

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

January 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 Nov 2019				Pool
SW02	27 Nov 2019				Dry
SW03	27 Nov 2019				Dry
SW04	27 Nov 2019				Pool
SW05	27 Nov 2019				Dry
SW06	27 Nov 2019				Dry
SW07	27 Nov 2019				Dry
SW08	27 Nov 2019				Dry
SW12	20 Nov 2019	8.6	7370	75	
SW14	20 Nov 2019	8.9	871	<5	
SW15	20 Nov 2019	8.6	5820	40	
SW27	27 Nov 2019				Dry
SW31	20 Nov 2019	8.8	770	20	
SW32a	27 Nov 2019				Dry
SW38	20 Nov 2019	8.9	9810	12	
SW39	27 Nov 2019				Dry
SW40	27 Nov 2019				Pool
SW51	27 Nov 2019				Dry
SW52	27 Nov 2019	9.7	1280	20	
Wombat Dam	20 Nov 2019				Dry
Milk Can Dam	20 Nov 2019				Dry
Rug Dump Dam	20 Nov 2019				Dry
Montrose East 1	20 Nov 2019				Dry
Montrose East 2	20 Nov 2019				Dry

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

Date sampled: 18 November 2019
Date obtained: 24 November 2019
Date published: 20 January 2020

Table 2 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	18 Nov 2019	2.6	3.3	78.79	
D19	18 Nov 2019	4.1	6.4	64.06	
D21	18 Nov 2019	2.1	2.4	87.50	
D22	18 Nov 2019	4.3	5.0	86.00	

Monitoring Frequency: Continuous
 Sampling Method: AM22
 Limits: Nil

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 20 January 2020

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
1/11/2019	82.9	25.6	85.1	26.6	83.5	19.9	96.5	26.5
2/11/2019	48.4	25.7	58.5	26.7	45.4	20.0	68.3	26.7
3/11/2019	39.4	25.8	52.1	26.8	41.3	20.1	47.8	26.7
4/11/2019	10.0	25.7	8.8	26.7	6.0	20.0	8.2	26.7
5/11/2019	14.1	25.7	10.7	26.7	14.1	20.0	14.0	26.6
6/11/2019	11.4	25.6	20.0	26.7	10.0	20.0	10.0	26.6
7/11/2019	68.6	25.8	79.6	26.8	66.6	20.1	51.4	26.6
8/11/2019	69.1	25.9	72.9	27.0	70.7	20.3	56.7	26.7
9/11/2019	28.7	25.9	17.0	27.0	18.3	20.3	15.7	26.7
10/11/2019	22.4	25.9	29.9	27.0	27.6	20.3	21.4	26.7
11/11/2019	22.1	25.9	27.3	27.0	14.2	20.3	22.6	26.7
12/11/2019	106.4	26.1	139.8	27.3	104.4	20.6	84.1	26.9
13/11/2019	38.7	26.2	38.3	27.4	35.9	20.6	30.6	26.9
14/11/2019	33.9	26.2	40.5	27.4	25.4	20.6	21.1	26.9
15/11/2019	34.6	26.2	46.9	27.5	23.5	20.6	21.5	26.8
16/11/2019	69.7	26.4	76.0	27.6	69.7	20.8	67.4	27.0
17/11/2019	79.5	26.5	84.0	27.8	86.9	21.0	71.7	27.1
18/11/2019	46.8	26.6	49.1	27.9	38.3	21.0	37.4	27.1
19/11/2019	49.1	26.7	70.9	28.0	42.0	21.1	67.5	27.3
20/11/2019	50.4	26.7	61.5	28.1	72.5	21.3	66.8	27.4
21/11/2019	108.2	27.0	116.2	28.4	114.1	21.6	115.4	27.7
22/11/2019	90.5	27.2	111.5	28.6	107.8	21.8	106.5	27.9
23/11/2019	56.9	27.3	64.6	28.7	75.1	22.0	58.6	28.0
24/11/2019	23.6	27.3	24.9	28.7	28.1	22.0	24.4	28.0
25/11/2019	33.0	27.3	29.0	28.7	36.0	22.0	32.6	28.0
26/11/2019	166.4	27.7	197.6	29.2	186.7	22.5	148.9	28.4
27/11/2019	48.4	27.8	45.4	29.3	57.8	22.7	67.0	28.5
28/11/2019	132.6	28.1	143.8	29.6	116.9	22.9	117.9	28.8
29/11/2019	105.0	28.3	130.6	29.9	122.9	23.2	105.5	29.0
30/11/2019	72.4	28.5	85.1	30.1	75.0	23.4	75.8	29.1

Monitoring Frequency: Every blast
 Airblast Overpressure Limit: 120 dBL G
 round Vibration Limit: 10mm/s

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 20 January 2020

Table 5 - WCPL Blast Monitoring Results

Date & Time	ID	BM02 - Kelly		BM05 - Muller		BM07 - Thelander	
		dBL	mm/sec	dBL	mm/sec	dBL	mm/sec
6 Nov 2019 14:30:09	M_WestDozer_448	87.4	0.05	98.0	0.24	98.1	0.24
6 Nov 2019 14:39:50	M_WMA_444	85.3	0.17	100.3	0.82	96.3	0.57
6 Nov 2019 14:48:47	M_WRC_443	110.1	0.13	100.4	0.26	93.6	0.17
8 Nov 2019 12:10:34	M_WMA_450	107.4	0.05	99.6	0.21	95.2	0.12
14 Nov 2019 15:49:20	W_WMA_445	90.0	0.10	91.2	0.39	92.7	0.33
14 Nov 2019 15:58:25	M_MWA_449	88.3	0.27	101.2	1.02	95.7	0.60
14 Nov 2019 16:04:46	M_WTA_454	84.8	0.06	107.5	0.78	99.5	0.60
21 Nov 2019 15:35:47	ME_WTA_455	96.5	0.20	98.4	0.23	93.6	0.11
21 Nov 2019 15:51:57	M_WRA_453	94.6	0.08	99.0	0.17	92.1	0.16
21 Nov 2019 15:57:41	M_WMA_451	80.2	0.17	98.0	1.01	90.3	0.45

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

Date sampled: continuous
 Date obtained: 1 December 2019
 Date published: 20 January 2020

Table 4 - 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
1/11/2019	23.2	11.2	33.9	23.4	12.3	33.4	52.5	20.2	86.1	322.9	1034.8	0.0	0.6	0.0	6.3
2/11/2019	24.8	13.4	34.5	25.0	14.4	33.8	51.9	20.3	90.5	295.1	1092.2	0.0	0.7	0.0	4.2
3/11/2019	23.9	15.1	32.9	24.1	16.0	32.1	61.9	30.8	97.5	238.5	1084.8	9.2	2.7	0.2	6.3
4/11/2019	22.4	16.9	28.5	22.3	17.4	28.1	63.7	27.0	97.9	285.9	1268.2	0.6	2.0	0.1	5.0
5/11/2019	17.2	11.2	22.9	17.3	11.8	22.3	59.5	26.1	91.0	227.6	1142.6	1.8	0.8	0.2	6.3
6/11/2019	19.6	7.0	29.6	19.7	8.1	29.1	47.4	12.9	98.2	380.4	1138.8	0.0	2.9	0.1	6.5
7/11/2019	25.7	18.7	33.0	25.7	19.1	32.3	21.1	9.7	33.1	366.3	1095.8	0.0	4.5	1.8	8.2
8/11/2019	24.7	18.6	31.3	24.6	18.7	30.6	26.7	17.1	39.7	368.7	1134.0	0.0	4.1	1.8	9.7
9/11/2019	18.8	13.3	24.0	18.6	13.9	23.2	25.8	8.9	50.3	383.1	1172.8	0.0	2.7	0.9	5.4
10/11/2019	20.6	14.1	29.9	20.4	14.3	28.9	33.6	17.6	67.9	380.9	1142.7	0.0	0.6	0.6	6.5
11/11/2019	20.7	9.9	30.5	21.1	11.1	29.9	47.4	17.3	85.8	363.4	1191.8	0.0	1.4	0.1	4.7
12/11/2019	25.5	8.2	36.7	25.7	9.7	36.0	27.8	5.8	72.7	387.2	1153.5	0.0	3.3	0.0	8.3
13/11/2019	21.8	12.7	28.6	21.8	14.2	27.9	29.5	7.7	82.8	400.1	1180.5	0.0	1.2	0.1	5.7
14/11/2019	20.6	7.0	30.7	21.2	8.8	30.2	35.2	13.5	76.7	381.3	1147.1	0.0	1.9	0.1	5.4
15/11/2019	24.0	9.8	33.9	24.6	11.8	33.3	27.2	8.8	66.0	397.3	1166.0	0.0	2.9	0.1	7.5
16/11/2019	21.6	15.0	30.1	21.9	16.4	29.5	48.0	21.8	75.6	308.0	943.9	0.0	1.5	0.1	7.0
17/11/2019	20.8	15.6	28.3	20.8	16.9	27.7	60.1	26.9	85.0	248.7	1019.2	0.0	1.8	0.1	7.4
18/11/2019	23.2	15.4	31.6	23.1	15.5	31.2	47.6	17.1	82.3	355.0	1106.4	0.0	0.9	0.1	4.6
19/11/2019	25.2	10.1	38.3	25.7	11.2	37.7	31.8	8.3	71.4	381.0	1148.2	0.0	0.3	0.1	7.3
20/11/2019	22.9	19.0	29.6	22.5	19.2	28.6	56.5	34.4	72.2	356.0	1121.9	0.0	3.0	1.5	7.1
21/11/2019	26.5	16.8	37.6	26.4	17.6	37.2	53.9	15.0	85.9	347.0	1075.1	0.0	0.2	0.2	4.4
22/11/2019	27.6	18.3	40.3	27.7	19.1	39.6	52.6	16.4	88.3	324.4	1070.7	0.6	1.0	0.0	8.4
23/11/2019	22.9	18.7	28.9	22.7	18.8	27.9	74.5	52.0	93.5	220.4	906.6	3.4	1.9	0.1	6.1
24/11/2019	21.2	19.0	26.1	21.1	19.1	25.5	73.0	54.5	88.9	176.1	1046.0	0.0	2.0	0.8	4.5
25/11/2019	24.5	18.3	34.2	24.4	18.6	33.4	61.6	28.7	89.8	268.8	1136.2	0.0	1.4	0.1	9.9
26/11/2019	25.3	15.0	36.4	25.4	15.7	35.7	48.8	17.7	94.4	295.5	1136.5	3.8	4.0	0.0	33.9
27/11/2019	20.0	9.1	29.3	20.0	10.4	28.5	39.6	14.9	75.7	400.0	1177.5	0.0	0.7	0.0	6.0
28/11/2019	22.6	10.8	34.8	22.7	11.7	34.3	51.8	10.6	89.4	353.1	1135.1	0.0	1.0	0.1	6.8
29/11/2019	26.4	18.3	36.6	26.4	18.6	36.2	48.1	11.1	84.6	233.7	1204.5	0.0	1.4	0.2	6.5
30/11/2019	26.1	17.8	38.2	26.4	19.4	37.5	43.9	12.8	80.4	277.7	1265.5	0.0	0.7	0.1	7.6
	23.0	7.0	40.3	23.1	8.1	39.6	46.8	5.8	98.2	324.1	1268.2	19.4	1.8	0.0	33.9

