

**WAMBO COAL
ENVIRONMENTAL REPORTING
1 JULY – 31 JULY 2018**

6 August 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: 18 and 27 July 2018
 Date obtained: 23 July and 2 August 2018
 Date published: 6 August 2018

Table 1 - WCPL Surface and Mine Water Dam Results

Site	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
SW01	27 July				Pool
SW02	27 July				Pool
SW03	27 July				Pool
SW04	27 July				Dry
SW05	27 July				Dry
SW06	27 July				Dry
SW07	27 July				Dry
SW08	27 July				Dry
SW14	18 July	8.44	535	<5	
SW15	27 July	7.59	8430	20	
SW27	27 July				Dry
SW31	18 July	9.03	8260	52	
SW32a	27 July				Dry
SW38	18 July	8.98	8360	52	
SW39	18 July				Dry
SW40	27 July				Pool
SW41	18 July				Dry
SW52	18 July	9.20	2870	29	
Montrose East 1	18 July	8.20	959	50	
Montrose East 2	18 July	8.06	1010	148	
Milk Can Dam	18 July	9.45	12000	38	
Rug Dump Dam	18 July	9.03	3700	115	
Wombat Dam	18 July	8.84	1280	145	

Monitoring Frequency: Once per month
Sampling Method: AM19
Limits: 4g / m² / month EPA Guideline

Date sampled: 15 July 2018
Date obtained: 25 July 2018
Date published: 6 August 2018

Table 2 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	15 July	1.2	1.7	70.5	
D19	15 July	1.7	2.6	65.3	
D21	15 July	0.6	1.0	60	
D22	15 July	1.5	2.1	71.4	

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: 6 August 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 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 July	10.9	25.65	7.6	23.18	5.3	18.60	6.7	25.63
2 July	18.1	25.60	14	23.13	11.9	18.56	30	25.65
3 July	12.2	25.53	7.5	23.04	8.6	18.50	15.7	25.60
4 July	12.3	25.46	7.4	22.96	11.7	18.47	17.7	25.56
5 July	20.2	25.43	13.2	22.90	8.8	18.41	13.2	25.49
6 July	15.4	25.38	14.1	22.86	4.6	18.34	6.5	25.39
7 July	19.4	25.35	22.9	22.86	9.8	18.29	10.2	25.31
8 July	17.4	25.30	15.6	22.82	9	18.24	9.9	25.23
9 July	14.5	25.25	22.5	22.82	8.4	18.19	8.9	25.14
10 July	12.9	25.18	14.2	22.77	9.8	18.15	22.8	25.13
11 July	20.4	25.16	26	22.79	13.2	18.12	32.8	25.17
12 July	20.2	25.13	20.7	22.78	11.4	18.09	23.5	25.16
13 July	16.8	25.09	16.6	22.75	10.5	18.05	12.1	25.09
14 July	32.6	25.13	19.7	22.73	6.8	17.99	7.8	25.00
15 July	11.8	25.06	35.6	22.80	7.5	17.93	9.5	24.92
16 July	15.5	25.01	22.8	22.80	7.9	17.88	8.8	24.84
17 July	17.5	24.97	26.7	22.82	10.2	17.84	11.3	24.77
18 July	20.6	24.95	37.5	22.89	10.5	17.81	16.3	24.73
19 July	39.8	25.03	58.2	23.07	33.8	17.89	34.9	24.78
20 July	37.5	25.09	46.6	23.18	31.3	17.96	40.1	24.86
21 July	33.9	25.13	30	23.22	17.7	17.95	23.6	24.85
22 July	14.7	25.08	17.5	23.19	12.7	17.93	22.4	24.84
23 July	28.1	25.10	27.8	23.21	15.1	17.91	47.9	24.95
24 July	25.5	25.10	43.9	23.31	17.5	17.91	28	24.97
25 July	25.2	25.10	53.8	23.46	19	17.92	29.2	24.99
26 July	19.7	25.07	28.3	23.49	14.9	17.90	21.9	24.97
27 July	22.3	25.06	34.4	23.54	14.7	17.89	23.1	24.96
28 July	40.3	25.13	46.8	23.65	20.7	17.90	54.9	25.11
29 July	43.4	25.22	46.8	23.76	27.2	17.94	69.1	25.32
30 July	26.2	25.22	21.5	23.75	17.7	17.94	23.5	25.31
31 July	16.2	25.18	17	23.72	9.9	17.91	11.9	25.25

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: 6 August 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
2018-07-05 15:09:54	M_WWA_284	102.8	0.09	111.1	1.43	108.5	2.45
2018-07-12 12:08:02	ME_WMA_285	99.8	0.11	99.1	0.16	89.5	0.11
2018-07-12 12:19:21	M_27RCA_289	89.0	0.03	101.9	0.25	95.2	0.24
2018-07-21 09:10:53	HD_1WWA_276	113.2	0.10	110.3	0.32	101.2	0.20
2018-07-21 09:22:52	M_27WWA_287	100.8	0.10	104.2	2.81	101.6	3.25
2018-07-28 11:06:42	ME_WTA_292	98.7	0.15	103.2	0.33	94.8	0.18
2018-07-31 14:03:39	HD_1WWA_294	106.7	0.20	108.6	1.26	102.5	0.64

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

Date sampled: Weather readings recorded daily
 Date obtained: 1 August 2018
 Date published: 6 August 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 July	-0.9	8	15.3	0.2	8.5	14.9	49	79.1	98	102.5	607.8	0	0.1	0.4	2.9
2 July	10.5	12.8	15.8	10.4	12.8	15.3	64.9	83.5	97.5	60.2	505.5	0	0.4	1.3	2.9
3 July	6	12	17.8	7	12.3	17.4	61.9	86.1	98.5	79.5	629.8	0	0.1	0.5	2.9
4 July	4.8	11	19.1	5.1	11.4	18.6	66.3	90.3	100	82.9	430.6	0	0	0.1	2.2
5 July	6.3	15	25	7.1	15.8	24.7	45.2	76.8	100	143.2	566.9	0.2	0	1.1	4
6 July	12	19.6	25.1	13.4	19.8	24.9	33.5	54.6	76.2	96	621.3	0	0.3	3.7	9.7
7 July	3.9	11.2	17.1	7	11.5	16.6	35.2	60.4	87.4	135.9	599	0	0.1	3.1	6.5
8 July	7.8	11.1	14.8	7.8	10.9	14.5	47.7	60.1	69.1	150.8	588.1	0	2.4	4.8	7.9
9 July	1.8	10.1	18.2	2.4	10.5	17.5	32.9	66.3	95.2	150.4	622.2	0	0.2	0.2	3.6
10 July	-1	8.1	17.3	0.4	8.6	16.6	45	75.5	99	145.3	596.9	0	0	0.3	2.6
11 July	-0.7	8.2	19.3	0.3	9	18.7	34	75.7	98.8	148.5	590.6	0	0.1	0.3	2.5
12 July	-1.3	8.1	19	-0.9	8.9	18.5	29.2	67.5	99.1	146.6	589.5	0	0	0.9	4
13 July	-2	7.7	17.2	-0.3	8.7	16.7	32	63.7	93.5	152.8	592.2	0	0.1	1.4	4.4
14 July	-3.7	5.7	16.7	-2.6	6.8	16.1	32	69.4	96	154.2	597.8	0	0.1	0.8	3.7
15 July	-5.5	5	17.9	-3.9	6.2	17.4	18.2	60.7	94.8	162.8	630	0	0.1	1.1	5.6
16 July	-3.4	8.2	17.4	-1.7	9.2	16.9	21.1	46.2	85.5	161.3	621.8	0	0.1	1.8	5.6
17 July	7.2	14.7	22	7.3	14.7	21.6	16.4	27.3	41.9	161.3	620.6	0	0.8	3.5	7.1
18 July	3	14.8	22.2	5.3	15.4	21.6	23.4	36	76.8	157.1	613.7	0	0	2.2	5.2
19 July	-1.6	9.6	24.1	0.4	10.6	23.6	19.2	57.9	91.1	160	620.6	0	0.1	1.2	5.5
20 July	-0.6	10.9	20.1	0.5	11.4	19.6	24.1	52.5	91.1	137.9	601.3	0	0.2	3	12.3
21 July	0.8	9.6	17	2	9.9	16.4	28.5	52.6	82.8	161.1	613.9	0	0.1	2.2	4.8
22 July	-3.8	5.8	17.8	-2.9	6.6	17.1	25.7	63	94.2	159	610.6	0	0.1	0.3	3
23 July	-4.4	7.2	19.7	-3.6	8.2	19.2	21.6	57.5	95.6	162.2	623.6	0	0	0.9	4.3
24 July	4.7	16.2	24.2	7	16.7	23.7	19.3	29.5	53.5	162.8	623.7	0	0.2	3.1	6.6
25 July	6.7	15	23.1	8	15.6	22.4	24.5	39.8	76.7	160.8	615	0	0.1	2.1	5.5
26 July	0.3	11	21.6	1.6	11.8	21	29	59.8	89.6	151.6	610.7	0	0.1	0.8	4.8
27 July	0.4	10.4	21.7	1.7	11.2	20.9	30.6	64.2	95	155.7	602.1	0	0.1	0.1	2.4
28 July	4.3	12.9	23.3	6.1	13.3	22.6	29	63.1	88.4	125	633.3	0	0.1	0.2	2.7
29 July	8.1	15.9	23	8.6	15.9	22.4	38.2	66.1	96.3	138.7	638.8	0.8	0.1	2.4	7
30 July	6.4	13.3	18.4	8.6	13.2	17.6	28.9	44.7	67.7	181.1	682.1	0	0.1	2.9	6
31 July	7	14	20.4	7.5	13.8	19.7	27.7	42.4	66.1	172.6	678.4	0	0.6	3.3	7.3
MONTH	-5.5	11.0	25.1	-3.9	11.5	24.9	16.4	60.3	100	142.5	682.1	1	0	1.6	12.3

