

**WAMBO COAL  
ENVIRONMENTAL REPORTING  
1 NOVEMBER – 30 NOVEMBER 2018**

21 December 2018

**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**

Monitoring Frequency: Once per month  
 Sampling Method: Grab sample  
 Limits: Nil

Date sampled: 20 and 29 November 2018  
 Date obtained: 26 November and 5 December 2018  
 Date published: 21 December 2018

Table 1 - WCPL Surface and Mine Water Dam Results

Site	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
SW01	29 November	7.6	1030	8	
SW02	29 November				Dry
SW03	29 November				Pool
SW04	29 November				Pool
SW05	29 November				Pool
SW06	29 November				Dry
SW07	29 November				Dry
SW08	29 November				Dry
SW14	20 November	8.73	558	309	
SW15	20 November	8.91	10300	5580	
	29 November	9.0	8400	160	
SW27	29 November				Pool
SW31	20 November	8.94	8660	4590	
SW32a	29 November				Pool
SW38	29 November	8.95	7500	38	
SW39	29 November				Dry
SW40	29 November				Pool
SW41	29 November				Dry
SW52	20 November	9.83	2780	1490	
Montrose East 1	29 November	8.37	523	434	
Montrose East 2	29 November	8.34	540	6000	
Milk Can Dam	20 November	8.64	3710	2380	
	29 November	9.00	3250	221	
Rug Dump Dam	20 November	9.02	2570	1550	
	29 November	8.99	1580	468	
Wombat Dam	20 November	9.60	1820	1340	

Monitoring Frequency: Once per month  
Sampling Method: AM19  
Limits: 4g / m<sup>2</sup> / month EPA Guideline

Date sampled: 16 November 2018  
Date obtained: 23 November 2018  
Date published: 21 December 2018

Table 2 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m <sup>2</sup> )	Total Insoluble Matter (g/m <sup>2</sup> )	AR/IS Ratio	Comment
D11	16 November	2.2	2.9	75.8	
D19	16 November	4.4	6.6	66.6	
D21	16 November	1.9	2.7	70.3	
D22	16 November	2.4	3.3	72.7	

**Monitoring Frequency: Continuous**

**Sampling Method: AM22**

**Limits: Nil**

**Date sampled: Dust readings recorded daily**

**Date obtained: The next day for the preceding day's result**

**Date published: 21 December 2018**

**Table 3 - WCPL PM10 Results**

Date of Run	PM01 - Coralie (Sentinex 19)		PM02 - Wambo Road (Caban) (Sentinex 20)		PM03 - Thelander (Sentinex 21)		PM04 - Muller (Sentinex 22)	
	PM10 24 Hour Result (ug/m <sup>3</sup> )	YTD Average	PM10 24 Hour Result (ug/m <sup>3</sup> )	YTD Average	PM10 24 Hour Result (ug/m <sup>3</sup> )	YTD Average	PM10 24 Hour Result (ug/m <sup>3</sup> )	YTD Average
1 November	32	24.34	37.1	22.72	31.6	17.27	42.6	24.54
2 November	44.9	24.40	46.2	22.80	24.5	17.29	29	24.55
3 November	36	24.44	27	22.82	21	17.31	22.1	24.54
4 November	40.8	24.49	42.3	22.88	37.8	17.37	37.6	24.59
5 November	32.3	24.52	24.8	22.89	19.7	17.38	21.8	24.58
6 November	53.1	24.61	40.7	22.94	32.3	17.43	31.7	24.60
7 November	27.3	24.62	27.3	22.96	19.1	17.43	19.3	24.58
8 November	12.4	24.58	11.1	22.92	11.1	17.41	11.3	24.54
9 November	23.7	24.58	19.1	22.91	19.5	17.42	27.4	24.55
10 November	26.5	24.58	19.9	22.90	21.9	17.44	24.4	24.55
11 November	24.7	24.58	22.9	22.90	19.4	17.44	24.1	24.55
12 November	17	24.56	17.9	22.88	17	17.44	22.8	24.54
13 November	25.1	24.56	23.1	22.88	25.6	17.47	24.8	24.54
14 November	27.8	24.57	28.6	22.90	22.1	17.48	23	24.54
15 November	25.7	24.58	23.9	22.90	19.6	17.49	18.7	24.52
16 November	14.3	24.54	11.5	22.87	9.9	17.46	13	24.48
17 November	19.9	24.53	14	22.84	17.8	17.46	19.7	24.47
18 November	23.5	24.53	14.5	22.81	17.9	17.47	19.5	24.45
19 November	24.5	24.53	20.4	22.81	19.9	17.47	28.2	24.47
20 November	34.4	24.56	25.9	22.82	24.2	17.49	40.3	24.51
21 November	57.6	24.66	65.2	22.95	53.9	17.61	48.5	24.59
22 November	151.9	25.05	163.5	23.38	143.8	18.00	125	24.90
23 November	103.3	25.29	102.4	23.62	96.2	18.24	88.1	25.09
24 November	23.4	25.28	16.6	23.60	20.1	18.24	14.5	25.06
25 November	31.6	25.30	25.4	23.61	26.5	18.27	20.1	25.04
26 November	29.5	25.31	24.6	23.61	24.6	18.29	34.4	25.07
27 November	42.3	25.37	39	23.65	35.5	18.34	37.84	25.11
28 November	12	25.33	9.3	23.61	10	18.31	11.3	25.07
29 November	11.7	25.28	8.1	23.56	8.7	18.29	10	25.02
30 November	18.8	25.26	14.2	23.54	12.5	18.27	20.3	25.01

**Monitoring Frequency: Every blast**  
**Airblast Overpressure Limit: 120 dBL**  
**Ground Vibration Limit: 10mm/s**

**Date sampled: After each blast event**  
**Date obtained: After each blast event**  
**Date published: 21 December 2018**

**Table 4 - WCPL Blast Monitoring Results**

Date & Time	ID	BM02 - Kelly		BM05 - Muller		BM07 - Thelander	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
2018-11-02 11:32:06	MW_DOZERPUSH_325	108.1	0.06	100.7	0.21	104.3	0.35
2018-11-07 11:32:44	M_27WMA_326	117.0	0.14	109.1	2.09	102.6	1.46
2018-11-14 14:10:26	ME_2WMA_327	94.9	0.06	107.3	0.58	97.4	0.60
2018-11-23 12:06:38	MW_RCA_335	101.6	0.09	108.2	0.17	99.9	0.19
2018-11-23 12:22:10	M_27WRA_329	102.9	0.07	112.5	0.34	111.4	0.26
2018-11-28 13:01:45	M_27WRA_332	98.4	0.05	112.7	0.72	103.8	0.53
2018-11-28 13:05:14	M_27WRC_334	93.7	0.05	102.6	0.46	95.1	0.48

Monitoring Frequency: Continuous  
 Sampling Method: Site Meteorological Station  
 Limits: Nil

Date sampled: Weather readings recorded daily  
 Date obtained: 1 December 2018  
 Date published: 21 December 2018

Table 5 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN mm	Wind Speed		
	Min	Average	Max	Min	Average	Max	Min	Average	Max	Average	Max		Min	Average	Max
1 November	20.3	26.7	35.9	20.2	26.6	35.5	20.4	55.3	77.7	330.1	1052.3	0	0.1	0.8	4.8
2 November	20.1	29.9	36.1	21.6	30.1	35.6	17.4	34.1	87.2	323.5	1177.5	0	0.1	3.6	17.6
3 November	21.1	28.5	36.9	21.2	28.4	36.4	20.5	47.8	73.6	332.8	1074.6	0.2	1	3.5	7.3
4 November	17.6	22.9	29.6	18.3	22.8	29.2	37.4	68.4	92.6	247.4	1145.8	0	0.1	1.4	4.3
5 November	13.3	24.7	33.3	13.8	24.9	33.1	19.2	55.6	98.9	215.7	1101.7	0	0.1	0.8	5.4
6 November	18.4	28.1	38.7	19.1	28.5	38.4	16.9	45.8	76.2	210.8	1179	0	0	1.4	7.1
7 November	16.7	21.9	27.9	16.5	22.3	28.1	44.9	74.3	94.6	81.4	437.6	8.4	0.1	1.6	7.5
8 November	11.6	16.6	22.9	12.2	16.5	22.3	25.5	60.1	95.2	330.1	1294.6	10.4	0.1	0.8	5.3
9 November	8.6	17.3	25.1	9.6	17.3	24.8	25.9	61.3	96	344.7	1237.4	0	0.2	0.6	5.3
10 November	12.1	19.6	26.5	12.9	19.6	26	19.6	55.8	92.9	311.7	1250.5	0	0.1	1.4	6.5
11 November	9.8	19.4	28	10.8	19.4	27.4	23.8	63.5	97.7	372.1	1126.7	0	0.2	1.7	6.4
12 November	13.4	20.7	27.6	14.3	20.6	26.8	34.7	61.3	90.4	375.4	1120.3	0	0.3	2	5.4
13 November	13.1	22.1	29.7	13.7	22	29.1	18.5	56.9	93.5	346.1	1243.2	0	0.1	1.3	4.4
14 November	16.3	21.7	28.6	16.7	21.9	28	39	66.7	90.3	117.2	825.9	0	0.1	0.6	3.4
15 November	14.8	21.2	31	15.7	21.3	30.5	31.4	71.1	98.5	246.7	1250.8	12.2	0.1	1.2	7.4
16 November	15.6	18	20.9	15.5	17.8	20.4	66.9	77.2	92.8	115.6	741.9	0	0.8	2.1	3.6
17 November	16.9	19.9	24.5	17.1	19.7	23.9	46.1	70	86.2	193.9	1002.9	0	0.1	2.2	6.1
18 November	14.3	18.9	23.5	14.8	18.8	22.8	40.6	64.3	91.3	236.8	1341.9	0	0.9	3	6.9
19 November	13	20.2	26.9	13.8	20	26.2	36.8	60	87.9	333.2	1262.8	0	0.3	1.9	6.2
20 November	14.8	23.7	33.5	15.2	23.6	32.8	27.8	57	88.4	351.7	1160.2	0	0.1	0.5	6
21 November	21.1	24.5	29.2	22	24.5	28.7	44	63.9	80	142	752.5	0	0.2	3.1	6.9
22 November	20.1	23.1	26.4	20.2	22.9	25.6	10.2	38.2	76.6	357.2	1117.5	0.6	1	5.1	9.6
23 November	16.5	20	24.1	16.6	19.7	23.3	23.2	32	42.5	376.8	1194	0	2	5	21.8
24 November	14.4	21.1	28.5	14.6	21	27.6	19.1	32.4	48.4	382	1199.2	0	0.1	2.5	7.2
25 November	14	21.4	29.4	15.8	21.6	28.6	19.6	40.2	74.4	309	1342	0	0.2	1.1	5.2
26 November	9.9	19.6	28.7	10.8	19.6	27.7	26.6	59.4	90.9	322.7	1231.1	0	0	1.5	6.4
27 November	13.3	21.1	31.6	13.8	21	31	22.2	69.2	95.6	278.4	1161.9	0.6	0.1	0.7	6.8
28 November	16	19	24.6	16.2	18.8	24.4	53	84.9	99.3	123	1013.4	28.2	0.5	1.6	6.4
29 November	16.3	20.1	24.8	16.4	19.8	24.1	44.2	61.9	74.6	311.6	1273.5	0	0.6	2.6	6.5
30 November	14.6	20.4	28.8	14.9	20.6	28.4	34	67.9	93.9	267.7	1214.8	0	0	0.3	3.8
MONTH	8.6	21.7	38.7	9.6	21.7	38.4	10.2	58.6	99.3	276.2	1341.9	60.0	0	1.9	21.8

