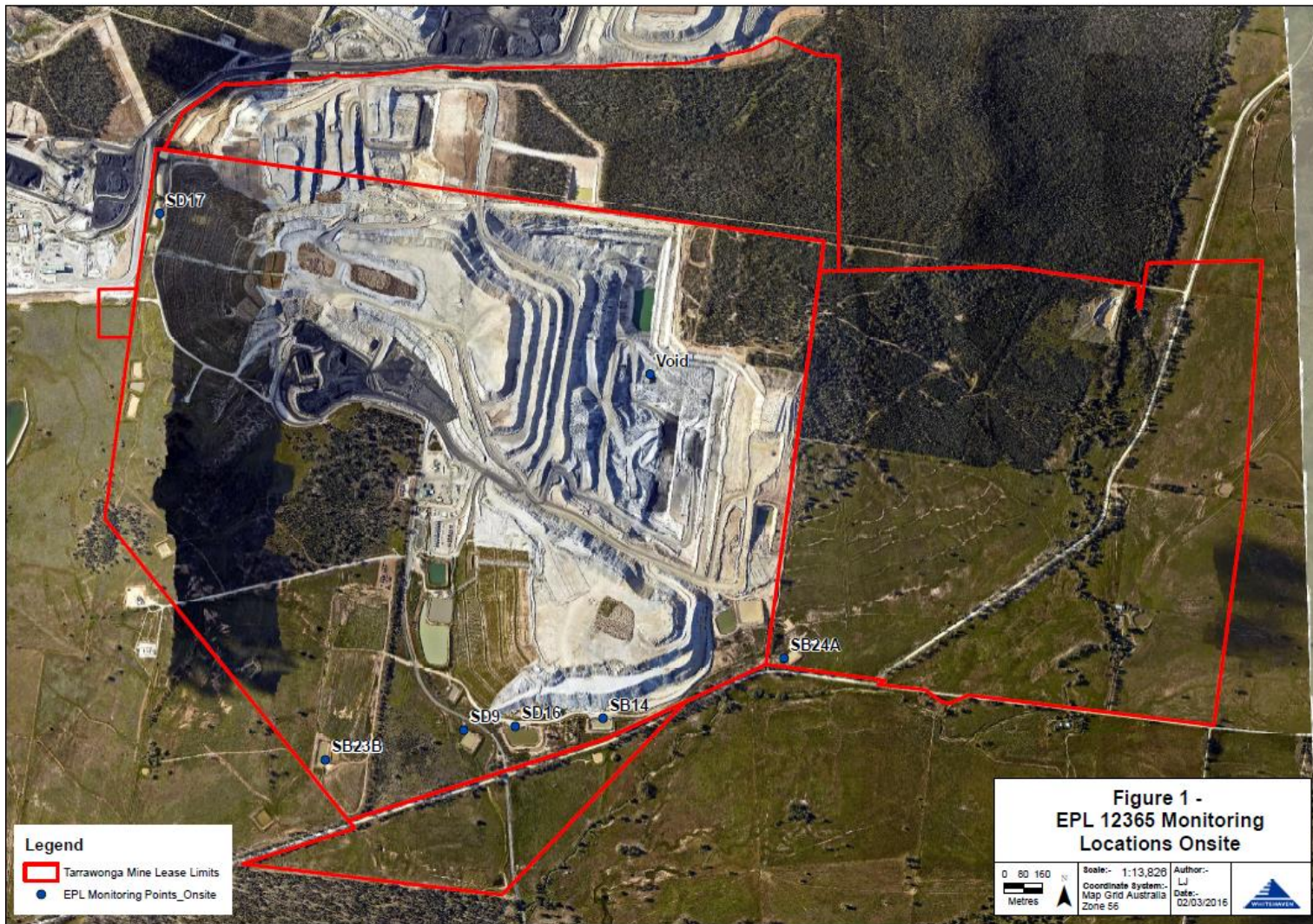


Figure 2 – EPL 12365 Offsite Monitoring Locations

