

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

10 May 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: 9 and 10 April 2018
 Date obtained: 26 April 2018
 Date published: 10 May 2018

Table 1 - WCPL Groundwater Results

Site	Date	pH	EC ($\mu\text{S}/\text{cm}$)	Depth	Comments
P106	9 April				Dry
P109	9 April	6.6	797	6.26	
P114	9 April				Dry
P116	9 April	7.0	2360	6.84	
P202	9 April	7.8	3900	9.04	
P206	9 April	7.9	2100	21.37	
P301	10 April	6.8	6060	16.51	
P315	10 April				Insufficient Water
GW02	10 April	6.8	563	8.66	
GW08	9 April	7.8	1514	7.21	
GW09	9 April				Dry
GW11	10 April	6.7	645	6.77	
GW12	10 April				Insufficient Water
GW13	9 April	7.0	3870	6.29	
GW15	9 April	7.5	640	11.36	
GW16	10 April	7.6	1143	11.08	
GW17	10 April	7.0	5440	12.33	
GW21	10 April				Dry
GW22	9 April	8.4	7030	35.57	
GW23	10 April	7.2	4570	8.28	
GW24	10 April	6.2	1880	8.57	
GW25	10 April				Dry
GW26	10 April	7.1	1131	7.66	
P1	11 April	6.62	1582	26.35	
P3	11 April				Removed
P11	11 April				Mud
P16	11 April	7.33	7640	9.10	
P20	11 April	7.38	7840	8.80	

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

Date sampled: 24 April and 27 April 2018
 Date obtained: 2 and 5 May 2018
 Date published: 10 May 2018

Table 2 - WCPL Surface and Mine Water Dam Results

Site	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
SW01	27 April	7.66	939	-	
SW02	27 April	7.33	1260	-	
SW03	27 April				Pool
SW04	27 April				Dry
SW05	27 April				Pool
SW06	27 April				Pool
SW07	27 April				Pool
SW08	27 April				Unsafe access
SW14	24 April	8.47	631	436	
SW15	27 April	9.19	7910	5800	
SW27	27 April				Pool
SW31	24 April	9.14	7580	4050	
SW32a	27 April				Dry
SW38	24 April	9.12	8750	5060	
SW39	27 April				Pool
SW40	27 April				Pool
SW52	24 April	9.27	2270	1270	

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

Date sampled: 15 April 2018
Date obtained: 20 April 2018
Date published: 10 May 2018

Table 3 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	15 April	1.80	2.40	75	
D19	15 April	2.60	3.90	66	
D21	15 April	1.40	1.70	82	
D22	15 April	2.50	3.10	80	

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 May 2018

Table 4 - 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 April	25.58	30.51	34.57	24.73	21.8282	22.15	30.00	29.28
2 April	23.9	30.44	23.6	24.71	20.1	22.13	20	29.18
3 April	27.2	30.41	21.7	24.68	24.5	22.16	28.2	29.17
4 April	20.66	30.30	15.285	24.58	17.92	22.11	22.6424	29.10
5 April	24.1	30.24	22.4	24.56	17.9	22.07	23.6	29.04
6 April	19.9	30.13	29.8	24.61	20.7	22.05	29.2	29.04
7 April	24.6	30.07	33.5	24.70	22.6	22.06	26.7	29.02
8 April	24.2	30.01	28.6	24.74	28.7	22.13	31.7	29.05
9 April	26.3	29.98	44.8	24.95	24.3	22.15	41.8	29.18
10 April	24.9	29.93	23.8	24.94	27.6	22.20	35.6	29.24
11 April	32.1	29.95	49.5	25.18	24.4	22.23	46.9	29.42
12 April	26.2	29.91	42.8	25.36	21.8	22.22	23.4	29.36
13 April	31	29.92	36.1	25.46	18.8	22.19	21.6	29.28
14 April	22	29.84	28.8	25.49	17.7	22.14	16.3	29.16
15 April	53.6	30.07	55	25.78	50.2	22.42	44.3	29.30
16 April	22	29.99	19	25.71	13.9	22.33	12.9	29.15
17 April	34.9	30.04	17.7	25.64	19.9	22.31	20.9	29.07
18 April	42.3	30.15	18.9	25.58	19.7	22.29	29.6	29.07
19 April	32.2	30.17	16.9	25.50	13.5	22.20	21.4	29.00
20 April	18.7	30.07	14.5	25.39	17.3	22.16	17.1	28.90
21 April	30.2	30.07	25.7	25.40	26.1	22.20	26.9	28.88
22 April	18.7	29.97	14.9	25.30	17.1	22.15	26	28.85
23 April	22.4	29.90	17.2	25.23	15.3	22.09	20	28.77
24 April	30.7	29.91	17.8	25.16	19.4	22.06	25.4	28.74
25 April	22.9	29.85	17.2	25.09	14.7	22.00	19.6	28.66
26 April	27.2	29.82	22	25.07	19.4	21.98	21.9	28.61
27 April	18.4	29.73	17.4	25.00	16.3	21.93	38.9	28.69
28 April	14.8	29.60	12	24.89	15	21.87	28.8	28.69
29 April	20.8	29.53	12.9	24.79	15.5	21.81	27.9	28.69
30 April	15.7	29.41	15.1	24.71	11.5	21.72	15.8	28.58

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 May 2018

Table 5 - WCPL Blast Monitoring Results

Date & Time	ID	BM02 - Kelly		BM05 - Muller		BM07 - Thelander	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
2018-04-05 10:42:45	M_27WWA_247	92.3	0.03	106.1	0.35	100.0	0.37
2018-04-09 10:37:54	HD_1RCA_246	100.9	0.06	100.1	0.07	92.2	0.06
2018-04-13 15:35:38	ME_WTA_225	94.1	0.23	95.1	0.26	89.5	0.18
2018-04-13 15:44:25	M_27RCA_254	92.3	0.06	102.1	0.19	95.3	0.20
2018-04-16 10:34:59	M_27WWA_257	94.4	0.07	102.2	0.52	92.8	0.74
2018-04-19 14:58:05	M_27WWA_258	96.5	0.09	104.3	1.52	98.0	1.38
2018-04-26 09:15:24	M_WWA 249	92.8	0.06	108.5	0.54	103.3	0.47
2018-04-26 09:20:46	M_WWA 256	97.9	0.06	108.0	1.53	105.6	1.34

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

Date sampled: Weather readings recorded daily
 Date obtained: 1 May 2018
 Date published: 10 May 2018

Table 6 - 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 April	16.8	23.3	32.4	17.3	23.7	32.3	31.7	73.2	98.4	232.2	873.5	0	0.1	0.2	3.2
2 April	13.9	22.1	33.6	14.8	22.5	33.4	31.6	70.1	97.4	175.5	955.9	1.2	0	0.5	7.3
3 April	18.4	22.3	26.3	19	22.4	26	55.8	72.3	88.2	173.1	904.8	0	0.3	1.9	5
4 April	18.8	22.3	27.5	19.4	22.3	27.3	52.7	73.7	90.5	173.9	997.7	0	0.5	1.7	6.2
5 April	16	21.7	28.5	17.1	22.1	28.2	41.8	73.7	97	226.4	864.5	0	0.1	0.5	3.4
6 April	12.1	20.7	29.6	13	21.3	29.1	44.5	74.2	98	246.6	846.6	0	0	0.8	4
7 April	14.8	21.2	29.5	15.5	21.9	29.2	40.3	75.1	98.4	237	828.3	0	0.1	0.4	2.5
8 April	12	21.4	32	13.2	22.1	31.8	25.1	64.9	97.5	240.3	832.4	0	0	0.1	2.6
9 April	11.8	23.4	34.8	13	24	34.7	16.1	55.7	96.2	237.9	840.6	0	0.2	0.6	5.3
10 April	15.2	20.8	26.2	16.4	21.1	25.8	47.8	69.9	91.6	194.2	889	0	0.4	1.4	4.3
11 April	13.1	21.2	31.2	14.1	21.7	31	33.2	72.2	97.6	227.2	805.3	0	0.1	0.3	2.7
12 April	12.4	23.4	31.7	13.9	23.9	31.4	31.4	55.9	98	233.1	821.8	1.2	0	2.2	5.8
13 April	20.3	26.1	31.9	21.9	26.4	31.6	30.3	38.8	48.3	232.1	810.3	0	0.2	3.1	5.9
14 April	18.5	23.3	30	18.8	23.5	30	38	60.2	87.8	155	888.3	7.2	1.4	4.7	83.1
15 April	17	20.4	24	17.4	20.6	23.6	38.9	50.1	59.4	231.8	861	0	1.4	3.9	8.2
16 April	16.4	21.8	28.6	16.7	22.1	28.3	34.9	51.7	71.9	230	804.3	0	0.5	3.4	6.5
17 April	10.9	18.8	25.1	12.1	19.2	24.4	46.9	69.3	95	186.4	975.7	0	0.1	1.8	5.9
18 April	15.1	19	23.1	15.9	19.2	22.6	49.3	66.3	82.6	142.7	977.6	0	0.6	1.9	4.6
19 April	10.7	18.6	28.8	11.6	18.9	28.4	41.7	77	97.1	197.4	776.7	11	0	0.4	4.9
20 April	11.3	18.7	25.9	11.9	19	25.5	48.7	81.9	99.8	216.3	774.7	0	0	0.8	3.9
21 April	14.4	19.2	24.5	15.7	19.6	23.7	55.4	78.9	99.1	138.7	872.9	0	0.1	1.4	5
22 April	12.5	18.1	24.6	13.4	18.5	24.1	52.4	79.3	99	179.6	830.1	0	0	1	5.2
23 April	10.1	17.4	25.4	11.2	17.9	24.9	46.5	80.1	99.1	205.9	799.4	0	0.1	0.7	5.7
24 April	10.7	17.4	25	11.4	18	24.7	36	74.6	99.1	208.1	770.9	0	0	0.9	4.6
25 April	11.5	17.1	22.5	12.5	17.6	22.3	66.7	86.6	98.6	88.8	627	0	0.1	0.8	3.6
26 April	12.2	19.6	28	12.6	19.7	27.7	33.8	75.2	100	182.3	773.8	0.2	0.1	0.2	5
27 April	14.7	18	21.8	15.4	18.1	21.2	51.5	68.9	91.7	109.3	751.2	0	0.4	2	4.7
28 April	10.1	16.8	21.9	11.5	17.1	21.2	48.7	69.1	93.7	169.1	818.9	0	0.2	2.1	4.9
29 April	9.7	14.9	21.4	10.5	15.5	20.9	51.7	78.3	97.6	124.7	774	0	0.1	0.9	4.9
30 April	8.9	16.1	21.1	9.9	16.3	20.5	52	72.6	96.5	155.6	830.3	0	0.2	1.3	4.7
MONTH	8.9	20.1	34.8	9.9	20.5	34.7	16.1	69.6	100	191.7	997.7	20.8	0	1.3	83.1

