

**WAMBO COAL
POLLUTION MONITORING DATA
1 SEPTEMBER 2021 – 30 SEPTEMBER 2021
SEPTEMBER MONTHLY REPORT**

Published 04 November 2021

**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	24/09/2021	7.23	687	7	
Point 25	SW02	24/09/2021	7.36	633	7	
Point 26	SW03	24/09/2021	7.35	647	10	
Point 27	SW04	24/09/2021				Dry
Point 28	SW05	24/09/2021				Dry
Point 29	SW06	24/09/2021	7.29	470	<5	
Point 30	SW07	24/09/2021	7.21	712	<5	
Point 31	SW08	24/09/2021				Dry
Point 33	SW15	14/09/2021	8.84	5120	16	
Point 34	SW27a	24/09/2021				No Access
Point 36	SW32a	24/09/2021				Dry
Point 39	SW39	24/09/2021				Dry
Point 40	SW40	24/09/2021	7.33	644	6	
Point 41	SW41	24/09/2021				No Flow

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	TSS (mg/L)	Turbidity (NTU)	Volume (ML/day)	Comments
Point 4						No Discharges
Point 19						No Discharges

Sewerage Treatment Monitoring

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

Table 3- WCPL Discharge Monitoring

EPL ID	Site ID	Date	pH	Faecal Coliforms	Comments
Point 42	STPD2	13/9/21	9	~140 CFU/100mL	
Point 52	STP2	13/9/21	7.09	<91 CFU/100mL	
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
1/09/2021	19.7	13.27	11.6	9.03	22.6	14.45	19.8	12.97
2/09/2021	23.4	13.28	19.3	9.04	26.0	14.42	25.0	13.01
3/09/2021	15.9	13.24	11.0	9.04	15.5	14.40	17.9	13.02
4/09/2021	11.5	13.16	7.7	9.02	11.6	14.38	21.4	13.05
5/09/2021	5.1	13.09	2.6	8.98	4.0	14.34	8.9	13.04
6/09/2021	9.4	13.09	4.3	8.97	9.0	14.32	10.3	13.03
7/09/2021	10.8	13.08	5.2	8.93	7.4	14.25	25.6	13.07
8/09/2021	17.4	13.09	8.5	8.91	11.1	14.21	21.8	13.10
9/09/2021	18.6	13.09	6.2	8.90	7.9	14.18	36.4	13.17
10/09/2021	20.8	13.12	9.4	8.90	14.4	14.18	36.2	13.25
11/09/2021	15.7	13.14	11.6	8.93	15.3	14.18	34.2	13.31
12/09/2021	20.7	13.18	11.2	8.96	15.3	14.17	52.3	13.44
13/09/2021	14.2	13.19	13.9	8.99	20.8	14.21	18.9	13.45
14/09/2021	5.0	13.17	2.3	8.99	5.4	14.20	5.8	13.43
15/09/2021	6.2	13.13	2.9	8.99	6.7	14.17	4.9	13.40
16/09/2021	6.9	13.10	5.1	8.99	9.9	14.12	7.8	13.38
17/09/2021	11.7	13.09	6.9	9.00	14.1	14.12	14.4	13.39
18/09/2021	22.0	13.09	11.7	9.01	15.4	14.13	34.8	13.45
19/09/2021	7.8	13.07	5.4	9.01	6.3	14.09	18.0	13.47
20/09/2021	10.3	13.05	6.2	9.01	8.4	14.03	26.9	13.51
21/09/2021	8.7	13.06	2.9	9.01	8.5	14.02	19.6	13.53
22/09/2021	11.0	13.08	4.6	9.01	10.8	14.03	16.6	13.54
23/09/2021	14.5	13.07	6.8	9.00	8.8	14.02	29.1	13.58
24/09/2021	11.2	13.06	7.2	9.02	8.5	14.01	31.8	13.64
25/09/2021	22.2	13.10	13.6	9.06	16.6	14.04	23.9	13.67
26/09/2021	7.6	13.08	5.8	9.07	12.3	14.04	5.9	13.65
27/09/2021	11.4	13.08	12.6	9.11	15.8	14.07	10.5	13.64
28/09/2021	18.2	13.09	15.5	9.14	22.4	14.10	17.7	13.65
29/09/2021	17.0	13.10	13.8	9.17	21.6	14.09	20.5	13.67
30/09/2021	8.2	13.06	5.2	9.17	8.5	14.06	8.9	13.66

*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
1/09/2021	18.1	3.4	26.2	18.4	3.9	25.7	48.9	14.5	100.0	345.3	864.5	0.0	1.2	0.2	3.7	167.7	30.3	93.4	7.2
2/09/2021	16.6	6.7	25.9	16.9	8.6	25.5	74.6	45.5	96.8	207.4	814.1	0.0	1.4	0.1	4.0	143.2	26.6	97.6	8.0
3/09/2021	15.9	7.7	26.4	16.3	8.2	25.8	71.1	25.0	100.0	241.1	851.0	0.0	1.2	0.0	3.1	226.2	27.5	100.9	6.2
4/09/2021	15.8	7.2	24.8	16.0	7.9	23.9	78.1	40.1	100.0	136.4	838.7	2.6	2.0	0.2	4.6	253.3	24.7	77.7	7.7
5/09/2021	14.6	10.8	18.5	14.5	10.9	17.8	69.4	34.4	100.0	219.1	991.6	3.4	3.8	0.9	6.1	297.5	19.7	29.2	15.2
6/09/2021	12.6	5.6	21.3	12.8	6.6	20.9	61.2	22.0	99.1	263.3	924.3	0.0	2.1	0.1	5.1	236.4	26.8	87.3	9.4
7/09/2021	12.6	1.5	24.8	13.3	2.8	24.3	60.3	15.4	100.0	268.4	912.8	0.0	2.2	0.0	5.8	224.1	31.9	89.8	6.9
8/09/2021	13.2	4.1	23.3	13.7	5.0	22.6	69.4	33.2	100.0	259.1	887.5	0.0	0.9	0.0	2.5	211.5	31.5	81.7	5.9
9/09/2021	16.7	4.2	26.9	17.1	5.2	26.3	51.5	14.4	100.0	267.1	951.9	0.0	2.9	0.1	6.0	266.5	24.9	98.8	7.9
10/09/2021	19.6	13.1	28.8	19.7	14.1	28.3	47.0	17.3	96.3	261.5	932.0	0.0	3.0	0.3	6.9	275.2	20.5	70.3	7.8
11/09/2021	18.5	6.6	29.7	18.9	8.4	29.0	57.0	18.2	100.0	271.4	921.5	0.0	1.8	0.1	4.6	247.6	25.9	82.2	8.3
12/09/2021	18.5	5.9	30.7	19.3	6.9	30.0	49.0	10.4	97.9	267.6	895.9	0.0	2.3	0.0	8.1	252.6	26.5	89.6	6.3
13/09/2021	14.9	10.2	21.3	14.9	10.0	20.5	66.1	29.4	100.0	153.4	990.6	9.2	1.7	0.0	5.8	161.5	26.3	98.2	8.7
14/09/2021	12.5	8.7	17.2	12.3	9.4	16.4	71.9	49.3	97.9	192.0	1021.5	2.4	3.0	0.2	6.1	175.3	19.7	96.9	9.0
15/09/2021	13.2	6.9	19.9	13.4	8.5	19.1	65.7	35.9	99.2	237.1	1129.7	0.0	1.5	0.1	3.5	172.6	27.2	93.7	6.1
16/09/2021	12.1	4.6	19.9	12.3	5.6	18.8	77.3	44.4	100.0	203.4	1054.9	0.0	1.5	0.0	4.5	129.3	25.8	92.9	5.1
17/09/2021	13.7	3.1	24.1	13.8	3.5	23.1	72.3	30.9	100.0	275.3	925.5	0.0	1.0	0.1	2.7	211.8	29.5	88.0	6.4
18/09/2021	17.8	9.5	28.2	17.7	9.9	27.4	72.4	32.5	100.0	199.5	1073.1	0.6	3.1	0.1	8.5	260.8	24.2	92.7	12.2
19/09/2021	15.7	7.1	24.2	16.0	8.4	23.4	61.1	22.2	100.0	291.0	965.6	0.2	2.5	0.1	5.9	249.7	26.8	95.0	7.2
20/09/2021	16.0	3.3	26.6	16.2	4.3	25.7	51.1	15.2	100.0	292.3	964.2	0.0	3.0	0.1	7.1	247.4	26.4	82.0	11.2
21/09/2021	12.0	5.2	17.7	12.2	7.8	16.9	51.8	25.9	93.8	231.5	1102.5	0.0	2.1	0.1	5.7	209.0	29.4	94.9	10.6
22/09/2021	12.2	2.2	21.4	12.4	2.8	20.6	66.6	32.7	100.0	274.1	1050.8	0.0	1.1	0.1	3.2	163.5	31.6	87.8	5.2
23/09/2021	16.5	4.3	26.8	16.7	6.2	25.8	57.8	25.1	100.0	291.9	958.4	0.0	2.7	0.1	5.9	272.5	25.1	93.4	8.8
24/09/2021	19.4	10.1	27.7	19.4	11.9	26.6	50.7	24.6	81.9	294.0	1048.2	0.0	3.2	0.1	6.2	274.1	24.4	83.4	6.4
25/09/2021	17.6	8.9	28.6	17.6	9.8	27.5	56.2	12.4	89.9	296.7	1091.1	0.0	2.5	0.3	7.6	167.1	29.9	89.2	10.8
26/09/2021	13.6	11.5	16.7	13.1	11.4	15.8	73.2	54.5	85.4	100.6	781.1	0.2	2.6	0.5	6.1	138.9	18.6	42.9	10.2
27/09/2021	14.2	6.2	20.8	13.9	6.8	19.8	69.4	42.5	100.0	278.2	1137.0	0.0	2.0	0.1	4.6	149.5	22.4	72.0	6.5
28/09/2021	16.1	6.2	25.1	16.0	6.6	24.3	69.3	36.7	100.0	263.8	1055.5	0.0	1.2	0.1	4.0	146.3	33.7	100.5	7.9
29/09/2021	15.3	9.6	22.3	15.1	10.0	21.6	89.5	51.9	100.0	75.6	378.5	8.8	1.0	0.1	6.5	212.0	30.5	97.9	6.9
30/09/2021	18.0	9.6	26.1	17.9	9.9	25.0	78.9	47.2	100.0	219.4	978.2	0.2	1.6	0.1	4.6	221.9	24.0	77.3	6.0
	15.4	1.5	30.7	15.6	2.8	30.0	64.8	10.4	100.0	238.2	1137.0	27.6	2.1	0.0	8.5	212.6	26.4	100.9	5.1

