

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

10 October 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: 26 and 28 September 2018
 Date obtained: 3 and 5 October 2018
 Date published: 10 October 2018

Table 1 - WCPL Surface and Mine Water Dam Results

Site	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
SW01	28 September				Pool
SW02	28 September				Pool
SW03	28 September				Pool
SW04	28 September				Dry
SW05	28 September				Dry
SW06	28 September				Dry
SW07	28 September				Dry
SW08	28 September				Dry
SW14	26 September	8.62	551	<5	
SW15	28 September	9.07	9210	86	
SW27	28 September				Dry
SW31	26 September	9.20	9770	59	
SW32a	28 September				Dry
SW38	26 September	8.96	10100	92	
SW39	28 September				Dry
SW40	28 September				Pool
SW41	28 September				Dry
SW52	26 September	9.37	4080	30	
Montrose East 1	26 September	8.45	1240	55	
Montrose East 2	26 September	8.05	1600	630	
Milk Can Dam	26 September				Dry
Rug Dump Dam	26 September				Dry
Wombat Dam	26 September	9.01	1730	72	

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

Date sampled: 17 September 2018
Date obtained: 25 September 2018
Date published: 10 October 2018

Table 2 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	17 September	1.9	2.4	79.1	
D19	17 September	3.2	4.5	71.1	
D21	17 September	1.7	2.2	77.2	
D22	17 September	2.7	3.2	84.3	

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: 10 October 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 September	19.1	24.74	12.6	23.64	13.3	17.60	13	25.04
2 September	19.2	24.71	9.4	23.58	14	17.58	15.5	25.00
3 September	12.9	24.66	7.5	23.51	10.6	17.55	25.9	25.00
4 September	12.4	24.62	3.2	23.43	6.1	17.51	13.6	24.96
5 September	21	24.60	7.6	23.37	9.5	17.48	19.8	24.94
6 September	20.5	24.58	17.2	23.34	15.5	17.47	28.7	24.95
7 September	7.50278	24.52	5.11087	23.27	6.19574	17.42	10.8674	24.90
8 September	6.3	24.44	4.6	23.19	4.3	17.37	11.2	24.84
9 September	10.3	24.39	9.5	23.14	3.7	17.31	5.4	24.76
10 September	15.4	24.35	16.4	23.11	12.1	17.29	18.5	24.74
11 September	20	24.33	24.2	23.12	15.3	17.29	25	24.74
12 September	25.3	24.34	25.5	23.13	15.6	17.28	21.7	24.73
13 September	41.2	24.40	42.4	23.20	36.0794	17.35	44.8	24.81
14 September	45.8	24.49	40.9	23.27	26.5	17.39	44.7	24.88
15 September	40.8	24.55	43.1	23.35	24.4	17.42	28.9	24.90
16 September	21.1	24.54	19.1	23.33	19.5	17.42	36.8	24.95
17 September	29.8	24.56	27	23.35	28.3	17.47	36.5	24.99
18 September	39.4	24.61	35.9	23.40	21.4	17.48	28.9	25.01
19 September	35.9	24.66	36	23.44	30.1	17.53	35.1	25.04
20 September	21.2	24.64	23.2	23.44	18.2	17.53	34	25.08
21 September	22.8	24.64	25.1	23.45	18.3	17.54	33	25.11
22 September	46.2	24.72	23.9	23.45	13.4	17.52	18	25.08
23 September	51.1	24.82	31.7	23.48	24.3	17.55	26.9	25.09
24 September	23.3	24.81	18.7	23.46	13.5	17.53	25.4	25.09
25 September	20	24.79	13.6	23.43	12.1	17.51	19.7	25.07
26 September	16.4	24.76	10.1	23.38	10.4	17.48	NaN	25.07
27 September	17.1	24.73	13.8	23.34	12.3	17.46	18.9052	25.05
28 September	27.2	24.74	22	23.34	9.6	17.44	12.9	25.00
29 September	18.4	24.72	17.5	23.31	13	17.42	15.9	24.97
30 September	20.9	24.71	17.7	23.29	16.3	17.41	21.2	24.95

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: 10 October 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
2018-09-07 12:07:10	M_27WRA_302	100.0	0.04	108.9	0.44	98.5	0.58
2018-09-07 12:10:20	ME_2WMA_259	95.0	0.09	111.7	0.92	101.0	0.89
2018-09-11 14:35:02	ME_WMA_309	86.9	0.06	96.4	0.05	86.8	0.04
2018-09-14 12:28:56	M_WTA_312	90.3	0.03	103.6	0.18	94.0	0.17
2018-09-14 12:35:04	M_RCA_311	99.6	0.06	108.2	0.90	97.6	1.08
2018-09-21 10:40:12	HD_WWA_305	95.7	0.13	107.7	0.60	99.7	0.56
2018-09-21 10:47:59	M_WMA_315 and M_WRA_307	94.7	0.08	113.0	0.43	105.7	0.33
2018-09-28 12:06:10	ME_WTA_317	97.3	0.13	100.3	0.18	92.9	0.15
2018-09-28 12:18:36	M_27WRA_313	86.5	0.04	105.7	0.42	99.5	0.54
2018-09-28 12:21:46	MW_PRESPLIT_304	90.5	0.10	96.9	0.36	88.6	0.44

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

Date sampled: Weather readings recorded daily
 Date obtained: 1 September 2018
 Date published: 10 October 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 September	11.3	15.4	20.1	11.3	15.2	19.5	42.4	64.2	91.5	170.4	698.8	0	0.2	3.5	6.5
2 September	7.3	13.6	19.7	8.2	13.5	18.7	36.3	64.1	93.6	176.3	1109.3	0	0.1	1.3	6.2
3 September	8.8	13.1	18.1	9.8	12.7	17	50.6	71.3	92.2	132.4	950.9	0.2	0.8	1.9	4.3
4 September	11.1	13.3	17.4	10.7	12.9	16.7	60.4	82.7	97.2	135.1	880.4	1.8	0.7	2	6
5 September	9.3	14.3	20.3	9.7	14	19.4	47.2	77.5	98.6	191.6	995.7	0.2	0	1.5	4.8
6 September	10.3	16.6	23.2	10.8	16.5	22.3	40.4	69.6	96.5	193.8	882.4	1.2	0.2	0.5	3.1
7 September	13.6	15.8	19.8	13.4	15.6	19.4	68.8	90.6	99.7	85.9	585.9	9.4	0.1	0.1	2.7
8 September	13.2	15.7	17.8	13.2	15.3	17	67.4	79.7	97.4	129.1	959.5	0.2	0.4	2.2	4
9 September	7.9	15.1	23.7	9.2	15.5	22.9	25	61.8	99.2	255.3	875.6	0	0.1	1.7	5.1
10 September	6.9	15.4	23.4	8.2	15.7	22.4	32.7	63.5	94	248.6	860.1	0	0.1	0.7	3.3
11 September	6	15.5	25.9	6.9	15.7	25.1	29.9	70	98.5	229.7	816.2	0	0	0.2	3
12 September	7.1	19.2	30.8	6.3	18.4	28.9	27	63.6	100	245.3	858.8	0	0	1.4	5.5
13 September	12.6	19.8	28.2	11.4	17.9	25.6	45.5	71.3	93.4	245.1	854.1	0	0.1	1.6	5.5
14 September	13.2	22.4	31.8	13.5	20.8	29.7	22.1	59.4	90.8	249.3	898.4	0	0.1	0.8	4.7
15 September	6.3	22.8	34.5	6.1	21.6	32.6	12	44.2	97.6	261.6	896.6	0	0.1	2.8	7.9
16 September	7.6	15.6	21	7.4	14	18.7	11.2	35.5	71.9	285.9	948.7	0	0.4	1.6	6.2
17 September	2.9	13.5	22.4	2.1	12	20.2	32.1	62.9	94.5	255.5	1055.9	0	0.1	0.8	4.8
18 September	4.2	16.9	28.9	3.5	15.8	26.4	25.7	60.9	99	270.1	909.3	0	0	1.2	4.6
19 September	7.2	19.9	30.5	7.4	19.1	28.4	17.4	46.9	89.5	224.3	948.4	0	0.1	2	6.5
20 September	4.2	13.1	19.1	4.6	12.3	16.9	47	65.5	91	204.9	1064.8	1	0.1	1.3	5.6
21 September	2.3	14	24.5	2	13.1	22.3	24.1	61.2	98.3	278.8	935.2	0	0.1	0.1	2.6
22 September	4.1	17.3	28.2	3.9	16.4	25.9	17.3	52.1	96.7	248.1	1105.2	0	0.1	1.2	5
23 September	5.4	17.9	27.2	5.9	16.9	25	23.6	56.2	82.8	276.1	919.8	0	0.1	1.6	6.8
24 September	13	15.6	17.9	11.5	14	16.4	56.2	71.5	95.2	93.7	724.6	0	0.6	2.5	5.8
25 September	11.3	15.8	21.9	10	14.2	19.7	37.8	69.5	97.2	182.8	959.4	0.2	0.1	1.6	4.8
26 September	6.8	12.6	17.8	6.2	11.4	15.9	58.3	87.4	100	91.5	745.6	6.8	0.1	0.7	4.3
27 September	8.8	15.4	24.3	8.1	14.2	22.4	26.1	72.1	100	254.3	977.5	0.2	0	0.1	2.2
28 September	5.5	18.8	32.3	4.5	18	30.1	15.9	61.2	100	268.4	957.8	0	0	1.2	4.7
29 September	11	19.4	27.1	10.6	18.2	24.9	17.9	52.5	85.6	280.6	978.6	0	0.1	0.2	6.2
30 September	8.8	15.6	22.4	8.6	14.1	19.8	33.1	62.6	92.3	263.2	1014.5	0	0.2	1.9	6.7
MONTH	2.3	16.33	34.5	2	15.5	32.6	11.2	65.05	100	214.2	1109.3	21.2	0	1.34	7.9

