

**WAMBO COAL  
ENVIRONMENTAL REPORTING  
1 SEPTEMBER – 30 SEPTEMBER 2019**

October 2019

**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

Table 1 - WCPL Surface and Mine Water Dam Results

Site	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
SW01	27 Sept 2019				Pool
SW02	27 Sept 2019				Pool
SW03	27 Sept 2019				Pool
SW04	27 Sept 2019				Dry
SW05	27 Sept 2019				Dry
SW06	27 Sept 2019				Dry
SW07	27 Sept 2019				Dry
SW08	27 Sept 2019				Dry
SW12	18 Sept 2019	8.8	6370	50	
SW14	18 Sept 2019	8.9	503	22	
SW15	18 Sept 2019	8.6	5510	97	
SW27	27 Sept 2019				Dry
SW31	18 Sept 2019	8.8	807	100	
SW32a	27 Sept 2019				Dry
SW38	18 Sept 2019	9.2	7130	123	
SW39	27 Sept 2019				Dry
SW40	27 Sept 2019				Pool
SW51	18 Sept 2019	9.1	1020		
SW52	18 Sept 2019	8.8	1010	90	
Wombat Dam	18 Sept 2019				No Access
Milk Can Dam	18 Sept 2019	9.3	5840	200	
Rug Dump Dam	18 Sept 2019	9.1	1980	840	
Montrose East 1	18 Sept 2019	8.3	728	516	
Montrose East 2	18 Sept 2019	8.5	715	90	

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

Date sampled: 18 September 2019  
Date obtained: 24 September 2019  
Date published: 9 October 2019

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	18 Sept 2019	1.6	2.4	66.7	Insects
D19	18 Sept 2019	2.3	3.3	69.7	Insects/Veg
D21	18 Sept 2019	1.0	1.5	66.7	Insects
D22	18 Sept 2019;	3.3	4.2	78.6	Insects

Monitoring Frequency: Continuous  
 Sampling Method: AM22  
 Limits: Nil

Date sampled: Continuous  
 Date obtained: Continuous  
 Date published: 9 October 2019

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
1/09/2019	13.1	23.2	11.7	23.5	10.7	17.5	16.7	24.2
2/09/2019	14.8	23.2	17.3	23.5	13.1	17.4	20.9	24.1
3/09/2019	20.4	23.2	25.9	23.5	14.4	17.4	39.2	24.2
4/09/2019	29.1	23.2	30.6	23.5	17.3	17.4	20.2	24.2
5/09/2019	36.8	23.3	34.8	23.6	26.5	17.5	34.8	24.2
6/09/2019	92.8	23.5	106.9	23.9	67.2	17.7	62.3	24.4
7/09/2019	20.6	23.5	15.7	23.9	16.9	17.7	15.3	24.3
8/09/2019	12.4	23.5	8.7	23.8	6.5	17.6	6.7	24.3
9/09/2019	17.6	23.5	12.4	23.8	8.3	17.6	8.2	24.2
10/09/2019	16.3	23.4	16.1	23.7	13.8	17.6	21.9	24.2
11/09/2019	23.6	23.4	47.0	23.8	22.0	17.6	42.1	24.3
12/09/2019	25.6	23.4	33.8	23.9	17.6	17.6	18.9	24.3
13/09/2019	47.0	23.5	42.1	23.9	34.3	17.6	46.1	24.3
14/09/2019	39.9	23.6	31.3	23.9	29.2	17.7	35.6	24.4
15/09/2019	28.3	23.6	30.0	23.9	16.7	17.7	19.3	24.7
16/09/2019	46.6	23.7	62.7	24.1	25.2	17.7	36.8	24.4
17/09/2019	8.5	23.7	9.7	24.1	7.3	17.7	14.6	24.4
18/09/2019	6.6	23.6	6.6	24.0	6.9	17.6	8.1	24.3
19/09/2019	16.4	23.6	13.6	23.9	16.4	17.6	21.0	24.3
20/09/2019	16.3	23.5	13.0	23.9	15.1	17.6	25.6	24.3
21/09/2019	32.0	23.6	26.1	23.9	22.6	17.6	39.5	24.4
22/09/2019	31.9	23.6	29.7	23.9	27.8	17.7	32.9	24.4
23/09/2019	13.8	23.6	12.8	23.9	10.2	17.6	10.5	24.3
24/09/2019	19.8	23.5	22.9	23.9	12.6	17.6	20.5	24.3
25/09/2019	25.2	23.6	25.3	23.9	25.2	17.7	28.3	24.34
26/09/2019	43.7	23.6	29.8	23.9	27.1	17.7	33.2	24.37
27/09/2019	27.2	23.6	24.0	23.9	16.0	17.7	12.2	24.33
28/09/2019	33.2	23.7	37.1	23.9	23.6	17.7	25.0	24.33
29/09/2019	35.5	23.7	30.8	24.0	29.5	17.8	35.2	24.37
30/09/2019	32.8	23.8	25.6	24.0	34.4	17.8	30.7	24.39

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

**Date sampled: Continuous**  
**Date obtained: Continuous;**  
**Date published: 9 October 2019**

**Table 4 - WCPL Blast Monitoring Results**

Date & Time	ID	BM02 - Kelly		BM05 - Muller		BM07 - Thelander	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
6/09/2019 12:00	M_27WMA_426	79.9	0.04	107.3	0.47	106.0	0.41
12/09/2019 15:50	DZ_WWA_427	76.2	0.15	108.5	0.82	104.4	1.35
13/09/2019 11:59	HS_WMA_430	98.1	0.78	96.9	0.05	83.4	0.06
21/09/2019 12:09	M_27WMA_433	80.2	0.21	120.6	1.17	115.9	0.89
21/09/2019 11:59	M_27WTA_431	85.9	0.11	105.7	1.52	95.7	1.67
27/09/2019 12:15	M_27WMA_435	105.5	0.15	104.6	0.81	91.3	0.58
27/09/2019 12:08	M_27WMA_432	95.1	0.10	103.2	0.81	92.7	0.84

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

Date sampled: continuous  
 Date obtained: 1 October 2019  
 Date published: 9 October 2019

Table 5 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed		
	Average	Min	Max	Average	min	Max	Average	Min	Max	Average	Max	Sum (mm)	Average	Min	Max
1/09/2019	15.2	7.7	23.4	15.5	8.6	22.7	74.0	39.2	99.5	234.2	831.4	0.0	0.5	0.1	2.6
2/09/2019	14.9	5.6	25.3	15.2	6.6	24.8	66.1	16.4	99.7	243.5	849.0	0.0	0.7	0.0	5.2
3/09/2019	16.6	7.0	28.1	16.9	7.8	27.7	56.2	16.6	99.6	232.6	936.8	0.0	1.2	0.1	4.6
4/09/2019	17.9	4.1	31.1	18.4	5.3	30.6	49.4	13.2	95.5	240.6	831.4	0.0	1.3	0.0	6.9
5/09/2019	17.2	6.2	27.9	17.5	7.8	27.4	59.4	23.6	89.7	237.0	821.3	0.0	0.8	0.0	5.0
6/09/2019	20.4	10.5	32.5	20.2	11.2	31.9	50.3	7.5	96.3	207.4	865.5	0.0	3.9	0.2	12.2
7/09/2019	14.7	10.9	19.0	13.9	10.5	17.8	48.0	28.1	79.2	232.2	895.4	0.8	4.9	2.5	8.0
8/09/2019	15.8	11.9	21.4	15.1	11.6	20.2	38.2	23.6	55.0	257.1	880.9	0.0	2.5	1.1	5.9
9/09/2019	14.5	11.1	18.1	13.8	10.8	16.9	38.1	25.7	56.6	262.9	964.0	0.0	2.7	0.7	6.1
10/09/2019	12.2	4.9	19.1	12.3	6.6	17.9	57.8	35.3	93.7	238.8	930.5	0.0	1.5	0.0	5.3
11/09/2019	13.1	3.3	22.7	13.1	4.0	21.6	66.0	28.6	96.9	258.5	895.1	0.0	0.1	0.0	2.3
12/09/2019	16.4	1.9	27.6	16.4	2.6	26.6	45.9	12.1	99.8	243.3	950.2	0.0	1.9	0.1	5.8
13/09/2019	17.9	7.1	28.4	17.2	8.8	24.5	53.7	32.8	95.2	252.8	898.8	0.0	0.5	0.1	3.8
14/09/2019	15.2	3.4	25.7	14.9	4.6	24.4	64.5	20.6	99.2	272.1	916.2	0.0	1.2	0.1	5.7
15/09/2019	16.1	3.6	29.6	16.2	4.0	28.5	56.1	14.1	100.0	269.5	921.1	0.0	0.9	0.0	3.7
16/09/2019	18.5	3.2	32.2	18.5	4.7	30.7	43.0	7.1	82.8	233.6	1046.7	0.0	0.8	0.1	5.7
17/09/2019	13.3	10.7	16.4	12.5	9.9	15.8	84.1	70.7	100.0	42.3	249.4	16.0	2.0	0.2	5.8
18/09/2019	16.1	13.2	19.9	15.1	12.4	18.5	84.0	70.7	93.1	127.3	780.9	5.4	3.6	0.8	6.1
19/09/2019	18.3	13.9	24.4	17.4	13.5	23.0	82.0	49.7	100.0	190.6	999.9	0.2	1.7	0.3	6.8
20/09/2019	19.8	13.5	26.8	19.1	13.9	25.3	74.4	45.2	99.2	247.6	1032.1	0.0	1.4	0.4	4.6
21/09/2019	20.3	12.5	29.3	20.0	12.6	28.1	67.8	30.2	99.2	187.6	819.7	0.0	0.8	0.0	4.5
22/09/2019	20.1	13.7	26.6	19.8	13.9	25.3	72.0	46.7	96.1	238.1	1026.3	1.0	1.7	0.1	5.6
23/09/2019	18.0	9.8	24.7	17.5	10.0	23.3	50.3	18.7	99.0	292.7	982.4	0.0	1.5	0.1	5.6
24/09/2019	14.2	3.3	24.1	14.1	3.4	22.6	47.4	18.1	88.9	298.3	972.4	0.0	0.5	0.1	2.7
25/09/2019	14.6	3.8	23.3	14.1	3.9	22.0	61.4	31.4	95.1	266.7	987.0	0.0	0.7	0.0	5.4
26/09/2019	18.4	11.2	26.3	17.7	11.5	24.8	68.7	25.1	97.4	240.5	993.9	0.0	0.9	0.1	5.6
27/09/2019	19.5	10.9	28.6	19.2	11.2	27.4	51.7	11.8	100.0	274.4	964.0	0.0	1.7	0.0	5.5
28/09/2019	18.2	9.7	28.1	17.8	10.8	27.0	44.9	18.3	82.5	285.2	949.4	0.0	0.9	0.1	7.3
29/09/2019	16.7	6.6	27.1	16.4	6.8	26.0	63.4	23.5	94.7	282.8	995.4	0.0	0.2	0.0	3.6
30/09/2019	17.0	11.8	22.9	16.3	11.8	21.3	71.9	47.6	94.5	190.2	1061.6	0.0	2.3	0.1	7.0
	<b>16.7</b>	<b>1.9</b>	<b>32.5</b>	<b>16.4</b>	<b>2.6</b>	<b>31.9</b>	<b>59.7</b>	<b>7.1</b>	<b>100.0</b>	<b>236.0</b>	<b>1061.6</b>	<b>23.4</b>	<b>1.5</b>	<b>0.0</b>	<b>76.6</b>

