



# Environmental Monitoring Report V1

## **Broadwater Power Plant 117 Baraang Drive Broadwater NSW**

Licencee Cape Byron Management Pty Ltd  
Address 117 Baraang Drive Broadwater NSW  
EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>

This data is published as required under section 66(6) of the *Protection of the Environment Operations Act 1997*

Sampling Point:

Licencee

Location

EPL No

Parameters Monitored

Frequency & Method

Limits

**Monitoring Point 1 - No 12 Boiler Stack Emissions**

Cape Byron Management Pty Ltd

Broadwater Cogeneration Power Plant

20425

<http://www.epa.nsw.gov.au/prpoeoapp/>

see individual parameters in table

Annually in accordance with EPA protocols

see individual parameters in table



			RESULTS TABLE			
			AE 13192	AE 13741	AE 14703	AE 15185
			16-Jul-20	15-Jul-21	15-Dec-22	13-Sep-23
			25-Aug-20	02-Aug-21	11-Jan-23	06-Oct-23
			27-Aug-20	13-Aug-21	25-Jan-23	07-Feb-24
Measured Parameters dry @ STP and corrected to 7% O <sub>2</sub>	Units	Concentration Limit				
Average stack gas temperature	°C	Not Applicable	108.0	88.0	98.0	80.0
Average velocity at sampling plane	m/s	Not Applicable	8.1	9.7	6.6	10.0
Gas Volumetric Flowrate	m <sup>3</sup> /sec	Not Applicable	20.9	47.8	20.5	64.0
Dry Gas Density	kg/m <sup>3</sup>	Not Applicable	1.3	1.3	1.2	1.3
Molecular Weight of Stack Gases	g/g mole	Not Applicable	30.1	30.1	29.9	29.4
Moisture content	%	Not Applicable	26.7	20.1	13.1	18.3
Concentration of carbon dioxide	mg Drive Broadw	Not Applicable	10.6	11.0	9.3	4.5
Total Solid Particles	mg/m <sup>3</sup>	<b>100</b>	70.7	42.7	61.0	75.0
Sulphuric Acid Mist & Sulphur Trioxide as SO <sub>3</sub>	mg/m <sup>3</sup>	<b>12</b>	5.6	11.3	10.9	10.9
Nitrogen Oxides (NOx)	mg/m <sup>3</sup>	<b>500</b>	368.0	270.0	266.0	442.0

117 Baraang Drive Broadwater NSW

**Sampling Point:**

Licencee  
 Location  
 EPL No  
 Parameter/s Monitored  
 Frequency & Method  
 Limits

**Monitoring Point 2 - No 1 Cogeneration Boiler Stack Emissions**

Cape Byron Management Pty Ltd  
 Broadwater Cogeneration Power Plant  
 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 see individual parameters in table  
 Quarterly in accordance with EPA protocols  
 see individual parameters in table



			RESULTS TABLE							
Report Number			AE 14555	AE 14703	AE 14762	AE 14903	AE 15072	AE 15185	AE15397	AE15490
Sampling Date			16-Sep-22	15-Dec-22	09-Feb-23	19-Apr-23	11-Jul-23	23-Nov-23	17-Jan-24	07-Mar-24
Date Received			03-Nov-22	11-Jan-23	20-Mar-23	05-May-23	14-Aug-23	29-Jan-24	11-Feb-24	16-Apr-24
Date Published			25-Jan-23	25-Jan-23	22-Mar-23	17-May-23	23-Aug-23	07-Feb-24	21-Feb-24	17-Apr-24
Measured Parameters dry @ STP and corrected to 7% O <sub>2</sub>	Units	Concentration Limit								
Average stack gas temperature	°C	Not Applicable	73.3	64.0	64.0	63.0	70.0	64.0	63.7	60.0
Average velocity at sampling plane	m/s	Not Applicable	16.7	15.1	23.9	16.5	16.9	8.1	20.1	14.8
Dry Gas Volumetric Flowrate	Nm <sup>3</sup> /sec	Not Applicable	67.0	61.7	103.6	67.7	67.7	68.4	85.1	64.4
Dry Gas Density	kg/Nm <sup>3</sup>	Not Applicable	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Molecular Weight of Stack Gases	g/g mole	Not Applicable	28.8	30.1	30.0	29.9	30.0	29.9	29.8	29.8
Moisture content	%	Not Applicable	19.9	19.5	15.2	20.3	20.9	12.8	17.3	16.4
Concentration of carbon dioxide	%	Not Applicable	12.7	10.5	9.7	9.2	10.0	8.8	8.3	7.8
Total Solid Particles	mg/Nm <sup>3</sup>	100	21.5	19.2	17.1	17.6	64.7	30.6	29.0	44.2
Sulphuric Acid Mist & Sulphur Trioxide as SO <sub>3</sub>	mg/Nm <sup>3</sup>	12	0.9	11.9	11.97	11.96	7.00	5.50	7.90	1.80
Nitrogen Oxides (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	500	247.0	279.0	136.0	171.0	299.0	229.0	172.0	215.0

**Sampling Point:** Monitoring Point 3 - Ambient Air Monitoring  
 Licence Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpocoeapp/>  
 Parameters Monitored PM10  
 Monitoring Frequency Sampling for 24 hours every 6 Days when site is operating  
 Limits Not Applicable  
 Comments Laboratory Analysis



Date Sample Collected	Date Received	Date Published	Results (ug/m <sup>3</sup> )	Notes
12-Dec-23	19-Jan-24	24-Jan-24	24.9	
18-Dec-23	19-Jan-24	24-Jan-24	19.7	
24-Dec-23	19-Jan-24	24-Jan-24	7.5	
30-Dec-23	19-Jan-24	24-Jan-24	13.6	
5-Jan-24	19-Jan-24	24-Jan-24	11.8	
11-Jan-24	15-Feb-24	21-Feb-24	20.6	
17-Jan-24	15-Feb-24	21-Feb-24	12.1	
23-Jan-24	15-Feb-24	21-Feb-24	21.5	
29-Jan-24	15-Feb-24	21-Feb-24	22.9	
4-Feb-24	15-Mar-24	20-Mar-24	N/A	paper lost in transit
10-Feb-24	15-Mar-24	20-Mar-24	16.5	
16-Feb-24	15-Mar-24	20-Mar-24	11.0	
22-Feb-24	15-Mar-24	20-Mar-24	11.5	
28-Feb-24	15-Mar-24	20-Mar-24	16.4	
5-Mar-24	18-Apr-24	1-May-24	13.6	
11-Mar-24	18-Apr-24	1-May-24	16.6	
17-Mar-24	18-Apr-24	1-May-24	4.9	
23-Mar-24	18-Apr-24	1-May-24	11.7	
29-Mar-24	18-Apr-24	1-May-24	7.8	
4-Apr-24	10-May-24	15-May-24	8.1	
10-Apr-24	10-May-24	15-May-24	9.4	
16-Apr-24	10-May-24	15-May-24	10.7	
22-Apr-24	10-May-24	15-May-24	6.9	
4-May-24	17-May-24	12-Jun-24	14.6	
10-May-24	17-May-24	12-Jun-24	7.8	
16-May-24	17-May-24	12-Jun-24	6.0	
22-May-24	17-May-24	12-Jun-24	5.7	
28-May-24	17-May-24	12-Jun-24	8.2	
3-Jun-24	NR	10-Jul-24	N/A	
9-Jun-24	NR	10-Jul-24	N/A	
15-Jun-24	NR	10-Jul-24	N/A	
21-Jun-24	NR	10-Jul-24	N/A	
27-Jun-24	NR	10-Jul-24	N/A	

**Sampling Point:** Monitoring Point 3 - Ambient Air Monitoring  
 Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameters Monitored Particulates - Deposited Matter  
 Monitoring Frequency Continuous with sample results extrapolated from sample period of 30 ± 2 days  
 Limits Not Applicable  
 Comments Laboratory Analysis



Date Sample Collected	Date Received	Date Published	Results (g/m <sup>2</sup> /month)	Notes
5-Aug-02	11-Aug-21	13-Aug-21	0.77	
7-Sep-21	10-Sep-21	23-Sep-21	1.64	Large org. matter
7-Oct-21	19-Oct-21	22-Oct-21	0.80	Fine org. matter
7-Dec-21	15-Dec-21	15-Dec-21	2.20	Bug, large org. matter
1-Jan-22	21-Jan-22	28-Jan-22	1.54	Fine org. matter
1-Feb-22	NR	28-Feb-22	N/A	Bottles flooded
1-Mar-22	NR	31-Mar-22	N/A	Bottles flood damaged and not serviceable, new bottles set 20/04/2022
1-Apr-22	NR	30-Apr-22	N/A	New bottles placed on 20/4/22
5-May-22	11-May-22	1-Jun-22	0.13	
6-Jun-22	20-Jun-22	29-Jun-22	4.30	
5-Jul-22	8-Jul-22	27-Jul-22	0.19	
4-Aug-22	9-Aug-22	24-Aug-22	0.16	
5-Sep-22	12-Sep-22	21-Sep-22	0.41	
5-Oct-22	6-Oct-22	2-Nov-22	0.32	
7-Nov-22	11-Nov-22	30-Nov-22	0.20	
5-Dec-22	20-Dec-22	28-Dec-22	0.73	
9-Jan-23	12-Jan-23	11-Jan-23	0.63	
6-Feb-23	10-Feb-23	22-Feb-23	0.32	
6-Mar-23	9-Feb-23	22-Mar-23	0.73	
3-Apr-23	14-Apr-23	3-May-23	0.34	
8-May-23	12-May-23	31-May-23	0.28	
13-Jun-23	19-Jun-23	28-Jun-23	0.02	36 days exposure due to delivery delays
10-Jul-23	17-Jul-23	26-Jul-23	0.50	
7-Aug-23	15-Aug-23	23-Aug-23	0.66	
5-Sep-23	11-Sep-23	5-Oct-23	0.33	
4-Oct-23	19-Oct-23	1-Nov-23	1.08	
6-Nov-23	14-Nov-23	16-Nov-23	6.91	
5-Dec-23	13-Dec-23	10-Jan-24	0.67	
8-Jan-24	12-Jan-24	24-Jan-24	0.32	
5-Feb-24	9-Feb-24	21-Feb-24	0.15	
4-Mar-24	8-Mar-24	20-Mar-24	0.28	
8-Apr-24	12-Mar-24	17-Apr-24	0.59	
6-May-24	15-May-24	29-May-24	0.13	
5-Jun-24	14-Jun-24	26-Jun-24	0.28	
8-Jul-24	NR	10-Jul-24	N/A	

**Sampling Point: Monitoring Point 4 - Ambient Air Monitoring**

Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameter Particulates - Deposited Matter  
 Frequency Continuous with sample results extrapolated from sample period of 30 ± 2 days  
 Limits Not Applicable  
 Comments Laboratory Analysis



Date Sample Collected	Date Received	Date Published	Results (g/m <sup>2</sup> /month)	Notes
2-Jul-21	9-Jul-21	16-Jul-21	0.97	Fine org. matter
5-Aug-21	11-Aug-21	13-Aug-21	1.02	
7-Sep-21	10-Sep-21	23-Sep-21	1.49	Large org. matter
7-Oct-21	19-Oct-21	22-Oct-21	1.01	Fine org. matter
7-Dec-21	15-Dec-21	15-Dec-21	0.59	Dirt, large org. matter
1-Jan-22	21-Jan-22	28-Jan-22	1.11	
01-Feb-22	NR	NR	N/A	Bottles flooded
01-Mar-22	NR	NR	N/A	Bottles flood damaged and not serviceable, new bottles set 20/04/2022
1-Apr-22	NR	30-Apr-22	N/A	New bottles placed on 20/4/22
5-May-22	11-May-22	1-Jun-22	0.23	
6-Jun-22	20-Jun-22	29-Jun-22	4.80	
5-Jul-22	8-Jul-22	27-Jul-22	0.33	
4-Aug-22	9-Aug-22	24-Aug-22	0.25	
5-Sep-22	12-Sep-22	21-Sep-22	0.41	
5-Oct-22	6-Oct-22	2-Nov-22	0.86	
7-Nov-22	11-Nov-22	30-Nov-22	0.11	
5-Dec-22	20-Dec-22	28-Dec-22	0.61	
9-Jan-23	12-Jan-23	11-Jan-23	0.51	
6-Feb-23	10-Feb-23	22-Feb-23	0.71	
6-Mar-23	9-Mar-23	22-Mar-23	1.49	
3-Apr-23	14-Apr-23	3-May-23	0.36	
8-May-23	12-May-23	31-May-23	0.55	
13-Jun-23	19-Jun-23	28-Jun-23	0.13	36 days exposure due to delivery delays
10-Jul-23	17-Jul-23	26-Jul-23	0.85	
7-Aug-23	15-Aug-23	23-Aug-23	1.24	
5-Sep-23	11-Sep-23	5-Oct-23	0.90	
4-Oct-23	19-Oct-23	1-Nov-23	4.20	
6-Nov-23	14-Nov-23	16-Nov-23	9.89	
5-Dec-23	13-Dec-23	10-Jan-24	0.54	
8-Jan-24	12-Jan-24	24-Jan-24	1.06	
5-Feb-24	9-Feb-24	21-Feb-24	0.16	
4-Mar-24	8-Mar-24	20-Mar-24	0.48	
8-Apr-24	12-Mar-24	17-Apr-24	0.51	
6-May-24	15-May-24	29-May-24	0.27	
5-Jun-24	14-Jun-24	26-Jun-24	0.25	
8-Jul-24	NR	10-Jul-24	N/A	

**Sampling Point:** Monitoring Point 5 - Ambient Air Monitoring  
 Licence Cape Byron Management Pty Ltd  
 Location Broadwater Power Plant Fuel Stockpile  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameters Monitored Particulates - Deposited Matter  
 Monitoring Frequency Continuous with sample results extrapolated from sample period of 30 ± 2 days  
 Limits Not Applicable  
 Comments Laboratory Analysis



Date Sample Collected	Date Received	Date Published	Results (g/m <sup>2</sup> /month)	Notes
1-Apr-22	NR	30-Apr-22	N/A	New bottles placed on 20/4/22
5-May-22	11-May-22	1-Jun-22	0.17	
6-Jun-22	20-Jun-22	29-Jun-22	5.00	
5-Jul-22	8-Jul-22	27-Jul-22	0.65	
4-Aug-22	9-Aug-22	24-Aug-22	0.08	
5-Sep-22	12-Sep-22	21-Sep-22	0.56	
5-Oct-22	6-Oct-22	2-Nov-22	1.33	
7-Nov-22	11-Nov-22	30-Nov-22	1.14	
5-Dec-22	20-Dec-22	28-Dec-22	1.50	
9-Jan-23	12-Jan-23	11-Jan-23	4.02	
6-Feb-23	10-Feb-23	22-Feb-23	1.62	
6-Mar-23	9-Feb-23	22-Mar-23	5.21	
3-Apr-23	14-Apr-23	3-May-23	1.23	
8-May-23	12-May-23	31-May-23	1.00	
13-Jun-23	19-Jun-23	28-Jun-23	0.02	36 days exposure due to delivery delays
10-Jul-23	17-Jul-23	26-Jul-23	0.81	
7-Aug-23	15-Aug-23	23-Aug-23	0.92	
5-Sep-23	11-Sep-23	5-Oct-23	0.36	
4-Oct-23	19-Oct-23	1-Nov-23	1.64	
6-Nov-23	14-Nov-23	16-Nov-23	7.18	
5-Dec-23	13-Dec-23	10-Jan-24	1.77	
8-Jan-24	12-Jan-24	24-Jan-24	1.10	
5-Feb-24	9-Feb-24	21-Feb-24	0.60	
4-Mar-24	8-Mar-24	20-Mar-24	0.44	
8-Apr-24	12-Mar-24	17-Apr-24	0.71	
6-May-24	15-May-24	29-May-24	0.23	
5-Jun-24	14-Jun-24	26-Jun-24	0.58	
8-Jul-24	NR	10-Jul-24	N/A	

**Sampling Point:** Monitoring Point 7 - O<sub>2</sub> Monitoring No 12 Boiler  
**Licencee:** Cape Byron Management Pty Ltd  
**Location:** Broadwater Cogeneration Power Plant  
**EPL No:** 20425 <http://www.environment.nsw.gov.au/>  
**Parameters Monitored:** Oxygen  
**Monitoring Frequency:** Continuous Online Sampling  
**Limit:** No Limits Prescribed



The results in the table provide a fortnightly summary of the minimum, maximum and mean daily values for the period indicated

Comments

MONITORING PERIOD			Oxygen (%)			Notes
Date Start	Date Finish	Date Published	Minimum Value	Maximum Value	Mean Value	
4-Apr-22	17-Apr-22	30-Apr-22	No Data	No Data	No Data	Boiler damaged during flood event
18-Apr-22	1-May-22	30-Apr-22	No Data	No Data	No Data	Boiler damaged during flood event
2-May-22	15-May-22	18-May-22	No Data	No Data	No Data	Boiler damaged during flood event
16-May-22	29-May-22	1-Jun-22	No Data	No Data	No Data	Boiler damaged during flood event
30-May-22	12-Jun-22	15-Jun-22	No Data	No Data	No Data	Boiler damaged during flood event
13-Jun-22	26-Jun-22	29-Jun-22	No Data	No Data	No Data	Boiler damaged during flood event
27-Jun-22	10-Jul-22	13-Jul-22	No Data	No Data	No Data	Boiler damaged during flood event
11-Jul-22	24-Jul-22	27-Jul-22	No Data	No Data	No Data	Boiler damaged during flood event
25-Jul-22	7-Aug-22	10-Aug-22	No Data	No Data	No Data	Boiler damaged during flood event
8-Aug-22	21-Aug-22	24-Aug-22	No Data	No Data	No Data	Boiler damaged during flood event
22-Aug-22	4-Sep-22	7-Sep-22	No Data	No Data	No Data	Boiler damaged during flood event
5-Sep-22	18-Sep-22	21-Sep-22	No Data	No Data	No Data	Boiler damaged during flood event
19-Sep-22	2-Oct-22	5-Oct-22	No Data	No Data	No Data	Boiler damaged during flood event
3-Oct-22	16-Oct-22	19-Oct-22	No Data	No Data	No Data	Boiler damaged during flood event
17-Oct-22	30-Oct-22	2-Nov-22	No Data	No Data	No Data	Boiler damaged during flood event
31-Oct-22	13-Nov-22	16-Nov-22	No Data	No Data	No Data	Boiler damaged during flood event
14-Nov-22	27-Nov-22	17-Nov-22	No Data	No Data	No Data	Boiler damaged during flood event
28-Nov-22	11-Dec-22	23-Jan-23	0.21	21.0	14.40	
12-Dec-22	25-Dec-22	23-Jan-23	5.29	21.0	14.24	
26-Dec-22	8-Jan-23	23-Jan-23	4.98	21.0	18.59	
9-Jan-23	22-Jan-23	23-Jan-23	0.89	21.0	8.70	
23-Jan-23	5-Feb-23	8-Feb-23	1.86	20.6	19.59	Boiler offline 23/1/23
26-Jun-23	9-Jul-23	9-Aug-23	0.02	21.0	20.07	Boiler start-up 4/7/23; boiler offline 4/7/23, 5/7/23, 6/7/23, 7/7/23
10-Jul-23	23-Jul-23	9-Aug-23	0.02	21.0	12.37	Boiler offline 10/7/23 - 22/7/23
24-Jul-23	6-Aug-23	9-Aug-23	0.02	21.0	12.36	Boiler offline 5/8/23 - 8/8/23
7-Aug-23	20-Aug-23	23-Aug-23	0.02	21.0	14.12	Boiler offline 11/8/23 - 15/8/23, 20/8/23
21-Aug-23	3-Sep-23	6-Sep-23	0.02	21.0	13.71	Boiler offline 25/8/23 - 27/8/23, 2/8/23 - 4/8/23
4-Sep-23	17-Sep-23	20-Sep-23	0.00	21.0	14.71	Boiler offline 9/9/23 - 11/9/23, 15/9/23 - 17/9/23
18-Sep-23	1-Oct-23	5-Oct-23	0.00	21.0	13.87	Boiler offline 23/9/23 - 24/9/23, 30/9/23 - 2/10/23
2-Oct-23	15-Oct-23	18-Oct-23	0.02	21.0	17.63	Boiler offline 2/10/23, 7/10/23, 8/10/23, 14/10/23, 15/10/23
16-Oct-23	29-Oct-23	1-Nov-23	0.02	21.0	15.30	Boiler offline 19/10/23 - 23/10/23, 27/10/23 - 31/10/23
30-Oct-23	12-Nov-23	16-Nov-23	0.31	21.0	19.82	Boiler offline 1/11/23 - 16/11/23
24-Jun-24	7-Jul-24	10-Jul-24	0.00	21.0	15.98	Boiler offline 29/6-30/6, 6/7-8/7



**Sampling Point: Monitoring Point 6 - O<sub>2</sub> Monitoring No 1 Cogeneration Boiler**

Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameters Monitored Oxygen  
 Monitoring Frequency Continuous Online Sampling  
 Limit No Limits Prescribed



The results in the table provide a fortnightly summary of the minimum, maximum and mean daily values for the period indicated

Comments

MONITORING PERIOD		Date Published	Oxygen (%)			Notes
Date Start	Date Finish		Minimum Value	Mean Value	Maximum Value	
10-Jul-23	23-Jul-23	26-Jul-23	0.20	3.93	20.9	Boiler offline 22/7/23
24-Jul-23	6-Aug-23	9-Aug-23	0.00	5.89	21.3	Boiler offline 30/7/23, 31/7/23, 5/8/23, 6/8/23
7-Aug-23	20-Aug-23	23-Aug-23	0.00	7.28	21.3	Boiler offline 7/8/23, 12/8/23, 13/8/23, 19/8/23, 20/8/23
21-Aug-23	3-Sep-23	6-Sep-23	0.00	6.62	21.3	Boiler offline 21/8/23, 26/8/23, 27/8/23, 3/9/23
4-Sep-23	17-Sep-23	20-Sep-23	0.00	4.99	21.2	Boiler offline 10/9/23, 11/9/23, 17/9/23
18-Sep-23	1-Oct-23	5-Oct-23	0.00	4.98	21.2	Boiler offline 28/9/23, 1/10/23
2-Oct-23	15-Oct-23	18-Oct-23	0.20	7.53	21.3	Boiler offline 2/10/23, 7/10/23, 8/10/23, 14/10/23, 15/10/23
16-Oct-23	29-Oct-23	1-Nov-23	0.00	7.32	21.3	Boiler offline 19/10/23 - 22/10/23, 28/10/23, 29/10/23
30-Oct-23	12-Nov-23	16-Nov-23	0.10	7.73	21.2	Boiler offline 4/11/23, 5/11/23, 7/11/23, 12/11/23
13-Nov-23	26-Nov-23	30-Nov-23	0.00	11.69	21.5	Boiler offline 13/11/23 - 17/11/23, 20/11/23, 25/11/23
27-Nov-23	10-Dec-23	13-Dec-23	0.00	8.81	21.3	Boiler offline 1/12/23 - 4/12/23
11-Dec-23	24-Dec-23	27-Dec-23	2.10	11.12	21.5	Boiler offline 21/12/23
25-Dec-23	7-Jan-24	10-Jan-24	1.00	16.77	21.8	Boiler offline 25/12/23 - 2/1/24, 5/1/24 - 7/1/24
8-Jan-24	21-Jan-24	24-Jan-24	3.00	8.75	21.2	Boiler offline 8/1/24, 12/1/24 - 14/1/24, 19/1/24 - 21/1/24
22-Jan-24	4-Feb-24	7-Feb-24	3.30	11.59	21.3	Boiler offline 22/1, 26/1-29/1, 31/1-4/2
5-Feb-24	18-Feb-24	21-Feb-24	2.30	8.76	21.2	Boiler offline 9/2 - 12/2, 16/2 - 18/2
19-Feb-24	3-Mar-24	6-Mar-24	1.40	9.43	21.4	Boiler offline 19/2, 23/2-27/2, 2/3-3/3
4-Mar-24	17-Mar-24	20-Mar-24	2.90	8.65	21.2	Boiler offline 4/3, 9/3-11/3, 15/3-17/3
18-Mar-24	31-Mar-24	3-Apr-24	2.00	11.18	21.2	Boiler offline 18/3, 19/3, 23/3 - 25/3, 28/3 - 31/3
1-Apr-24	14-Apr-24	17-Apr-24	0.00	21.35	21.6	Plant shutdown from 28/3 - 15/4
15-Apr-24	28-Apr-24	1-May-24	2.50	6.08	21.5	Boiler offline 15/4, 27/4, 28/4
29-Apr-24	12-May-24	15-May-24	0.60	10.68	21.3	Boiler offline 29/4, 2/5, 3/5-6/5, 8/5-12/5
13-May-24	26-May-24	29-May-24	3.00	13.46	21.3	Boiler offline on weekends
27-May-24	9-Jun-24	12-Jun-24	2.90	11.06	21.7	Boiler offline 27/5, 30/5-4/6, 6/6-9/6
10-Jun-24	23-Jun-24	26-Jun-24	3.00	11.99	21.4	Boiler offline 10/6, 11/6, 14/6-18/6, 22/6, 23/6
24-Jun-24	7-Jul-24	10-Jul-24	0.60	4.63	21.3	Boiler offline 24/6, 30/6, 6/7-7/7

**Sampling Point:** Monitoring Point 8 - Cogeneration Cooling Water Discharge  
 Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameters Monitored Temperature & Volume  
 Monitoring Frequency Continuous online  
 Limits Set Table  
 Comments No result may exceed the maximum limit.



MONITORING PERIOD			Temperature (°C)			Volume (kL/day)			Notes
			Limit/s	Maximum	41	Limit/s	Maximum	155520	
Date Start	Date Finish	Date Published	Min Temp	Mean Temp	Max Temp	Minimum Daily Discharge	Mean Daily Discharge	Maximum Daily Discharge	
12-Jun-23	25-Jun-23	28-Jun-23	16	22	29	68592	116416	137184	Boiler offline 12/6/23, 13/6/23, 17/6/23, 18/6/23, 19/6/23, 23/6/23, 24/6/23, 25/6/23
26-Jun-23	9-Jul-23	12-Jul-23	16	21	32	68592	118639	137184	Boiler offline 26/6/23, 29/6/23, 30/6/23, 1/7/23, 2/7/23, 6/7/23, 8/7/23, 9/7/23
10-Jul-23	23-Jul-23	26-Jul-23	17	26	32	134898	136993	137184	Boiler offline 22/7/23
24-Jul-23	6-Aug-23	9-Aug-23	18	27	33	106842	133417	137184	Boiler offline 30/7/23, 31/7/23, 5/8/23, 6/8/23
7-Aug-23	20-Aug-23	23-Aug-23	18	27	34	80310	127856	137184	Boiler offline 7/8/23, 12/8/23, 13/8/23, 19/8/23, 20/8/23
21-Aug-23	3-Sep-23	6-Sep-23	19	29	35	83501	127018	137184	Boiler offline 21/8/23, 28/8/23, 27/8/23, 3/9/23
4-Sep-23	17-Sep-23	20-Sep-23	21	31	36	117988	135426	137184	Boiler offline 10/9/23, 11/9/23, 17/9/23
18-Sep-23	1-Oct-23	5-Oct-23	21	32	37	128098	136235	137184	Boiler offline 28/9/23, 1/10/23
2-Oct-23	15-Oct-23	18-Oct-23	22	31	39	101126	134076	137184	Boiler offline 2/10/23, 7/10/23, 8/10/23, 14/10/23, 15/10/23
16-Oct-23	29-Oct-23	1-Nov-23	23	32	40	95314	131894	137184	
30-Oct-23	12-Nov-23	16-Nov-23	23	33	39	97934	130619	137184	Boiler offline 4/11/23, 5/11/23, 7/11/23, 12/11/23
13-Nov-23	26-Nov-23	30-Nov-23	24	31	37	8955	112531	137184	Boiler offline 13/11/23 - 17/11/23, 20/11/23, 25/11/23
27-Nov-23	10-Dec-23	13-Dec-23	26	35	45	68592	123513	137184	Boiler offline 1/12/23 - 4/12/23, temperature spike due to factory offline 01/12 - 12:34 water in pipe exposed to sun
11-Dec-23	24-Dec-23	27-Dec-23	27	34	40	98220	125865	137184	Boiler offline 21/12/23
25-Dec-23	7-Jan-24	10-Jan-24	24	30	38	67782	89135	137184	Boiler offline 25/12/23 - 2/1/24, 5/1/24 - 7/1/24
8-Jan-24	21-Jan-24	24-Jan-24	25	34	40	68592	125397	137184	Boiler offline 8/1/24, 12/1/24 - 14/1/24, 19/1/24 - 21/1/24
22-Jan-24	4-Feb-24	7-Feb-24	22	33	40	54064	114887	137184	Boiler offline 22/1, 26/1-29/1, 31/1-4/2
5-Feb-24	18-Feb-24	21-Feb-24	26	36	41	137184	137184	137184	
19-Feb-24	3-Mar-24	6-Mar-24	27	35	41	68592	124258	137184	Boiler offline 19/2, 23/2-27/2, 2/3-3/3
4-Mar-24	17-Mar-24	20-Mar-24	26	35	40	68592	122167	137184	Boiler offline 4/3, 9/3-11/3, 15/3-17/3
18-Mar-24	31-Mar-24	3-Apr-24	24	31	37	68592	119876	137184	Boiler offline 18/3, 19/3, 23/3 - 25/3, 28/3 - 31/3
1-Apr-24	14-Apr-24	17-Apr-24	23	25	26	0	0	0	Plant shutdown from 28/3 - 15/4
15-Apr-24	28-Apr-24	1-May-24	23	31	35	136327	137106	137184	Boiler offline 15/4, 27/4, 28/4
29-Apr-24	12-May-24	15-May-24	20	27	32	68592	115416	137184	Boiler offline 29/4, 2/5, 3/5-6/5, 8/5-12/5
13-May-24	26-May-24	29-May-24	17	23	34	68592	111575	137184	Boiler offline on weekends
27-May-24	9-Jun-24	12-Jun-24	17	24	30	68592	116771	137184	Boiler offline 27/5, 30/5-4/6, 6/6-9/6
10-Jun-24	23-Jun-24	26-Jun-24	16	22	30	68592	105781	137184	Boiler offline 10/6, 11/6, 14/6 - 18/6, 22/6, 23/6
24-Jun-24	7-Jul-24	10-Jul-24	16	24	30	129896	135972	137184	Boiler offline 24/6, 30/6, 6/7-7/7

**Sampling Point:** Monitoring Point 9 - Cogeneration Cooling Water Inlet  
 Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpocapp/>  
 Parameters Monitored Temperature  
 Monitoring Frequency Continuous online (by calculation)  
 Limits Not Applicable - background data only



MONITORING PERIOD			Temperature (°C)			Volume (kL/day)			Notes
Date Start	Date Finish	Date Published	Minimum Background Temperature	Mean Background Temperature	Maximum Background Temperature	Minimum Daily Intake	Mean Daily Intake	Maximum Daily Intake	
24-Jul-23	6-Aug-23	9-Aug-23	17.5	19.0	20.6	106842	133417	137184	Boiler offline 30/7/23, 31/7/23, 5/8/23, 6/8/23
7-Aug-23	20-Aug-23	23-Aug-23	18.3	20.2	21.7	80310	127856	137184	Boiler offline 7/8/23, 12/8/23, 13/8/23, 19/8/23, 20/8/23
21-Aug-23	3-Sep-23	6-Sep-23	19.4	20.8	22.4	83501	127018	137184	Boiler offline 21/8/23, 26/8/23, 27/8/23, 3/9/23
4-Sep-23	17-Sep-23	20-Sep-23	14.6	22.3	23.9	117988	135426	137184	Boiler offline 10/9/23, 11/9/23, 17/9/23
18-Sep-23	1-Oct-23	5-Oct-23	22.0	23.2	24.7	128086	136235	137184	Boiler offline 28/9/23, 1/10/23
2-Oct-23	15-Oct-23	18-Oct-23	22.9	24.3	26.1	101126	134076	137184	Boiler offline 2/10/23, 7/10/23, 8/10/23, 14/10/23, 15/10/23
16-Oct-23	29-Oct-23	1-Nov-23	23.6	25.1	27.5	95314	131694	137184	Boiler offline 19/10/23 - 22/10/23, 28/10/23, 29/10/23
30-Oct-23	12-Nov-23	16-Nov-23	21.8	24.7	25.9	97934	130619	137184	Boiler offline 4/11/23, 5/11/23, 7/11/23, 12/11/23
13-Nov-23	26-Nov-23	30-Nov-23	20.2	27.4	50.0	8955	112531	137184	Boiler offline 13/11/23 - 17/11/23, 20/11/23, 25/11/23 - high temp due to factory shutdown with water sitting in pipe exposed to sun
27-Nov-23	10-Dec-23	13-Dec-23	26.5	28.4	83.9	68592	123513	137184	Boiler offline 1/12/23 - 4/12/23, temperature spike due to testing on transmitter 05/12 - 08:04 - 08:07.
11-Dec-23	24-Dec-23	27-Dec-23	27.8	29.6	39.4	98220	125865	137184	Boiler offline 21/12/23
25-Dec-23	7-Jan-24	10-Jan-24	23.8	28.2	30.9	67782	89135	137184	Boiler offline 25/12/23 - 2/1/24, 5/1/24 - 7/1/24
8-Jan-24	21-Jan-24	24-Jan-24	25.3	27.7	29.2	68592	125397	137184	Boiler offline 8/1/24, 12/1/24 - 14/1/24, 19/1/24 - 21/1/24
22-Jan-24	4-Feb-24	7-Feb-24	22.0	29.3	49.3	54064	114887	137184	Boiler offline 22/1, 26/1-29/1, 31/1-4/2. High temp on 2/2 due to water drained from pipe.
5-Feb-24	18-Feb-24	21-Feb-24	27.2	29.6	31.2	137184	137184	137184	
19-Feb-24	3-Mar-24	6-Mar-24	27.9	29.2	30.2	68592	124258	137184	Boiler offline 19/2, 23/2-27/2, 2/3-3/3
4-Mar-24	17-Mar-24	20-Mar-24	27.0	28.2	29.8	68592	122167	137184	Boiler offline 4/3, 9/3-11/3, 15/3-17/3
18-Mar-24	31-Mar-24	3-Apr-24	22.5	26.6	28.4	68592	119876	137184	Boiler offline 18/3, 19/3, 23/3 - 25/3, 28/3 - 31/3
1-Apr-24	14-Apr-24	17-Apr-24	18.1	26.7	43.1	0	0	0	Plant shutdown from 28/3 - 15/4
15-Apr-24	28-Apr-24	1-May-24	21.4	23.7	25.8	136327	137106	137184	Boiler offline 15/4, 27/4, 28/4
29-Apr-24	12-May-24	15-May-24	20.9	21.8	22.9	68592	115416	137184	Boiler offline 29/4, 2/5, 3/5-6/5, 8/5-12/5
13-May-24	26-May-24	29-May-24	18.2	19.9	21.4	68592	111575	137184	Boiler offline on weekends
27-May-24	9-Jun-24	12-Jun-24	18.3	19.2	20.1	68592	116771	137184	Boiler offline 27/5, 30/5-4/6, 6/6-9/6
10-Jun-24	23-Jun-24	26-Jun-24	17.2	17.9	18.8	68592	105781	137184	Boiler offline 10/6, 11/6, 14/6- 18/6, 22/6, 23/6
24-Jun-24	7-Jul-24	10-Jul-24	16.6	17.7	19.7	129896	135972	137184	Boiler offline 24/6, 30/6, 6/7-7/7

**Sampling Point:** Monitoring Point 10 - Stockpile Sediment Pond West  
 Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Power Plant Fuel Stockpile  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameter/s Monitored See Table  
 Frequency & Method Monthly Grab Sample  
 Limit/s None Prescribed



**PARAMETERS MEASURED**

Date Sampled	Date Received	Date Published	BOD <sub>5</sub> (mg/L)	TSS (mg/L)	pH	Nitrogen (mg/L)	Phosphorus (mg/L)	Notes
18-May-22	26-May-22	1-Jun-22	7.7	23	6.1	1.3	0.8	
21-Jun-22	30-Jun-22	27-Jul-22	3.7	15	6.3	0.9	0.9	
22-Jul-22	2-Aug-22	10-Aug-22	4.2	44	6.2	0.9	0.9	
18-Aug-22	26-Aug-22	7-Sep-22	1.9	23	6.6	0.7	1.3	
15-Sep-22	26-Sep-22	5-Oct-22	2.2	10	5.8	1.4	1.3	
18-Oct-22	27-Oct-22	16-Nov-22	3.6	19	6.6	0.6	0.8	
21-Nov-22	1-Dec-22	14-Dec-22	2.3	5	7.0	0.8	0.9	
19-Dec-22	3-Jan-23	11-Jan-23	2.9	10	7.0	1.1	0.6	
18-Jan-23	27-Jan-23	8-Feb-23	1.8	2	6.9	0.6	0.6	
21-Feb-23	3-Mar-23	8-Mar-23	2.7	5	6.8	0.7	0.7	
21-Mar-23	31-Mar-23	5-Apr-23	2.3	23	6.4	0.7	0.9	
18-Apr-23	28-Apr-23	17-May-23	4.7	26	6.6	0.6	0.6	
18-May-23	1-Jun-23	14-Jun-23	8.5	235	6.2	0.7	1.0	
19-Jun-23	29-Jun-23	12-Jul-23	1.4	10	6.5	0.5	0.6	
18-Jul-23	1-Aug-23	9-Aug-23	2.6	10	6.6	0.4	0.4	
17-Aug-23	30-Aug-23	6-Sep-23	1.4	11	6.7	0.6	0.3	
18-Sep-23	17-Oct-23	18-Oct-23	<1	4	7.1	0.5	0.2	
17-Oct-23	23-Oct-23	1-Nov-23	2.1	8	7.1	0.6	0.2	
20-Nov-23	5-Dec-23	13-Dec-23	3.5	15	6.5	0.6	0.8	
19-Dec-23	5-Jan-24	10-Jan-24	0.3	18	6.7	0.5	0.6	
17-Jan-24	30-Jan-24	7-Feb-24	20.5	228	6.4	1.1	1.3	
19-Feb-24	29-Feb-24	6-Mar-24	5.9	46	6.6	0.8	0.9	
19-Mar-24	28-Mar-24	3-Apr-24	7.7	104	6.6	1.2	1.0	
16-Apr-24	30-Apr-24	1-May-24	3.8	91	6.6	1.0	1.1	
20-May-24	28-May-24	29-May-24	7.9	308	6.3	1.4	1.3	
17-Jun-24	27-Jun-24	10-Jul-24	4.6	31	6.5	0.8	0.4	

**Sampling Point:**  
 Licence  
 Location  
 EPL No  
 Parameters Measured  
 Frequency & Method  
 Licence Limits

**Monitoring Point 12 - Reverse Osmosis**  
 Cape Byron Management Pty Ltd  
 Broadwater Cogeneration Power Plant  
 20425  
 See Table  
 Biannual Grab Sample  
 Not Prescribed



Pollutants	Units	Results	Notes
Aluminium	mg/l	0.695	
		0.205	
		0.449	
		0.584	
		0.693	
		0.325	
Ammonia	mg/l	1.320	
		0.680	
		0.292	
		0.998	
		0.116	
		0.751	
Arsenic	mg/l	0.038	
		0.066	
		0.003	
		0.001	
		0.003	
		0.002	
Barium	mg/l	0.003	
		0.002	
		0.003	
		0.002	
		0.002	
		0.002	
Bicarbonate	CaCO <sub>3</sub> /kg	0.118	
		0.078	
		0.070	
		0.137	
		0.093	
		0.055	
Cadmium	mg/l	0.049	
		37	
		120	
		238	
		105	
		105	
Calcium	mg/l	94	
		30	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
Chloride	mg/l	<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
Chromium	mg/l	26.3	
		33.7	
		70.4	
		35.8	
		36.0	
		43.6	
Conductivity	dS/m	6.9	
		2.206	
		1.389	
		108	
		213	
		261	
Copper	mg/l	232	
		51	
		0.001	
		<0.001	
		0.001	
		0.001	
Copper	mg/l	0.001	
		0.001	
		0.002	
		0.001	
		0.001	
		0.001	
Copper	mg/l	1.170	
		0.825	
		0.917	
		1.020	
		1.181	
		1.106	
Copper	mg/l	0.249	
		<0.001	
		<0.001	
		0.001	
		<0.001	
		<0.001	

**Sampling Point:**  
 Licencee  
 Location  
 EPL No  
 Parameters Measured  
 Frequency & Method  
 Licence Limits

**Monitoring Point 12 - Reverse Osmosis**  
 Cape Byron Management Pty Ltd  
 Broadwater Cogeneration Power Plant  
 20425  
 See Table  
 Biannual Grab Sample  
 Not Prescribed



Pollutants	Units	Results	Notes
		<0.001	
		<0.001	
Hardness (as calcium)	CaCO3/kg	142.124	
		33.7	
		241	
		36	
		178	
		189	
		39	
Iron	mg/l	7.673	
		1.35	
		6.77	
		8.06	
		5.97	
		5.42	
		13.90	
Lead	mg/l	<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
Magnesium	mg/l	18.6	
		15.5	
		15.9	
		23.0	
		21.4	
		19.5	
		5.4	
Manganese	mg/l	0.154	
		0.046	
		0.078	
		0.110	
		0.107	
		0.046	
		0.129	
Mercury	mg/l	<0.0005	
		<0.0005	
		<0.0005	
		<0.0005	
		<0.0005	
		<0.0005	
Nickel	mg/l	0.002	
		<0.001	
		<0.001	
		<0.01	
		<0.001	
		<0.001	
Nitrate	mg/l	0.016	
		0.623	
		0.135	
		0.034	
		<0.05	
		<0.005	
		0.020	
Nitrite	mg/l	0.248	
		0.100	
		0.020	
		0.010	
		0.563	
		0.009	
		0.026	
Orthophosphate	mg/l	0.027	
		0.007	
		0.016	
		0.012	
		0.369	
		0.062	
		0.007	
Potassium	mg/l	8.177	
		11.0	
		14.7	

**Sampling Point:**  
 Licencee  
 Location  
 EPL No  
 Parameters Measured  
 Frequency & Method  
 Licence Limits

**Monitoring Point 12 - Reverse Osmosis**  
 Cape Byron Management Pty Ltd  
 Broadwater Cogeneration Power Plant  
 20425  
 See Table  
 Biannual Grab Sample  
 Not Prescribed



Pollutants	Units	Results	Notes
		12.6	
		21.0	
		14.1	
		3.7	
Selenium	mg/l	<0.002	
		<0.002	
		<0.002	
		<0.002	
		<0.002	
		<0.002	
		<0.002	
Silica (total)	mg/l	23.467	
		20.4	
		30.1	
		29.4	
		26.9	
		25.8	
		8.2	
Silver	mg/l	<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
		<0.001	
Sodium	mg/l	175	
		113	
		108	
		157	
		152	
		178	
		35	
Sodium Adsorption Ratio	mg/l	6.394	
		4.0	
		3.0	
		5.0	
		4.9	
		5.6	
		2.4	
Sulfate	mg/l	115	
		87	
		67	
		92	
		109	
		177	
		14	
Total Dissolved Salts	mg/l	796	
		561	
		624	
		692	
		803	
		752	
		169	
Total Organic Carbon	mg/l	21.5	
		20.4	
		23.5	
		24.6	
		31.3	
		25.5	
		8.9	
Total Suspended Solids	mg/l	<1	
		<1	
		<1	
		<1	
		3	
		<1	
		25	
Zinc	mg/l	0.024	
		0.004	
		0.053	
		0.052	
		0.015	
		0.006	
		0.029	
pH		6.78	
		7.60	
		7.84	

**Sampling Point:**

Licencee

Location

EPL No

Parameters Measured

Frequency & Method

Licence Limits

**Monitoring Point 12 - Reverse Osmosis**

Cape Byron Management Pty Ltd

Broadwater Cogeneration Power Plant

20425

See Table

Biannual Grab Sample

Not Prescribed



Pollutants	Units	Results	Notes
		7.35	
		7.23	
		6.94	
		6.97	



**Sampling Point:** Monitoring Point 11 - Stockpile Sediment Pond East  
 Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Power Plant Fuel Stockpile  
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>  
 Parameter/s Monitored See Table  
 Frequency & Method Monthly Grab Sample  
 Limit/s None Prescribed



PARAMETERS MEASURED								
Date Sampled	Date Received	Date Published	BOD <sub>5</sub> (mg/L)	TSS (mg/L)	pH	Nitrogen (mg/L)	Phosphorus (mg/L)	Notes
31-Jan-22	NA	NA	NR	NR	NR	NR	NR	Flood affected operations
25-Feb-22	NA	NA	NR	NR	NR	NR	NR	Pond sample unable to be taken due to flooding in Feb
20-Mar-22	NA	NA	NR	NR	NR	NR	NR	Pond sample unable to be taken due to flooding in Feb
29-Apr-22	10-May-22	18-May-22	4.2	4	7.2	0.9	0.2	
18-May-22	26-May-22	1-Jun-22	5.4	9	7.1	1.4	0.4	
21-Jun-22	30-Jun-22	27-Jul-22	3.2	8	7.2	1.1	0.3	
22-Jul-22	2-Aug-22	10-Aug-22	2.4	30	7.0	1.4	0.3	
18-Aug-22	26-Aug-22	7-Sep-22	5.2	23	7.2	1.8	0.6	
15-Sep-22	26-Sep-22	5-Oct-22	3.3	13	7.0	1.2	0.4	
18-Oct-22	27-Oct-22	16-Nov-22	4.3	12	6.9	1.0	0.4	
21-Nov-22	1-Dec-22	14-Dec-22	12.8	14	8.1	4.0	0.9	
19-Dec-22	3-Jan-23	11-Jan-23	11.5	105	8.0	4.2	0.9	
18-Jan-23	27-Jan-23	8-Feb-23	16.7	29	9.3	3.4	0.8	
21-Feb-23	3-Mar-23	8-Mar-23	5.1	17	7.6	2.3	0.6	
21-Mar-23	31-Mar-23	5-Apr-23	5.9	19	7.6	2.8	0.6	
18-Apr-23	28-Apr-23	17-May-23	7.1	12	7.4	1.8	0.3	
18-May-23	1-Jun-23	14-Jun-23	2.9	28	7.3	1.5	0.3	
19-Jun-23	29-Jun-23	12-Jul-23	3.7	27	7.3	1.9	0.3	
18-Jul-23	1-Aug-23	9-Aug-23	7.0	21	7.5	1.7	0.3	
17-Aug-23	30-Aug-23	6-Sep-23	21.4	34	6.9	2.2	0.5	
18-Sep-23	17-Oct-23	18-Oct-23	7.2	25	8.7	2.3	0.5	
17-Oct-23	23-Oct-23	1-Nov-23	27.7	52	9.9	6.0	1.0	
20-Nov-23	5-Dec-23	13-Dec-23	4.2	13	7.3	1.4	0.5	
19-Dec-23	5-Jan-24	10-Jan-24	4.7	16	7.8	1.5	0.6	
17-Jan-24	30-Jan-24	7-Feb-24	8.5	45	9.8	3.3	0.5	
19-Feb-24	29-Feb-24	6-Mar-24	4.9	14	8.1	1.8	0.4	
19-Mar-24	28-Mar-24	3-Apr-24	6.2	16	7.8	1.8	0.4	
16-Apr-24	30-Apr-24	1-May-24	4.4	8	7.5	1.3	0.4	
20-May-24	28-May-24	29-May-24	4.2	9	7.2	1.1	0.3	
17-Jun-24	27-Jun-24	10-Jul-24	<1	4	7.2	1.6	0.4	

**Sampling Point:**  
 Licence  
 Location  
 EPL No  
 Parameter/s Monitored  
 Frequency & Method

**Rain gauge**  
 Cape Byron Management Pty Ltd  
 Broadwater Cogeneration Power Plant  
 20425  
 Rainfall  
 Continuous Auto Sampler



TIPPING GAUGE CONTINUOUS RAINFALL MONITORING					
Period From		Period To		Daily Rain	
Date	Time	Date	Time	Total (mm)	Max Intensity (mm/min)
Monday, 5 February 2024	9:01am	Tuesday, 6 February 2024	9:00am	0	0
Tuesday, 6 February 2024	9:01am	Wednesday, 7 February 2024	9:00am	0	0
Wednesday, 7 February 2024	9:01am	Thursday, 8 February 2024	9:00am	18	0.6
Thursday, 8 February 2024	9:01am	Friday, 9 February 2024	9:00am	16.8	0.4
Friday, 9 February 2024	9:01am	Saturday, 10 February 2024	9:00am	2.2	0.6
Saturday, 10 February 2024	9:01am	Sunday, 11 February 2024	9:00am	7.6	0.8
Sunday, 11 February 2024	9:01am	Monday, 12 February 2024	9:00am	22.6	1
Monday, 12 February 2024	9:01am	Tuesday, 13 February 2024	9:00am	0	0
Tuesday, 13 February 2024	9:01am	Wednesday, 14 February 2024	9:00am	0	0
Wednesday, 14 February 2024	9:01am	Thursday, 15 February 2024	9:00am	0	0
Thursday, 15 February 2024	9:01am	Friday, 16 February 2024	9:00am	31	1.2
Friday, 16 February 2024	9:01am	Saturday, 17 February 2024	9:00am	8.2	0.2
Saturday, 17 February 2024	9:01am	Sunday, 18 February 2024	9:00am	0.2	0.2
Sunday, 18 February 2024	9:01am	Monday, 19 February 2024	9:00am	0	0
Monday, 19 February 2024	9:01am	Tuesday, 20 February 2024	9:00am	56.6	2
Tuesday, 20 February 2024	9:01am	Wednesday, 21 February 2024	9:00am	0	0
Wednesday, 21 February 2024	9:01am	Thursday, 22 February 2024	9:00am	0.2	0.2
Thursday, 22 February 2024	9:01am	Friday, 23 February 2024	9:00am	0	0
Friday, 23 February 2024	9:01am	Saturday, 24 February 2024	9:00am	0	0
Saturday, 24 February 2024	9:01am	Sunday, 25 February 2024	9:00am	8	0.4
Sunday, 25 February 2024	9:01am	Monday, 26 February 2024	9:00am	0	0
Monday, 26 February 2024	9:01am	Tuesday, 27 February 2024	9:00am	7.6	0.6
Tuesday, 27 February 2024	9:01am	Wednesday, 28 February 2024	9:00am	1.8	0.8
Wednesday, 28 February 2024	9:01am	Thursday, 29 February 2024	9:00am	0	0
Thursday, 29 February 2024	9:01am	Friday, 1 March 2024	9:00am	0	0
Friday, 1 March 2024	9:01am	Saturday, 2 March 2024	9:00am	0	0
Saturday, 2 March 2024	9:01am	Sunday, 3 March 2024	9:00am	1.2	0.2
Sunday, 3 March 2024	9:01am	Monday, 4 March 2024	9:00am	2.4	0.6
Monday, 4 March 2024	9:01am	Tuesday, 5 March 2024	9:00am	23.6	1
Tuesday, 5 March 2024	9:01am	Wednesday, 6 March 2024	9:00am	1.4	0.2
Wednesday, 6 March 2024	9:01am	Thursday, 7 March 2024	9:00am	0	0
Thursday, 7 March 2024	9:01am	Friday, 8 March 2024	9:00am	0	0
Friday, 8 March 2024	9:01am	Saturday, 9 March 2024	9:00am	3.2	0.8
Saturday, 9 March 2024	9:01am	Sunday, 10 March 2024	9:00am	16.6	2
Sunday, 10 March 2024	9:01am	Monday, 11 March 2024	9:00am	8	1.4
Monday, 11 March 2024	9:01am	Tuesday, 12 March 2024	9:00am	1.8	0.4
Tuesday, 12 March 2024	9:01am	Wednesday, 13 March 2024	9:00am	0.2	0.2
Wednesday, 13 March 2024	9:01am	Thursday, 14 March 2024	9:00am	0	0
Thursday, 14 March 2024	9:01am	Friday, 15 March 2024	9:00am	0.6	0.2
Friday, 15 March 2024	9:01am	Saturday, 16 March 2024	9:00am	3.4	0.2
Saturday, 16 March 2024	9:01am	Sunday, 17 March 2024	9:00am	40	1.4
Sunday, 17 March 2024	9:01am	Monday, 18 March 2024	9:00am	1.6	0.2
Monday, 18 March 2024	9:01am	Tuesday, 19 March 2024	9:00am	15.4	1
Tuesday, 19 March 2024	9:01am	Wednesday, 20 March 2024	9:00am	0.8	0.2
Wednesday, 20 March 2024	9:01am	Thursday, 21 March 2024	9:00am	20.6	0.8
Thursday, 21 March 2024	9:01am	Friday, 22 March 2024	9:00am	3	0.2
Friday, 22 March 2024	9:01am	Saturday, 23 March 2024	9:00am	0.2	0.2
Saturday, 23 March 2024	9:01am	Sunday, 24 March 2024	9:00am	0.2	0.2
Sunday, 24 March 2024	9:01am	Monday, 25 March 2024	9:00am	2.6	0.2
Monday, 25 March 2024	9:01am	Tuesday, 26 March 2024	9:00am	23	0.6
Tuesday, 26 March 2024	9:01am	Wednesday, 27 March 2024	9:00am	42.8	0.6
Wednesday, 27 March 2024	9:01am	Thursday, 28 March 2024	9:00am	2.2	0.4
Thursday, 28 March 2024	9:01am	Friday, 29 March 2024	9:00am	2	1
Friday, 29 March 2024	9:01am	Saturday, 30 March 2024	9:00am	2.2	0.6
Saturday, 30 March 2024	9:01am	Sunday, 31 March 2024	9:00am	0	0
Sunday, 31 March 2024	9:01am	Monday, 1 April 2024	9:00am	0	0
Monday, 1 April 2024	9:01am	Tuesday, 2 April 2024	9:00am	0	0
Tuesday, 2 April 2024	9:01am	Wednesday, 3 April 2024	9:00am	0.2	0.2
Wednesday, 3 April 2024	9:01am	Thursday, 4 April 2024	9:00am	226	2.4
Thursday, 4 April 2024	9:01am	Friday, 5 April 2024	9:00am	95.6	1.6
Friday, 5 April 2024	9:01am	Saturday, 6 April 2024	9:00am	6.8	0.6
Saturday, 6 April 2024	9:01am	Sunday, 7 April 2024	9:00am	15.2	0.6
Sunday, 7 April 2024	9:01am	Monday, 8 April 2024	9:00am	1	0.2
Monday, 8 April 2024	9:01am	Tuesday, 9 April 2024	9:00am	0.2	0.2
Tuesday, 9 April 2024	9:01am	Wednesday, 10 April 2024	9:00am	0	0
Wednesday, 10 April 2024	9:01am	Thursday, 11 April 2024	9:00am	0	0
Thursday, 11 April 2024	9:01am	Friday, 12 April 2024	9:00am	0	0
Friday, 12 April 2024	9:01am	Saturday, 13 April 2024	9:00am	0	0
Saturday, 13 April 2024	9:01am	Sunday, 14 April 2024	9:00am	0	0
Sunday, 14 April 2024	9:01am	Monday, 15 April 2024	9:00am	0	0
Monday, 15 April 2024	9:01am	Tuesday, 16 April 2024	9:00am	0	0
Tuesday, 16 April 2024	9:01am	Wednesday, 17 April 2024	9:00am	0.2	0.2
Wednesday, 17 April 2024	9:01am	Thursday, 18 April 2024	9:00am	0	0
Thursday, 18 April 2024	9:01am	Friday, 19 April 2024	9:00am	6	0.4
Friday, 19 April 2024	9:01am	Saturday, 20 April 2024	9:00am	1.6	0.2
Saturday, 20 April 2024	9:01am	Sunday, 21 April 2024	9:00am	78.2	1.6
Sunday, 21 April 2024	9:01am	Monday, 22 April 2024	9:00am	5.4	0.4
Monday, 22 April 2024	9:01am	Tuesday, 23 April 2024	9:00am	8.4	0.6
Tuesday, 23 April 2024	9:01am	Wednesday, 24 April 2024	9:00am	1.6	0.2
Wednesday, 24 April 2024	9:01am	Thursday, 25 April 2024	9:00am	1.8	1.8
Thursday, 25 April 2024	9:01am	Friday, 26 April 2024	9:00am	14.6	1.2
Friday, 26 April 2024	9:01am	Saturday, 27 April 2024	9:00am	4.8	0.6
Saturday, 27 April 2024	9:01am	Sunday, 28 April 2024	9:00am	12.6	0.8
Sunday, 28 April 2024	9:01am	Monday, 29 April 2024	9:00am	16.2	0.8
Monday, 29 April 2024	9:01am	Tuesday, 30 April 2024	9:00am	0	0
Tuesday, 30 April 2024	9:01am	Wednesday, 1 May 2024	9:00am	0.2	0.2
Wednesday, 1 May 2024	9:01am	Thursday, 2 May 2024	9:00am	28.2	1
Thursday, 2 May 2024	9:01am	Friday, 3 May 2024	9:00am	27.8	1.6
Friday, 3 May 2024	9:01am	Saturday, 4 May 2024	9:00am	3.6	0.8
Saturday, 4 May 2024	9:01am	Sunday, 5 May 2024	9:00am	2.2	0.2
Sunday, 5 May 2024	9:01am	Monday, 6 May 2024	9:00am	4.4	0.8
Monday, 6 May 2024	9:01am	Tuesday, 7 May 2024	9:00am	20.4	1.6
Tuesday, 7 May 2024	9:01am	Wednesday, 8 May 2024	9:00am	10.4	0.6
Wednesday, 8 May 2024	9:01am	Thursday, 9 May 2024	9:00am	2.4	0.2
Thursday, 9 May 2024	9:01am	Friday, 10 May 2024	9:00am	3.4	0.8
Friday, 10 May 2024	9:01am	Saturday, 11 May 2024	9:00am	7.2	0.2
Saturday, 11 May 2024	9:01am	Sunday, 12 May 2024	9:00am	26.8	0.4
Sunday, 12 May 2024	9:01am	Monday, 13 May 2024	9:00am	0.6	0.2
Monday, 13 May 2024	9:01am	Tuesday, 14 May 2024	9:00am	0.2	0.2
Tuesday, 14 May 2024	9:01am	Wednesday, 15 May 2024	9:00am	3.8	0.2
Wednesday, 15 May 2024	9:01am	Thursday, 16 May 2024	9:00am	20.4	0.4
Thursday, 16 May 2024	9:01am	Friday, 17 May 2024	9:00am	42.4	1
Friday, 17 May 2024	9:01am	Saturday, 18 May 2024	9:00am	0.2	0.2
Saturday, 18 May 2024	9:01am	Sunday, 19 May 2024	9:00am	13.4	0.8
Sunday, 19 May 2024	9:01am	Monday, 20 May 2024	9:00am	0	0
Monday, 20 May 2024	9:01am	Tuesday, 21 May 2024	9:00am	0.2	0.2
Tuesday, 21 May 2024	9:01am	Wednesday, 22 May 2024	9:00am	0	0
Wednesday, 22 May 2024	9:01am	Thursday, 23 May 2024	9:00am	0	0
Thursday, 23 May 2024	9:01am	Friday, 24 May 2024	9:00am	0	0
Friday, 24 May 2024	9:01am	Saturday, 25 May 2024	9:00am	7	0.6
Saturday, 25 May 2024	9:01am	Sunday, 26 May 2024	9:00am	0.2	0.2
Sunday, 26 May 2024	9:01am	Monday, 27 May 2024	9:00am	0.2	0.2
Monday, 27 May 2024	9:01am	Tuesday, 28 May 2024	9:00am	5	0.2

**Sampling Point:**  
 Licence  
 Location  
 EPL No  
 Parameter/s Monitored  
 Frequency & Method

**Rain gauge**  
 Cape Byron Management Pty Ltd  
 Broadwater Cogeneration Power Plant  
 20425  
 Rainfall  
 Continuous Auto Sampler



TIPPING GAUGE CONTINUOUS RAINFALL MONITORING					
Period From		Period To		Daily Rain	
Date	Time	Date	Time	Total (mm)	Max Intensity (mm/min)
Tuesday, 28 May 2024	9:01am	Wednesday, 29 May 2024	9:00am	2.2	0.2
Wednesday, 29 May 2024	9:01am	Thursday, 30 May 2024	9:00am	0.2	0.2
Thursday, 30 May 2024	9:01am	Friday, 31 May 2024	9:00am	8	1.4
Friday, 31 May 2024	9:01am	Saturday, 1 June 2024	9:00am	0.2	0.2
Saturday, 1 June 2024	9:01am	Sunday, 2 June 2024	9:00am	4.8	0.2
Sunday, 2 June 2024	9:01am	Monday, 3 June 2024	9:00am	0.4	0.2
Monday, 3 June 2024	9:01am	Tuesday, 4 June 2024	9:00am	0	0
Tuesday, 4 June 2024	9:01am	Wednesday, 5 June 2024	9:00am	0	0
Wednesday, 5 June 2024	9:01am	Thursday, 6 June 2024	9:00am	0.6	0.2
Thursday, 6 June 2024	9:01am	Friday, 7 June 2024	9:00am	2	0.2
Friday, 7 June 2024	9:01am	Saturday, 8 June 2024	9:00am	0	0
Saturday, 8 June 2024	9:01am	Sunday, 9 June 2024	9:00am	0	0
Sunday, 9 June 2024	9:01am	Monday, 10 June 2024	9:00am	0	0
Monday, 10 June 2024	9:01am	Tuesday, 11 June 2024	9:00am	0	0
Tuesday, 11 June 2024	9:01am	Wednesday, 12 June 2024	9:00am	0	0
Wednesday, 12 June 2024	9:01am	Thursday, 13 June 2024	9:00am	0	0
Thursday, 13 June 2024	9:01am	Friday, 14 June 2024	9:00am	0	0
Friday, 14 June 2024	9:01am	Saturday, 15 June 2024	9:00am	0	0
Saturday, 15 June 2024	9:01am	Sunday, 16 June 2024	9:00am	0.6	0.2
Sunday, 16 June 2024	9:01am	Monday, 17 June 2024	9:00am	0.4	0.2
Monday, 17 June 2024	9:01am	Tuesday, 18 June 2024	9:00am	0	0
Tuesday, 18 June 2024	9:01am	Wednesday, 19 June 2024	9:00am	0	0
Wednesday, 19 June 2024	9:01am	Thursday, 20 June 2024	9:00am	0	0
Thursday, 20 June 2024	9:01am	Friday, 21 June 2024	9:00am	0	0
Friday, 21 June 2024	9:01am	Saturday, 22 June 2024	9:00am	0	0
Saturday, 22 June 2024	9:01am	Sunday, 23 June 2024	9:00am	0	0
Sunday, 23 June 2024	9:01am	Monday, 24 June 2024	9:00am	0.2	0.2
Monday, 24 June 2024	9:01am	Tuesday, 25 June 2024	9:00am	0.2	0.2
Tuesday, 25 June 2024	9:01am	Wednesday, 26 June 2024	9:00am	2.2	0.2
Wednesday, 26 June 2024	9:01am	Thursday, 27 June 2024	9:00am	0.2	0.2
Thursday, 27 June 2024	9:01am	Friday, 28 June 2024	9:00am	0	0
Friday, 28 June 2024	9:01am	Saturday, 29 June 2024	9:00am	0.2	0.2
Saturday, 29 June 2024	9:01am	Sunday, 30 June 2024	9:00am	0	0
Sunday, 30 June 2024	9:01am	Monday, 1 July 2024	9:00am	3.6	0.2
Monday, 1 July 2024	9:01am	Tuesday, 2 July 2024	9:00am	25.4	0.8
Tuesday, 2 July 2024	9:01am	Wednesday, 3 July 2024	9:00am	41.2	1.8
Wednesday, 3 July 2024	9:01am	Thursday, 4 July 2024	9:00am	21	0.8
Thursday, 4 July 2024	9:01am	Friday, 5 July 2024	9:00am	18.2	1
Friday, 5 July 2024	9:01am	Saturday, 6 July 2024	9:00am	21.2	1.2
Saturday, 6 July 2024	9:01am	Sunday, 7 July 2024	9:00am	7.2	0.6
Sunday, 7 July 2024	9:01am	Monday, 8 July 2024	9:00am	16.4	1.8
Monday, 8 July 2024	9:01am	Tuesday, 9 July 2024	9:00am	1.8	0.2
Tuesday, 9 July 2024	9:01am	Wednesday, 10 July 2024	9:00am	0.6	0.2

Licencee Cape Byron Management Pty Ltd  
 Location Broadwater Cogeneration Power Plant  
 EPL No 20425



CORRECTIONS LOG							
Date Sampled	Monitoring Point	Pollutant/Parameter	Original Data	Corrected Data	Date Corrected	Date Originally Published	Reason
01-Jul-21	3	PM10	<0.1	5.0	23-Sep-21	13-Aug-21	Sample and bag mixed up
31-Jul-21	3	PM10	5.0	11.9	23-Sep-21	13-Aug-21	Sample and bag mixed up
20/3/23	9	Cogen CW in	0.2	21.5	04-Jul-23	20/3/23	Analyser offline
3-Apr-23	9	Mean daily intake	1196474.0	119647	04-Jul-23	3-Apr-23	V2

117 Baraang Drive Broadwater NSW