

**WAMBO COAL
POLLUTION MONITORING DATA
1 DECEMBER 2022 – 31 DECEMBER 2022
DECEMBER MONTHLY REPORT**

Published 16 January 2023

**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**

The following pollution monitoring data is published as a requirement of the Wambo Environmental Protection Licence (EPL) 529. A link to EPL529 can be found on the Environmental Protection Authority (EPA) Public Register. A link to the EPA's public register can be found at: <https://www.epa.nsw.gov.au/licensing-and-regulation/public-registers/about-prpoeo>

Monthly interim reports will be provided on a fortnightly basis until a final monthly report is produced when all monthly data is available.

The location of each sampling point is provided in 'Plan 2672-2' at the end of this document.

Monitoring Data

Surface and Mine Water Dam Monitoring

Monitoring Frequency: Once per month

Sampling Method: Grab sample

Limits: Nil

Table 1 - WCPL Surface and Mine Water Dam Results

EPL ID	Site ID	Date	pH	EC (µS/cm)	TSS (mg/L)	Comments
Point 24	SW01	23/12/2022	7.28	774	12	Dry Dry
Point 25	SW02	23/12/2022	7.39	743	7	
Point 26	SW03	23/12/2022	7.38	742	12	
Point 27	SW04	23/12/2022				
Point 28	SW05	23/12/2022				
Point 29	SW06	23/12/2022	6.99	347	<5	
Point 30	SW07	23/12/2022	7.34	510	<5	
Point 31	SW08	23/12/2022	8.01	3080	8	
Point 33	SW15	20/12/2022	8.71	6020	<5	Dry Dry Dry
Point 34	SW27a	23/12/2022				
Point 36	SW32a	23/12/2022				
Point 39	SW39	23/12/2022				
Point 40	SW40	23/12/2022	7.46	766	7	Dry
Point 41	SW41	23/12/2022				

Water Discharge Monitoring

Monitoring Frequency: Continuous during discharge (EC, pH, Turbidity)
 Daily during discharge (TSS, Volume)
 Sampling Method: In line instrumentation (EC, pH Turbidity)
 Grab sample (TSS)
 Limits: pH- 6.5 to 9.5
 TSS – 120
 Volume – 250ML/day
 Date sampled: Continuous
 Date obtained: Continuous

Table 2 - WCPL Discharge Monitoring

Site	Date	pH (Avg)	Conductivity (µS/cm) Avg	TSS (mg/L)	Turbidity (NTU)	Volume (ML/day)	Comments
Point 4	No Discharges in December						
Point 19	No Discharges in December						

Sewerage Treatment Monitoring

Monitoring Frequency: Quarterly during discharge
 Sampling Method: Grab sample
 Limits: Nil
 Date sampled: No Samples in December
 Date obtained: No Samples in December

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms (CFU/100mL)	Comments
Point 43	STPD3	-	-	-	No discharge
Point 52	STPD2				No Sample
Point 56	STP1	-	-	-	No discharge

PM10 Monitoring

Monitoring Frequency: Continuous

Sampling Method: AM22

Limits: Nil

Date sampled: Continuous

Date obtained: Continuous

Table 4 - WCPL PM10 Results

Date	PM02 - Wambo Road (Caban) (EPA14)		PM03 - Thelander (EPA15)		PM04 - Muller (EPA16)		PM05 - Kelly (EPA 53)	
	PM10 24 Hour Result (ug/m ³)	Annual Average	PM10 24 Hour Result (ug/m ³)	Annual Average	PM10 24 Hour Result (ug/m ³)	Annual Average	PM10 24 Hour Result (ug/m ³)	Annual Average
1/12/2022	17.9	10.24	10.5	7.44	21.1	11.80	21.2	13.58
2/12/2022	16.9	10.27	10.4	7.46	20.8	11.84	10.9	13.58
3/12/2022	14.7	10.30	8.6	7.47	16.5	11.86	14.0	13.58
4/12/2022	12.3	10.31	8.5	7.48	16.3	11.86	20.6	13.59
5/12/2022	19.8	10.32	10.3	7.46	16.1	11.85	39.1	13.64
6/12/2022	22.8	10.34	15.1	7.47	28.8	11.88	24.4	13.66
7/12/2022	13.7	10.34	6.6	7.46	12.6	11.85	30.0	13.69
8/12/2022	15.4	10.35	7.8	7.46	15.4	11.87	23.5	13.72
9/12/2022	23.1	10.39	17.6	7.49	27.6	11.91	14.7	13.71
10/12/2022	18.5	10.42	14.3	7.52	27.7	11.96	17.7	13.74
11/12/2022	19.2	10.44	9.9	7.53	22.8	12.00	29.6	13.77
12/12/2022	18.5	10.48	13.9	7.56	19.8	12.03	25.5	13.82
13/12/2022	14.1	10.48	6.0	7.56	10.1	12.02	23.4	13.86
14/12/2022	11.1	10.46	7.5	7.55	11.1	11.98	22.8	13.87
15/12/2022	18.4	10.46	12.4	7.55	12.6	11.94	23.0	13.89
16/12/2022	16.6	10.43	17.6	7.55	20.8	11.93	19.1	13.86
17/12/2022	13.2	10.42	13.7	7.57	17.4	11.92	16.6	13.85
18/12/2022	7.8	10.38	11.4	7.58	16.3	11.91	9.8	13.81
19/12/2022	16.8	10.38	17.6	7.57	27.4	11.93	21.6	13.79
20/12/2022	18.3	10.38	19.4	7.59	24.3	11.95	17.8	13.73
21/12/2022	17.9	10.37	16.5	7.61	19.8	11.96	15.6	13.71
22/12/2022	23.9	10.36	21.8	7.60	28.6	11.96	17.7	13.67
23/12/2022	14.4	10.34	15.2	7.62	NaN	11.93	20.0	13.67
24/12/2022	10.8	10.31	12.6	7.64	NaN	11.91	16.5	13.66
25/12/2022	14.2	10.31	16.6	7.66	NaN	11.90	17.0	13.66
26/12/2022	9.1	10.31	11.5	7.67	NaN	11.90	7.5	13.65
27/12/2022	14.8	10.32	18.5	7.70	NaN	11.90	19.8	13.67
28/12/2022	25.1	10.36	20.4	7.73	NaN	11.90	12.8	13.69
29/12/2022	18.6	10.40	19.6	7.76	21.9	11.94	19.7	13.72
30/12/2022	18.7	10.42	27.6	7.82	22.6	11.97	26.7	13.78
31/12/2022	14.1	10.43	22.2	7.86	23.9	12.00	16.4	13.81

*NaN >75% of data collected during period

Meteorological Monitoring

Monitoring Frequency: Continuous

Sampling Method: Site Meteorological Station EPA17

Limits: Nil

Date sampled: continuous

Date obtained: continuous

Table 5 - WCPL Meteorology

Date	Temperature (2m)			Temperature (10m)			Humidity			Solar Radiation		RAIN	Wind Speed at 10m			Wind Direction at 10m	Sigma Theta		
	Average	Min	Max	Average	Min	Max	Average	Min	Max	Average	Max	Sum (mm)	Average	Min	Max	Average	Average	Max	Min
1/12/2022	19.2	16.1	22.7	18.8	15.8	21.6	76.0	58.1	92.0	251.3	888.0	0.0	2.8	0.8	7.1	122.9	17.6	33.2	10.3
2/12/2022	19.2	16.1	23.7	18.8	15.9	22.4	77.4	54.1	99.3	215.7	1294.8	0.0	3.0	0.4	6.4	135.2	17.0	32.5	7.4
3/12/2022	19.1	12.8	26.2	18.8	13.1	25.1	78.8	46.5	100.0	277.0	1291.8	0.0	2.0	0.2	5.4	135.5	21.5	58.8	6.2
4/12/2022	19.6	11.6	26.8	19.2	12.1	25.3	78.3	51.0	100.0	335.2	1196.0	0.0	1.9	0.2	4.7	131.8	22.6	69.7	5.5
5/12/2022	24.4	11.6	34.6	24.0	12.0	33.6	64.8	33.0	100.0	389.2	1240.1	0.0	2.2	0.1	4.6	261.3	21.4	82.0	7.9
6/12/2022	23.4	18.4	29.7	22.8	18.2	28.4	74.2	45.3	100.0	374.0	1263.9	0.0	2.5	0.1	6.0	116.5	22.8	85.0	8.0
7/12/2022	20.5	12.5	27.0	20.2	12.6	26.2	74.1	40.5	100.0	154.5	865.0	0.0	2.5	0.1	7.3	259.6	23.3	67.7	7.2
8/12/2022	21.0	14.4	28.8	20.3	14.2	27.6	67.6	22.8	100.0	426.5	1203.5	0.0	3.4	0.7	5.8	235.7	21.7	89.4	9.2
9/12/2022	17.4	10.2	24.7	17.0	10.2	23.7	74.9	43.6	100.0	288.7	1186.1	0.0	1.9	0.0	5.7	138.1	28.4	88.2	4.8
10/12/2022	18.5	15.1	22.8	18.0	15.3	21.8	78.6	63.7	100.0	206.4	859.0	0.0	2.4	1.0	5.2	130.4	18.8	41.4	6.7
11/12/2022	22.9	10.9	34.2	22.6	11.1	33.1	70.4	33.2	100.0	408.3	1204.8	0.0	1.6	0.1	4.3	236.5	27.2	84.1	7.5
12/12/2022	23.5	19.2	28.3	23.4	19.4	27.6	68.1	39.1	100.0	212.4	1092.5	3.6	3.2	0.1	7.5	254.1	23.5	76.2	7.4
13/12/2022	20.9	8.8	28.7	20.7	10.3	27.4	53.1	30.4	100.0	437.3	1228.9	0.0	2.6	0.2	4.5	263.5	25.0	83.5	11.7
14/12/2022	19.0	9.5	26.0	18.9	10.1	24.7	60.2	28.0	100.0	403.5	1257.5	0.0	2.6	0.1	6.5	225.4	25.9	88.4	6.2
15/12/2022	17.6	6.9	26.4	17.5	8.1	25.2	67.5	34.2	100.0	350.9	1213.7	0.0	2.0	0.1	5.6	192.8	35.4	101.6	8.9
16/12/2022	17.9	14.2	23.9	17.3	13.8	22.6	70.0	43.1	88.5	325.1	1217.6	0.0	2.6	0.6	5.1	120.3	22.1	72.5	11.2
17/12/2022	18.2	11.9	23.3	17.8	13.0	22.2	73.6	52.0	100.0	247.9	1075.5	0.0	2.4	0.4	4.7	134.0	21.0	45.9	7.0
18/12/2022	17.3	12.9	22.6	16.9	13.1	21.3	83.3	60.2	100.0	234.2	1153.8	0.0	2.3	0.4	5.5	134.7	20.4	64.2	8.0
19/12/2022	17.9	13.8	23.3	17.4	13.7	22.0	73.6	47.4	100.0	276.3	1124.1	0.0	2.5	0.4	5.0	139.4	21.5	48.8	10.7
20/12/2022	17.5	10.6	23.6	17.3	11.6	22.4	75.3	48.2	100.0	263.9	1034.5	0.0	2.2	0.1	4.9	133.4	23.8	71.6	7.1
21/12/2022	17.9	8.0	26.1	17.5	8.8	24.8	75.0	45.2	100.0	359.8	1292.7	0.0	1.9	0.1	5.1	135.0	25.9	77.0	7.5
22/12/2022	19.3	11.9	27.7	18.9	12.0	26.4	79.6	42.8	100.0	233.3	1253.4	3.2	1.1	0.1	3.9	163.8	29.4	93.4	7.9
23/12/2022	22.2	16.2	30.8	21.6	16.0	29.7	82.2	48.9	100.0	263.4	1031.3	20.8	1.8	0.1	4.4	235.4	27.7	90.0	7.0
24/12/2022	24.4	18.4	32.6	24.0	18.1	31.1	78.0	43.3	100.0	338.0	1330.8	3.4	2.0	0.0	4.7	234.0	29.1	100.0	9.4
25/12/2022	25.8	17.1	33.4	25.5	17.2	32.3	72.0	38.4	100.0	415.6	1211.5	0.0	1.7	0.1	4.0	155.5	29.4	80.7	11.0
26/12/2022	26.0	16.3	34.3	25.8	16.7	33.3	64.5	29.1	100.0	431.0	1255.2	0.0	2.0	0.1	5.8	122.6	26.9	87.0	8.6
27/12/2022	24.2	14.9	32.6	23.9	16.0	31.4	72.3	39.0	100.0	423.6	1219.3	0.0	2.6	0.2	6.6	140.3	22.4	84.8	6.9
28/12/2022	25.4	16.7	33.9	25.0	17.3	33.1	71.5	26.9	100.0	415.7	1219.4	0.0	1.4	0.0	3.6	139.2	26.9	91.7	7.7
29/12/2022	23.1	17.4	29.0	22.7	17.4	27.5	83.1	62.5	100.0	279.9	1142.7	0.0	2.2	0.1	4.4	159.9	22.3	83.4	6.7
30/12/2022	24.2	21.2	29.3	23.6	20.9	28.0	76.6	52.0	99.2	298.3	1096.9	0.0	3.1	1.1	6.0	121.3	19.3	34.9	12.6
31/12/2022	23.9	18.2	30.4	23.4	18.2	29.3	79.0	48.8	100.0	302.0	1294.8	0.0	2.5	0.5	5.3	125.4	20.9	43.1	11.6
	21.0	6.9	34.6	20.6	8.1	33.6	73.3	22.8	100.0	318.0	1330.8	31.0	2.3	0.0	7.5	169.3	24.0	101.6	4.8

This page is intentionally left blank.

