

**WAMBO COAL
POLLUTION MONITORING DATA
1 AUGUST 2020 – 31 AUGUST 2020**

AUGUST REPORT

Published 28 September 2020

**Environment Protection Licence Number: 529
Licensee: Wambo Coal Pty Limited, PMB 1, Singleton NSW 2330
Premises: Wambo Coal Pty Limited, Jerrys Plains Road, Warkworth NSW 2330**

The following pollution monitoring data is published as a requirement of the Wambo Environmental Protection Licence (EPL) 529. A link to EPL529 can be found on the Environmental Protection Authority (EPA) Public Register. A link to the EPA's public register can be found at: <https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers/about-prpoeo>

Monthly interim reports will be provided on a fortnightly basis until a final monthly report is produced when all monthly data is available.

The location of each sampling point is provided in 'Plan 2672-2' at the end of this document.

Monitoring Data

Surface and Mine Water Dam Monitoring

Monitoring Frequency: Once per month

Sampling Method: Grab sample

Limits: Nil

Table 1 - WCPL Surface and Mine Water Dam Results

EPL ID	Site ID	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
Point 24	SW01	11/08/2020				No access
Point 25	SW02	11/08/2020	7.2	352	5	
Point 26	SW03	11/08/2020	7	360	6	
Point 27	SW04	11/08/2020				No Flow
Point 28	SW05	11/08/2020				No Flow
Point 29	SW06	11/08/2020	6.7	332	6	
Point 30	SW07	11/08/2020	7	470	12	
Point 31	SW08	11/08/2020	6.7	553	<5	
Point 32	SW14	19/08/2020	8.4	696	23	
Point 33	SW15	11/08/2020	8.8	6080	114	
Point 34	SW27a	11/08/2020				No Flow
Point 35	SW31	19/08/2020	9.1	5180	158	
Point 36	SW32a	11/08/2020	7.4	667	266	
Point 37	SW38	19/08/2020	9.0	6240	16	
Point 38	SW12	19/08/2020	9.1	3810	31	
Point 39	SW39	11/08/2020				No Flow
Point 40	SW40	11/08/2020	6.9	353	6	
Point 41	SW41	11/08/2020	7.3	147	53	
Point 46	SW52	19/08/2020	9.0	3760	27	
Point 47	Wombat Dam	11/08/2020	8.5	488	16	
Point 48	Milk Can Dam	11/08/2020	8.3	1598	24	
Point 49	Rug Dump Dam	11/08/2020	8.4	532	268	
Point 50	Montrose East 1	11/08/2020	8.9	360	94	
Point 51	Montrose East 2	11/08/2020	8.4	406	62	

Water Discharge Monitoring

Monitoring Frequency: Continuous during discharge (EC, pH, Turbidity)
 Daily during discharge (TSS, Volume)

Sampling Method: In line instrumentation (EC, pH Turbidity)
 Grab sample (TSS)

Limits: pH- 6.5 to 9.5
 TSS – 120
 Volume – 250ML/day

Date sampled: Continuous
Date obtained: Continuous

Table 2 - WCPL Discharge Monitoring

Site	Date	pH	TSS (mg/L)	Turbidity (NTU)	Volume (ML/day)	Comments
Point 4						No Discharges
Point 19						No Discharges

Sewerage Treatment Monitoring

Monitoring Frequency: Quarterly during discharge

Sampling Method: Grab sample

Limits: Nil

Date sampled: No monitoring in August
Date obtained: No monitoring in August

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms	Comments
Point 18	STPD1				No monitoring in August
Point 42	STPD2				No monitoring in August
Point 52	STP2				No monitoring in August

PM10 Monitoring

Monitoring Frequency: Continuous

Sampling Method: AM22

Limits: Nil

Date sampled: Continuous

Date obtained: Continuous

Table 4 - WCPL PM10 Results

Date of Run	PM01 - Coralie (EPA13)		PM02 - Wambo Road (Caban) (EPA14)		PM03 - Thelander (EPA15)		PM04 - Muller (EPA16)	
	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average	PM10 24 Hour Result (ug/m ³)	YTD Average
1/08/2020	10	21.43	9.8	20.91	5.3	17.40	9.4	21.67
2/08/2020	12.2	21.39	13.9	20.88	7.0	17.35	14.2	21.64
3/08/2020	16	21.36	22.7	20.88	6.2	17.30	7.7	21.57
4/08/2020	15.6	21.33	13.8	20.85	5.9	17.24	8	21.51
5/08/2020	13.9	21.30	16.5	20.83	3.6	17.18	6.9	21.44
6/08/2020	14.6	21.27	15.6	20.81	8.7	17.14	17.8	21.42
7/08/2020	19	21.26	7.9	20.75	7.7	17.09	27.8	21.45
8/08/2020	6.1	21.19	6.5	20.69	1.2	17.02	5	21.38
9/08/2020	4.8	21.12	4.7	20.61	0.7	16.95	3.2	21.29
10/08/2020	12	21.07	9.4	20.56	4.4	16.89	10.1	21.24
11/08/2020	13.2	21.04	9.5	20.51	8.9	16.85	15.1	21.21
12/08/2020	14.6	21.01	15.9	20.49	10.6	16.82	14.1	21.18
13/08/2020	11.1	20.97	9.1	20.44	5.8	16.77	12.8	21.14
14/08/2020	15	20.94	13.3	20.41	5.1	16.72	7.9	21.09
15/08/2020	6.8	20.88	6.2	20.35	2.5	16.66	5.8	21.02
16/08/2020	6.8	20.82	10.5	20.31	1.5	16.59	4.7	20.94
17/08/2020	7.8	20.76	11.9	20.27	1.5	16.52	4.6	20.87
18/08/2020	10.6	20.71	14.8	20.25	2.6	16.46	5.5	20.81
19/08/2020	62.8	20.90	77.2	20.49	32.9	16.53	36.2	20.87
20/08/2020	22.7	20.90	20.3	20.49	11.0	16.51	18.4	20.86
21/08/2020	11.8	20.87	15.4	20.47	2.3	16.45	5.7	20.80
22/08/2020	8.6	20.81	5.6	20.41	1.9	16.38	4.6	20.73
23/08/2020	11.4	20.77	7.1	20.35	2.4	16.32	5.3	20.66
24/08/2020	10.5	20.73	16.6	20.33	2.5	16.26	5.7	20.60
25/08/2020	14.1	20.70	13.8	20.31	15.6	16.26	15.2	20.57
26/08/2020	19.9	20.70	23.2	20.32	11.1	16.24	14.6	20.55
27/08/2020	19.1	20.69	27.3	20.35	7.1	16.20	7.8	20.49
28/08/2020	15.9	20.67	20.2	20.35	8.1	16.16	17.8	20.48
29/08/2020	19.8	20.67	23.5	20.36	12.4	16.15	23.3	20.49
30/08/2020	24.7	20.68	31.8	20.41	14.8	16.14	17.8	20.48
31/08/2020	29.7	20.72	33.6	20.46	20.2	16.16	26.3	20.51

*NaN due to power outage >75% of data collection period

Blast Monitoring

Monitoring Frequency: Every blast

Airblast Overpressure Limit: 120 dBL
 115 dBL (5% of blast each year)

Ground Vibration Limit: 10mm/s
 5mm/s (5% of blast each year)

Date sampled: Continuous

Date obtained: Continuous

Table 5 - WCPL Blast Monitoring Results

Date & Time	ID	BM02 – Kelly (EPA10)		BM05 – Muller (EPA11)		BM07 – Thelander (EPA12)	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
1/8/2020 @ 1004	WMA_506_2a2 part 1 WRC_515	92.5	0.21	101.1	0.48	96.9	0.27
6/8/2020 @ 1506	WMA_506_2a2 part 2	84.3	0.19	95.1	0.43	92.6	0.29
12/8/2020 @ 1501	WTA_500_4c	81.9	0.26	100.2	0.45	95.5	0.48
20/8/2020 @ 1504	WMA_506_2a2 part 3&4	96.0	0.26	91.0	0.39	87.7	0.40
28/8/2020 @1203	WMA_513_123	82.4	0.26	102.4	0.52	101.9	0.32

Refer to Annual Blasting Report for Annual compliance limits

Meteorological Monitoring

Monitoring Frequency: Continuous

Sampling Method: Site Meteorological Station EPA17

Limits: Nil

Date sampled: continuous

Date obtained: continuous

Table 6 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed			Wind Direction at 10m	Sigma Theta		
	Average	Min	Max	Average	Min	Max	Average	Min	Max	Average	Max	Sum (mm)	Average	Min	Max	Average	Average	Max	Min
1/08/2020	9.2	1.5	18.8	9.6	1.6	18.5	82.2	42.6	100	187.9	713.1	0	0.6	0	3.5	303	19.8	94.4	7.6
2/08/2020	9.5	0.6	21.2	10	0.9	20.8	78.3	32.9	100	190.4	720.1	0.2	0.5	0	3.1	291	18.3	89.3	3.6
3/08/2020	11.7	1.7	20.7	12.1	2.2	20.5	69.5	32.3	100	173.4	739.5	0	1.5	0.1	5.2	305	19.2	76	6.7
4/08/2020	14.1	3.7	21.7	14.7	5.2	21.4	56.3	28.1	99.2	189	713.3	0	2.2	0.2	6.5	295	15.5	27.2	6.4
5/08/2020	9.5	1.6	15.9	10.2	3.5	15.5	58.6	30.5	99.4	193.6	713.4	0	2.9	0.2	6.3	301	15.5	51.9	7.3
6/08/2020	8.5	0.4	16.6	8.9	2.4	16.2	62.4	29.3	94.3	193.8	714.3	0	1.4	0	4.5	301	16.6	51.6	4.2
7/08/2020	9.5	5.2	11.1	9.8	5.8	11.2	88.8	68.5	100	17.7	106	6.4	1.2	0.1	2.8	155	25.7	73.5	11
8/08/2020	11.2	6.7	17.2	11.6	7	16.8	85.4	59.1	100	99.9	707.9	1.2	1.4	0.1	3.8	314	19.8	74.4	8.7
9/08/2020	10.2	6.9	14.6	10.2	7.2	14.2	73.8	51	98.9	129.8	709.6	3.4	3.3	0.7	5.8	299	16.3	34.7	10.5
10/08/2020	11.6	7.8	17	11.8	7.9	16.7	80.9	53.3	100	108.2	726.1	20.2	1.7	0.2	6.3	161	21.6	53	9.5
11/08/2020	12.4	8	18.8	12.7	8.8	18.6	74.7	45.2	99.9	143.2	834.8	0	0.6	0.1	3.4	154	24.2	84.4	4.6
12/08/2020	12	7.5	20.9	12.3	7.9	20.5	89.2	52	100	125	1006.2	4.4	0.1	0	4.2	33	22.0	88	4.5
13/08/2020	14.8	8.3	23	15.4	9.7	22.9	75.7	35.9	100	207.9	761.7	0.8	0.9	0.2	4.1	297	20.2	85.9	5.2
14/08/2020	11.3	6.2	16.3	11.6	6.6	16.3	93	63.9	100	53.2	323.2	5	0.1	0	1.9	210	23.3	100.4	8.8
15/08/2020	14.1	9.6	18.9	14.3	10.1	18.4	77.8	50.7	100	184.4	849.9	0.2	2.8	0.1	6.1	303	15.9	27.6	9.4
16/08/2020	14.2	10.6	18.5	14.2	10.9	18.2	62.8	39.8	82.8	179.9	792.3	0	3.9	2.4	6.3	304	17.6	32.1	11
17/08/2020	13.3	8.9	19.4	13.3	9.2	18.9	64.9	44.8	85.3	213	778.6	0	3.6	1.8	6.2	307	17.3	25.9	8.4
18/08/2020	13.9	7.4	19.2	14.2	8.8	18.9	63.6	48.4	95.2	138.5	862.3	0	2.1	0.2	5.4	311	16.4	38.1	5.2
19/08/2020	14.2	4.7	21.3	14.8	6.2	21.1	56.1	24.5	100	190.9	850	0	4.1	0.1	8.9	287	15.3	29	3.5
20/08/2020	13.2	10.4	17.4	13.3	10.7	17	58.6	42.9	71.1	177.6	887.2	0	4.1	1.1	7.8	291	17.2	58.3	10.9
21/08/2020	13.2	9.6	17.9	13.3	9.8	17.6	57.3	41.1	74.2	192.9	886.8	0	4.6	2.1	6.9	295	15.6	23.9	10
22/08/2020	10.7	8.2	13.8	10.7	8.3	13.2	64	45.9	86.3	167	945.4	1.8	4.1	1.8	7.8	285	17.9	42.2	9.8
23/08/2020	11.8	7.8	16.4	11.8	8.1	16	51.1	35.5	71.9	226.4	869.6	0	3.7	2.4	6.5	287	17.9	28.4	11.2
24/08/2020	11.2	3.7	17.8	11.3	5.2	17.3	57.2	32.5	91.9	236.6	833.5	0	3.4	0.1	5.3	305	16.6	59	8.1
25/08/2020	7.1	-0.6	15.7	7.7	0.1	15.3	74.2	39.3	100	209	905.6	0	0.6	0.1	2.9	307	22.0	81.2	3.5
26/08/2020	8.2	-0.1	18.6	8.9	0.9	18.1	72.9	33	100	232.4	826.2	0	0.4	0.1	2.4	351	26.2	96.9	3.7
27/08/2020	10.1	-1.2	21.5	10.8	-0.6	21.1	60.1	15.8	100	231.5	880.5	0	1.7	0.1	5.2	304	17.0	60.4	8.8
28/08/2020	13.7	5	20.8	13.8	6.2	20.4	49.5	22.1	88	229	830	0	1.8	0.4	6.4	313	22.6	91.8	5.4
29/08/2020	10.6	0.5	22.2	11.3	1.1	21.9	67.2	27.5	100	234.7	828.5	0	0.2	0.1	2.4	269	27.4	94.3	3.3
30/08/2020	13.4	1	24.5	14.1	1.7	24.2	65	31.1	100	232.6	821.9	0	1.6	0	5.1	307	19.7	77	7.9
31/08/2020	17	8.5	24.6	17.2	10	24.2	56.1	26.1	92.3	230.9	810.7	0	1.5	0.1	6.3	317	18.2	35.5	8.5
	11.8	-1.2	24.6	12.2	-0.6	24.2	68.6	15.8	100	178.1	1006.2	43.6	2.0	0	8.9	276	19.3	100.4	3.3

