

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

Published 29 November 2022

**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	10/10/2022	6.90	216	81	
Point 25	SW02	10/10/2022	7.03	240	75	
Point 26	SW03	10/10/2022	6.95	232	77	
Point 27	SW04	10/10/2022	7.16	248	<5	
Point 28	SW05	10/10/2022	7.22	242	16	
Point 29	SW06	10/10/2022	6.86	168	<5	
Point 30	SW07	10/10/2022	7.06	257	10	
Point 31	SW08	10/10/2022	7.36	432	8	
Point 33	SW15	10/10/2022	8.72	5090	<5	
Point 34	SW27a	10/10/2022	7.38	244	71.1	
Point 36	SW32a	10/10/2022	7.42	245	21	
Point 39	SW39	10/10/2022	-	-	-	No Flow
Point 40	SW40	10/10/2022	6.90	216	75	
Point 41	SW41	10/10/2022	6.97	137	138	

Water Discharge Monitoring

Monitoring Frequency:

Sampling Method:

Limits:

Date sampled: Continuous

Date obtained: Continuous

Continuous during discharge (EC, pH, Turbidity)

Daily during discharge (TSS, Volume)

In line instrumentation (EC, pH Turbidity)

Grab sample (TSS)

pH- 6.5 to 9.5

TSS – 120

Volume – 250ML/day

Table 2 - WCPL Discharge Monitoring

Site	Date	pH (Avg)	Conductivity (µS/cm) Avg	TSS (mg/L)	Turbidity (NTU)	Volume (ML/day)	Comments	
Point 4	7/10/2022	8.84	5500.00	15	22	0.5		
	8/10/2022	8.84	5500.00	17	45	13.3		
	9/10/2022	8.84	5000.00	22	45	13.4		
	10/10/2022	8.84	5000.00	12	17	18.7		
	11/10/2022	8.53	5000.00	9	11	48.8		
	12/10/2022	8.53	5000.00	6.1	8	116.0		
	13/10/2022	8.24	4500.00	27	65	80.4		
	14/10/2022	7.88	4500.00	26	18	68.0		
	15/10/2022	8.24	4250.00	16	12	44.7		
	16/10/2022	8.74	4500.00	15	11	24.2		
	17/10/2022	8.4	4500.00	12	11	24.9		
	18/10/2022	8.4	4500.00	20	37	26.4		
	19/10/2022	8.75	4500.00	<5	20	53.7		
	20/10/2022	8.54	4500.00	12	21	53.3		
	21/10/2022	8.67	4500.00	13	18	42.2		
	22/10/2022	8.52	4500.00	11	11	48.4		
	23/10/2022	8.52	4500.00	15	19	57.6		
	24/10/2022	8.74	4500.00	14	20	60.8		
	25/10/2022	8.52	4500.00	19	23	87.5		
	26/10/2022	8.85	4500.00	20	17	80.4		
	27/10/2022	8.83	4500.00	10	9.4	56.2		
	28/10/2022	8.56	4500.00	28	22	38.33		
	29/10/2022	8.53	4500.00	17	15	35.35		
	30/10/2022	8.39	4500.00	28	21	35.64		
	Point 19	No Discharges in October						

Sewerage Treatment Monitoring

Monitoring Frequency: Quarterly during discharge

Sampling Method: Grab sample

Limits: Nil

Date sampled: No Samples in October

Date obtained: No Samples in October

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms (CFU/100mL)	Comments
Point 42	STPD2				No discharge
Point 52	STP2				No Sample
Point 55	STPD1	-	-	-	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
1/10/2022	9.1	10.40	9.0	7.70	13.1	12.14	10.2	14.02
2/10/2022	5.9	10.40	3.6	7.70	10.2	12.15	7.3	14.01
3/10/2022	9.7	10.41	8.2	7.72	11.7	12.17	6.6	14.00
4/10/2022	14.2	10.43	9.9	7.73	16.8	12.20	14.2	14.00
5/10/2022	9.5	10.42	5.3	7.73	13.5	12.21	13.6	13.94
6/10/2022	6.1	10.41	3.0	7.72	7.1	12.20	4.7	13.88
7/10/2022	7.8	10.40	6.7	7.71	8.6	12.20	7.4	13.82
8/10/2022	7.1	10.36	2.3	7.68	6.8	12.16	7.4	13.67
9/10/2022	6.3	10.29	3.6	7.61	6.3	12.08	NaN	13.64
10/10/2022	12.3	10.29	11.5	7.61	15.0	12.08	NaN	13.62
11/10/2022	13.0	10.26	8.4	7.60	15.0	12.05	16.0	13.55
12/10/2022	10.8	10.28	11.4	7.62	13.5	12.08	12.0	13.57
13/10/2022	16.3	10.31	9.9	7.64	18.0	12.11	13.4	13.58
14/10/2022	9.6	10.32	5.1	7.65	7.1	12.11	15.3	13.60
15/10/2022	11.8	10.33	8.3	7.66	13.6	12.12	12.1	13.61
16/10/2022	15.4	10.33	7.6	7.65	13.6	12.10	13.7	13.59
17/10/2022	10.3	10.34	8.4	7.66	13.2	12.12	8.7	13.57
18/10/2022	12.9	10.34	10.0	7.68	16.1	12.14	15.2	13.58
19/10/2022	13.6	10.35	10.9	7.68	14.9	12.14	11.1	13.56
20/10/2022	8.7	10.33	7.8	7.68	10.0	12.13	14.8	13.56
21/10/2022	7.8	10.33	6.3	7.68	8.6	12.12	8.1	13.55
22/10/2022	9.8	10.32	3.3	7.66	9.7	12.09	10.3	13.54
23/10/2022	10.1	10.31	7.7	7.65	10.1	12.07	10.6	13.52
24/10/2022	8.5	10.29	7.4	7.63	9.4	12.05	NaN	13.51
25/10/2022	10.9	10.28	7.7	7.62	7.8	12.04	NaN	13.50
26/10/2022	6.1	10.26	6.6	7.61	5.2	12.01	25.7	13.52
27/10/2022	8.2	10.23	5.2	7.59	5.4	11.97	NaN	13.51
28/10/2022	11.2	10.20	5.0	7.58	8.0	11.95	35.1	13.55
29/10/2022	9.0	10.15	0.2	7.55	8.8	11.93	30.2	13.55
30/10/2022	11.1	10.09	7.4	7.50	12.2	11.90	NaN	13.41
31/10/2022	15.6	10.08	10.3	7.47	14.1	11.87	NaN	13.39

*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			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
1/10/2022	14.7	9.9	19.1	14.5	10.2	18.4	73.9	51.6	100.0	263.8	1020.5	0.4	2.2	0.5	4.8	147.8	19.8	39.4	9.8
2/10/2022	13.5	8.7	20.2	13.5	9.2	19.6	79.6	38.9	100.0	262.2	1113.6	2.2	1.3	0.1	4.6	155.8	26.6	84.7	7.8
3/10/2022	12.5	4.8	20.0	12.6	4.8	19.6	76.7	42.6	100.0	267.3	1125.7	0.4	1.2	0.1	3.8	145.0	27.7	80.5	8.4
4/10/2022	15.5	5.6	24.2	15.6	6.1	23.7	67.2	34.5	100.0	296.0	1070.5	0.0	1.2	0.1	3.0	177.2	28.3	79.6	9.4
5/10/2022	15.2	14.1	17.1	15.1	13.9	16.9	87.9	58.1	100.0	43.4	198.3	13.4	1.9	0.6	3.5	138.6	18.4	32.5	11.9
6/10/2022	16.0	13.6	19.6	15.8	13.4	19.2	90.3	68.9	100.0	98.6	572.7	2.2	0.9	0.3	1.8	180.1	20.9	63.4	8.4
7/10/2022	15.2	10.6	19.0	15.1	10.8	18.7	97.7	82.8	100.0	70.6	502.9	21.4	0.6	0.1	1.8	170.7	28.4	99.0	6.1
8/10/2022	18.5	15.2	24.2	18.3	15.1	23.9	94.1	68.2	100.0	116.4	727.7	19.4	1.2	0.0	5.6	190.0	28.7	92.0	8.6
9/10/2022	15.1	11.7	18.8	14.9	11.5	18.1	76.4	52.5	100.0	219.7	1169.8	3.2	2.1	0.3	4.2	147.1	23.9	86.5	9.3
10/10/2022	14.9	10.1	19.4	14.6	10.2	18.9	77.6	55.5	100.0	205.8	939.9	0.0	2.2	0.1	6.1	136.2	22.2	82.1	9.3
11/10/2022	18.2	12.8	21.8	17.2	12.7	20.1	65.7	52.4	94.1	194.3	892.4	0.0	2.2	0.0	4.0	137.7	20.5	37.0	11.9
12/10/2022	16.7	10.8	22.5	16.2	10.2	21.3	77.1	53.1	100.0	238.7	918.9	0.0	2.2	0.2	5.4	133.2	21.3	81.3	7.0
13/10/2022	18.3	11.5	24.2	18.0	11.8	23.4	71.2	43.9	100.0	261.2	1162.5	0.0	1.6	0.5	3.6	144.8	21.9	73.6	7.6
14/10/2022	18.5	12.8	24.6	18.4	14.4	23.6	72.3	29.1	100.0	248.4	1167.3	3.2	2.6	0.1	6.7	251.7	23.1	101.0	9.6
15/10/2022	16.8	8.8	24.4	16.9	9.4	23.7	65.3	35.5	100.0	353.2	1144.5	0.0	1.1	0.1	3.1	175.2	37.0	90.7	6.8
16/10/2022	18.1	9.8	26.0	17.9	10.1	25.3	70.3	29.9	100.0	312.5	1115.6	0.0	1.4	0.0	3.9	188.4	27.5	100.4	7.0
17/10/2022	17.8	14.8	21.3	17.5	14.9	20.4	72.8	56.8	98.5	238.0	1016.9	0.6	2.6	0.7	4.5	157.6	17.4	31.8	7.6
18/10/2022	18.8	14.2	24.9	18.6	14.3	24.2	77.2	48.6	100.0	223.4	1105.8	0.2	1.7	0.1	4.6	126.6	21.3	62.5	8.1
19/10/2022	19.7	16.8	23.8	19.5	16.8	23.5	86.7	63.2	100.0	134.0	871.2	1.2	1.1	0.1	3.6	188.9	27.5	78.3	7.9
20/10/2022	19.1	17.6	22.1	18.9	17.4	21.5	98.4	86.2	100.0	87.1	740.2	12.6	1.2	0.2	2.7	154.3	19.6	76.8	7.7
21/10/2022	20.0	17.2	24.3	19.8	17.6	23.8	90.7	63.2	100.0	164.6	1099.5	2.0	1.1	0.1	3.3	124.5	26.3	94.7	7.8
22/10/2022	20.0	16.4	25.2	19.8	16.3	24.8	90.2	61.5	100.0	171.6	922.0	2.8	0.8	0.1	2.8	150.4	31.1	99.8	6.9
23/10/2022	20.5	17.2	24.8	20.3	17.1	24.3	80.3	58.9	100.0	193.3	958.3	1.8	2.0	0.1	4.5	157.7	22.3	79.0	9.8
24/10/2022	20.0	16.6	25.4	19.9	16.6	24.8	83.4	57.2	100.0	170.8	932.3	0.6	1.9	0.2	5.2	149.0	19.3	51.4	6.0
25/10/2022	20.6	15.3	28.7	20.5	15.6	26.9	81.8	45.7	100.0	254.3	1102.2	0.2	1.7	0.1	5.3	233.3	29.5	91.1	9.3
26/10/2022	22.3	15.7	28.2	22.4	16.2	27.7	61.3	34.9	100.0	312.7	1113.3	0.0	3.0	0.1	5.4	266.6	25.5	94.2	7.7
27/10/2022	21.0	14.3	29.0	21.1	15.1	28.2	67.9	40.4	97.9	302.7	1163.3	0.0	2.3	0.3	5.0	253.6	27.3	71.4	9.0
28/10/2022	19.3	12.6	25.3	19.4	13.2	24.5	54.3	29.0	97.0	381.7	1162.9	0.0	3.6	0.2	7.3	273.0	21.1	67.2	9.3
29/10/2022	19.4	12.1	25.6	19.3	13.3	24.8	50.3	29.0	82.0	390.7	1171.7	0.0	3.8	0.6	6.3	291.8	19.7	46.9	11.8
30/10/2022	18.3	9.9	25.6	18.2	10.5	25.0	69.0	41.5	100.0	331.8	1174.7	0.0	1.6	0.1	4.5	229.8	25.6	88.9	7.2
31/10/2022	20.2	11.6	29.8	20.1	11.6	29.0	83.6	51.9	100.0	267.5	1252.5	10.0	3.0	0.1	7.8	256.7	25.0	87.6	6.3
	17.9	4.8	29.8	17.8	4.8	29.0	77.4	29.0	100.0	228.5	1252.5	97.8	1.8	0.0	7.8	183.0	24.5	101.0	6.0

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