

**WAMBO COAL
ENVIRONMENTAL REPORTING
1 APRIL 2020 – 30 APRIL 2020**

June 2020

**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	06/04/2020	6.6	358	7	
SW02	06/04/2020	6.8	327	<5	
SW03	06/04/2020	6.8	322	<5	
SW04	06/04/2020	7.3	366	<5	
SW05	06/04/2020				Pool (No Flow)
SW06	06/04/2020	6.8	300	<5	
SW07	06/04/2020	6.9	322	<5	
SW08	06/04/2020	6.8	323	<5	
SW12	15/04/2020	8.7	5820	10	
SW14	16/04/2020	8.3	600	45	
SW15	06/04/2020	8.8	3520	44	
	16/04/2020	8.3	5240	33	
SW27a	06/04/2020	8.2	661	23	
SW31	15/04/2020	9.0	2370	45	
SW32a	06/04/2020	7.8	537	21	
SW38	15/04/2020	8.9	4560	<5	
SW39	06/04/2020				Pool (No Flow)
SW40	06/04/2020	7	320	<5	
SW51	16/04/2020	8	664	114	
SW52	15/04/2020	8.4	574	40	
Wombat Dam	16/04/2020				No Access
Milk Can Dam	15/04/2020	8.5	1508	42	
Rug Dump Dam	15/04/2020				No water
Montrose East 1	06/04/2020	7.2	304	288	
Montrose East 2	06/04/2020	7.9	305	114	

Monitoring Frequency: Every 2 months
 Sampling Method: Grab sample
 Limits: Nil

Date sampled: 15, 27, 28, and 30 April 2020
 Date obtained: 06 May 2020
 Date published: 16 June 2020

Table 2 - WCPL Groundwater Results

Site	Date	pH	EC (µS/cm)	Depth	Comments
P106	28/04/2020	6.8	674	10.23	
P109	28/04/2020	6.7	638	4.94	
P114	28/04/2020	6.9	6220	10.56	
P116	28/04/2020	6.8	3740	7.23	
P202	28/04/2020	7.4	3110	7.6	
P206	27/04/2020	8	2060	21.05	
P301	27/04/2020	6.4	366	10.35	
P315	27/04/2020	6.3	370	3.93	
GW02	27/04/2020	6.8	508	6.28	
GW08	27/04/2020	6.7	2010	7.01	
GW09	28/04/2020				Dry
GW11	27/04/2020	6.9	553	4.12	
GW12	27/04/2020			12.77	Insufficient Water
GW13	30/04/2020	7	2240	7.24	
GW15	30/04/2020	7.1	691	12.06	
GW16	27/04/2020	7.2	411	4.26	
GW17	27/04/2020	7.1	5080	8.39	
GW21	27/04/2020				
GW22	28/04/2020	8.4	7020	36.24	
GW23 (Site 4A)	27/04/2020		6.7	456	
GW24 (Site 4B)	27/04/2020	6.7	456	4.36	
GW25 (Site 9A)	27/04/2020	7.1	1018	4.33	
GW26 (Site 9B)	27/04/2020	6.6	913	7.02	
GW27 (Instream 1)	27/04/2020	6.6	450	1.48	
GW28 (Instream 3)	27/04/2020	6.5	445	1.33	
GW30 (Site 11)	27/04/2020	7.0	511	5.26	
P1	15/04/2020	6.9	9080	28.21	
P11	15/04/2020				Dry
P16	15/04/2020	7.0	7360	8.73	
P20	15/04/2020	7.1	5070	7.61	

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

Date sampled: 16 April 2020
Date obtained: 27 April 2020
Date published: 16 June 2020

Table 3 - WCPL Depositional Dust Gauges

Site	Date	Ash (g/m ²)	Total Insoluble Matter (g/m ²)	AR/IS Ratio	Comment
D11	16-Apr-20	1.3	1.9	68	
D19	16-Apr-20	2.2	3.5	63	
D21	16-Apr-20	0.8	1.2	67	
D22	16-Apr-20	1.4	2.0	70	

Monitoring Frequency: Continuous
 Sampling Method: AM22
 Limits: Nil

Date sampled: Continuous
 Date obtained: Continuous
 Date published: 16 June 2020

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
01/04/2020	19.1	29.81	16.8	28.06	17.8	27.13	23.5	30.70
02/04/2020	16.7	29.66	16.3	27.93	12.1	26.97	16.0	30.55
03/04/2020	13.3	29.49	10.7	27.75	9.4	26.78	9.4	30.32
04/04/2020	15.2	29.34	16.6	27.63	12.7	26.63	12.4	30.13
05/04/2020	17.4	29.22	21.7	27.57	15.3	26.51	14.5	29.97
06/04/2020	16.8	29.09	18.3	27.47	15.2	26.39	16.3	29.83
07/04/2020	15.6	28.95	12.0	27.31	13.0	26.25	23.1	29.76
08/04/2020	12.4	28.78	13.2	27.17	8.7	26.08	24.8	29.71
09/04/2020	18.6	28.68	17.2	27.07	13.1	25.94	22.1	29.63
10/04/2020	9.0	28.49	9.1	26.89	6.0	25.74	8.4	29.42
11/04/2020	21.4	28.42	16.2	26.79	11.9	25.61	12.7	29.26
12/04/2020	21.7	28.35	16.6	26.69	14.5	25.50	23.6	29.21
13/04/2020	21.2	28.28	19.5	26.62	13.7	25.38	24.3	29.16
14/04/2020	20.8	28.21	24.1	26.60	18.0	25.31	26.9	29.14
15/04/2020	21.2	28.15	19.5	26.53	13.7	25.20	24.3	29.09
16/04/2020	24.9	28.11	29.0	26.55	15.9	25.11	15.6	28.96
17/04/2020	17.9	28.02	37.7	26.66	13.2	25.00	12.6	28.81
18/04/2020	20.6	27.95	26.6	26.65	14.7	24.91	25.0	28.78
19/04/2020	19.4	27.87	26.6	26.65	17.1	24.84	27.2	28.76
20/04/2020	20.6	27.81	30.3	26.69	12.8	24.73	11.8	28.61
21/04/2020	20.7	27.75	36.0	26.77	13.0	24.62	11.6	28.46
22/04/2020	19.0	27.67	36.3	26.85	13.7	24.52	12.8	28.32
23/04/2020	25.4	27.65	48.3	27.04	17.3	24.46	17.1	28.22
24/04/2020	32.2	27.69	65.0	27.37	21.5	24.43	25.8	28.20
25/04/2020	25.1	27.67	31.2	27.41	17.1	24.37	17.6	28.11
26/04/2020	30.4	27.69	34.0	27.46	21.1	24.34	20.4	28.04
27/04/2020	21.1	27.63	27.3	27.46	21.5	24.32	21.3	27.99
28/04/2020	20.2	27.57	23.1	27.42	17.7	24.26	23.6	27.95
29/04/2020	18.5	27.49	40.7	27.53	12.5	24.16	19.1	27.88
30/04/2020	10.1	27.35	8.0	27.37	10.1	24.05	17.2	27.79

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

Date sampled: Continuous
Date obtained: Continuous
Date published: 16 June 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
2 Apr 2020 15:28	M_27WMA_487_2	81.5	0.25	108.3	0.55	102.7	0.35
2 Apr 2020 15:28	M_27WMA_490_2	81.5	0.25	108.3	0.55	102.7	0.35
11 Apr 2020 12:04	M_27WMA_497a	99.8	0.04	99.0	0.12	101.7	0.09
17 Apr 2020 12:13	M_27WWA_485	86.6	0.06	100.0	0.37	96.7	0.38
17 Apr 2020 12:08	M_27WMA_496	105.3	0.11	101.3	0.31	92.9	0.17
24 Apr 2020 12:00	M_27WRC_497	94.7	0.17	104.1	0.58	99.0	0.34

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

Date sampled: continuous
 Date obtained: continuous
 Date published: 16 June 2020

Table 6 - 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
01/04/2020	22.3	18.2	28	22.4	18.4	27.5	79.7	50.3	99.4	198.3	1003.5	0	1.1	0.1	4
02/04/2020	19.9	16	24.9	20.1	16.5	24.7	90.7	62.9	99.9	105.1	763.7	6	0.8	0	4.3
03/04/2020	20.4	17.8	24.8	20.5	17.8	24.4	91.7	66.8	100	107.8	683.6	20	0.8	0.2	2.9
04/04/2020	20.9	16.5	25.6	21.3	16.9	25.3	69.7	37.6	100	245.9	906	13.2	3.5	0.2	9.5
05/04/2020	17.9	13.3	23.6	18.1	13.8	23.2	58.5	37.9	83.5	257.2	919.2	0	3.2	0.5	6
06/04/2020	17.7	11.5	24.1	17.9	12.5	23.7	67.8	44.5	88.2	223.6	1023.8	0	0.7	0.1	4
07/04/2020	17.8	15	21.4	18	15.5	21.1	75.3	56.4	90.2	138.2	811.5	0	1.6	0.2	4.4
08/04/2020	17.4	14.1	20.9	17.5	14.5	20.7	80.2	66.3	95.9	102	724.2	0	1.4	0.2	3.3
09/04/2020	18.1	15.9	20.5	18.3	16.2	20.6	82.5	71.4	92.5	74.6	402.2	0	1.2	0.5	3.7
10/04/2020	18	16.5	19.8	18.1	16.7	19.6	92.2	83.2	99.7	62.3	568.2	5.6	1.1	0.1	4.6
11/04/2020	19.6	15.1	26	19.7	15.5	25.8	57.2	32.5	92	249.2	891.1	0	4	1.2	8.8
12/04/2020	15.6	8.3	22.3	16	9.7	21.7	54.5	32.6	94.6	257.5	897.4	0	0.7	0.2	5.4
13/04/2020	14.3	6.2	23.5	14.8	6.6	23	75.6	36.8	99.8	206	928.8	0	0.1	0.1	1.9
14/04/2020	16.2	7.4	26.4	16.6	8.2	26	74.5	35.1	100	241.4	850.7	0	0.7	0	3.4
15/04/2020	18	8.8	29	18.5	9.3	28.8	71.8	30.6	99.6	231.5	823.4	0	0.9	0.1	3.5
16/04/2020	22.4	13.3	28.1	22.8	15.2	27.9	58.9	42.6	94.3	179.7	879.4	0	2.6	0.1	6.1
17/04/2020	21.4	12.9	27.5	21.9	15	27.1	51.5	29.9	83.4	221.3	830.6	0	2.3	0.1	5
18/04/2020	16	9.3	24.4	16.5	11	24	62.1	34.2	89.1	227.4	890.9	0	1.1	0.1	4.3
19/04/2020	14.3	5.8	23.9	14.8	6.3	23.6	70.9	27.5	99.8	223.7	798	0	0.2	0	2.1
20/04/2020	15.5	7.2	21.9	16.2	9.2	21.6	66	38.8	98.8	126.5	911.8	0.2	1.3	0.1	4.5
21/04/2020	18.7	11.8	25.7	19.2	12.3	25	60.3	36.6	89.5	154.8	901.8	0	1.4	0	3.9
22/04/2020	17.6	9.6	26.5	18.5	10.8	26.1	66.4	33.5	97.3	213.7	771.6	0	0.8	0.1	3.3
23/04/2020	15.3	5.6	24.6	16.2	6.3	24.3	66.9	28	99.5	213.4	784.8	0	0.8	0	3.6
24/04/2020	18.3	9.3	27.8	19	10.2	27.5	61.5	31.1	95.7	203.9	745.3	0	1.3	0.1	4.9
25/04/2020	16.6	7.8	27.5	17.4	8.9	27.1	71.3	31.5	98.3	197.8	728.8	0	0.7	0.1	3.5
26/04/2020	18.9	6.8	28.5	19.4	7.8	28.1	60.5	29.4	99.7	181.9	715.1	0	1.7	0.1	6.2
27/04/2020	18.1	13.1	21	18.5	15.1	20.8	77.3	61.7	94.7	97	795.8	0	1.6	0.3	3.8
28/04/2020	18.9	15.1	24.2	19.3	16.2	23.7	83.1	59.1	98.4	125.8	847.9	0	1.2	0	4.1
29/04/2020	20.8	15.8	28.5	21	15.8	28	76.1	42.3	99.8	151	703.5	0	1	0	4.1
30/04/2020	14.5	10	21.4	15	10.7	21.4	89.4	76.6	99.3	34.4	573.6	13	2.7	0.1	6.6
	18.0	5.6	29	18.5	6.3	28.8	71.5	27.5	100	175.1	1023.8	58	1.42	0.16	1.9