

**WAMBO COAL
POLLUTION MONITORING DATA
1 NOVEMBER 2020 – 30 NOVEMBER 2020
NOVEMBER REPORT**

Published 15 December 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	16/11/2020	7.05	390	12	
Point 25	SW02	16/11/2020	7.23	452	<5	
Point 26	SW03	16/11/2020	7.19	457	<5	
Point 27	SW04	16/11/2020				Dry
Point 28	SW05	16/11/2020				Dry
Point 29	SW06	16/11/2020	6.97	511	13	
Point 30	SW07	16/11/2020				No Flow
Point 31	SW08	16/11/2020	6.69	581	<5	
Point 32	SW14	18/11/2020	7.97	593	14	
Point 33	SW15	18/11/2020	8	6790	27	
Point 34	SW27a	16/11/2020				No Flow
Point 35	SW31	18/11/2020	7.96	4950	170	
Point 36	SW32a	16/11/2020				No Flow
Point 37	SW38	16/11/2020				
Point 38	SW12	18/11/2020	7.2	6490	17	
Point 39	SW39	16/11/2020				No Flow
Point 40	SW40	16/11/2020	7.2	454	<5	
Point 41	SW41	16/11/2020				No Flow
Point 46	SW52	18/11/2020	7.42	4360	<5	
Point 47	Wombat Dam	16/11/2020				No Access
Point 48	Milk Can Dam	16/11/2020	9.29	2050	14	
Point 49	Rug Dump Dam	16/11/2020	8.73	990	48	
Point 50	Montrose East 1	16/11/2020	8.7	564	56	
Point 51	Montrose East 2	16/11/2020	8.57	560	12	

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 sample in November
 Date obtained: No sample in November

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms	Comments
Point 18	STPD1	-	-	-	No sample in November
Point 42	STPD2	-	-	-	No sample in November
Point 52	STP2	-	-	-	No sample in November

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
1/11/2020	11.1	20.76	8.0	19.48	3.4	14.82	8.5	20.00
2/11/2020	20.4	20.76	13.7	19.47	10.1	14.81	16.4	19.99
3/11/2020	27.0	20.78	14.2	19.45	13.3	14.80	19.2	19.98
4/11/2020	20.5	20.78	16.7	19.44	7.6	14.78	10.0	19.95
5/11/2020	19.7	20.78	9.9	19.41	4.3	14.74	10.1	19.92
6/11/2020	13.7	20.76	12.1	19.39	10.1	14.73	14.7	19.90
7/11/2020	28.2	20.78	16.3	19.38	19.5	14.74	27.9	19.93
8/11/2020	22.9	20.79	13.1	19.36	16.8	14.75	21.8	19.93
9/11/2020	15.7	20.77	11.9	19.33	11.3	14.74	21.0	19.94
10/11/2020	13.9	20.75	12.6	19.31	11.6	14.73	19.9	19.94
11/11/2020	24.5	20.76	21.8	19.32	12.5	14.72	21.1	19.94
12/11/2020	30.1	20.79	28.9	19.35	19.1	14.74	27.3	19.97
13/11/2020	19.2	20.79	16.4	19.34	12.7	14.73	16.4	19.95
14/11/2020	17.1	20.77	10.7	19.31	9.8	14.71	14.2	19.94
15/11/2020	23.5	20.78	20.6	19.32	13.3	14.71	22.8	19.94
16/11/2020	34.2	20.82	20.3	19.32	10.4	14.69	21	19.95
17/11/2020	44.2	20.90	32.6	19.36	32.6	14.75	41.6	20.02
18/11/2020	34.1	20.94	25.3	19.38	24.0	14.78	35.7	20.07
19/11/2020	25	20.95	21.7	19.39	23.0	14.81	30.6	20.10
20/11/2020	36.2	21.00	30	19.42	22.6	14.83	36.3	20.15
21/11/2020	39.2	21.05	32.2	19.46	28.8	14.88	38.6	20.21
22/11/2020	31.4	21.09	27.7	19.48	23.4	14.90	29	20.23
23/11/2020	20.6	21.08	13.3	19.46	11.2	14.89	13	20.21
24/11/2020	22.7	21.09	14.3	19.45	11.1	14.88	15.5	20.20
25/11/2020	23.4	21.10	18.9	19.45	15.7	14.88	16.4	20.18
26/11/2020	29.9	21.12	21	19.45	14.2	14.88	20.2	20.18
27/11/2020	45.3	21.20	39.6	19.51	34.3	14.94	36.9	20.24
28/11/2020	46.9	21.27	26.4	19.53	15.6	14.94	22	20.24
29/11/2020	60.8	21.39	42.5	19.60	23.3	14.97	34.2	20.28
30/11/2020	43.6	21.46	26.2	19.62	21.6	14.99	27.3	20.30

*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
Wed/04/Nov/2020 1156hrs	WTA_500_8_part3	84.8	0.13	95.2	0.34	92.1	0.35
Fri/13/Nov/2020 1253hrs	WMA_519	94.8	0.28	99.8	0.4	93.1	0.36
Fri/20/Nov/2020 1400hrs	WRC_523	81.2	0.06	98.8	0.10	91.7	0.08

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
1/11/2020	17	10.1	22.9	17.1	10.6	22.2	74.7	52.9	100	271.2	1287.5	3	1.8	0	7.4	183	25.0	76.1	11.7
2/11/2020	18.2	12.5	23.2	18.2	13.1	22.6	62.8	42.6	97.8	293.7	1264.8	0	2.3	0.3	5.7	144	21.1	73.0	5.3
3/11/2020	17.4	9.6	24.2	17.4	10	23.5	71.3	44.4	100	364.4	1369.7	0	1.5	0.1	5.3	97	23.2	94.6	6.0
4/11/2020	20.3	9.9	30.6	20.6	10.6	30.2	59.9	20	100	379.1	1162.5	0	0.9	0.1	3.7	318	30.1	93.0	6.0
5/11/2020	17	13.6	22.1	17.4	13.7	21.3	77	61.8	99.3	111.7	1287.2	6.2	1.3	0.2	7.3	184	25.7	81.6	6.9
6/11/2020	17.6	13.6	23.1	17.5	13.8	22.5	58.8	34.2	86.3	325.6	1278	0.2	1.5	0.5	4.5	153	24.9	85.6	10.8
7/11/2020	16.9	9.7	25.1	16.9	10.3	24.5	70.1	36.2	100	316.1	1244	0	1.9	0.1	7	114	26.9	101.7	6.7
8/11/2020	17.4	13.8	21.3	17.3	14.4	20.8	61.7	43.6	79.8	290.6	1262.6	0	2.7	0.8	5.3	114	18.1	34.2	11.8
9/11/2020	16.6	9.8	22.9	16.6	10.4	22.2	66.3	40.5	100	310.2	1301.6	0	1.5	0.2	4.7	103	24.0	74.6	6.9
10/11/2020	17.4	8	25.5	17.5	8.9	24.8	68.9	39.2	99.9	391.5	1183.7	0	1.2	0.1	5.1	100	26.5	103.0	6.5
11/11/2020	20.9	9.6	31.1	21.1	10.1	30.7	66.2	24.2	100	387.9	1169.7	0	0.3	0.1	4	21	31.2	94.5	7.1
12/11/2020	23.3	14	31.3	23.6	14.5	31	61.3	30.6	100	252.4	1088.5	0	1.5	0.1	5.5	302	22.2	72.9	6.6
13/11/2020	19.7	15.1	28.3	19.8	15.1	27.9	85.2	41.1	100	166.5	1056.2	42.6	0.7	0	5.7	282	33.1	101.5	8.6
14/11/2020	21	12.1	29.6	21.2	12.5	29.1	64.9	25.4	100	399	1180.3	0.4	1.7	0.1	5.3	297	25.0	88.7	5.9
15/11/2020	23	12.2	34	23.2	12.6	33.6	59	19.7	100	400.6	1190.1	0	0.3	0.1	3	310	29.0	89.3	6.6
16/11/2020	26	14.1	38.2	26.3	14.7	38.1	60.1	21.7	100	355.5	1197.3	0.2	1.4	0.1	10.4	294	27.7	90.3	8.3
17/11/2020	22	18.4	25.8	21.9	18.5	24.9	64.3	51.9	75.5	315.7	1292.2	0.2	3.1	0.3	5.8	105	19.5	75.2	9.7
18/11/2020	20.7	16.9	25.8	20.6	17.2	25.1	64.7	47.6	80.6	363.3	1217.6	0	3.1	1.4	5.5	111	19.9	53.3	11.4
19/11/2020	22	13.4	29.8	22.1	14.3	29.5	66.4	41.8	99.6	384.5	1191.1	0	1	0.2	3.6	113	25.6	80.5	7.8
20/11/2020	25.6	14.9	36.6	25.8	15.5	36.6	62.8	28.1	100	334.5	1177	3.2	0.7	0.1	6.4	338	25.2	94.9	7.6
21/11/2020	23.2	18.8	27.6	23	19	28	65.7	40.1	93.5	383.6	1128.6	0.2	2.2	0.3	5.4	115	20.0	89.7	9.2
22/11/2020	23.3	18	29.6	23.4	18.3	29.1	75.6	48.5	97.5	214.8	1272.9	0	0.6	0.1	4.9	327	28.4	94.1	7.1
23/11/2020	23.8	19.4	30.5	24	20.2	30.3	69.2	37.2	99.8	110.5	770.6	0	1.9	0.1	6.7	290	27.5	97.0	6.5
24/11/2020	20.4	15.8	25.6	20.4	15.8	24.9	72.6	49.4	100	271.2	1306.4	0	2.1	0.1	5.8	101	22.6	87.7	7.8
25/11/2020	21.2	15.9	27.4	21.1	16.5	26.8	65.6	40.8	93.8	344.5	1227.3	0	1.8	0.5	5.9	107	20.8	54.9	8.7
26/11/2020	24.9	12.8	35.5	25	13.2	35.2	57.8	27	100	372.4	1202.3	0	0.3	0	5.3	316	27.6	86.5	6.0
27/11/2020	25.2	19.8	32.9	25.1	20	32.4	63.7	42	90.3	366.7	1145.9	0	1.4	0.4	4.6	117	24.5	89.6	10.0
28/11/2020	30.1	17.2	40.2	30.5	17.9	39.9	50.9	18	100	379.1	1199.6	0	2.3	0.1	5.7	305	24.3	102.3	10.1
29/11/2020	32.6	20.9	42.2	33	21.1	41.8	33.1	16.3	71.2	331	1187.5	0	2.7	0.1	9.6	301	20.2	90.2	7.9
30/11/2020	20.7	18.8	23.5	20.6	18.8	22.8	65.3	55.8	76.8	163.5	740.3	0.2	3.5	1.8	6.1	110	16.8	25.6	10.9
	21.5	8	42.2	21.6	8.9	41.8	64.9	16.3	100	311.7	1369.7	56.4	1.64	0	10.4	192.4	24.5	103.0	5.3

