



Environmental Monitoring Report

Broadwater Power Plant 117 Pacific Highway Broadwater NSW

Licencee Cape Byron Management Pty Ltd
Address 117 Pacific Highway 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:
 Licence
 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		
Report Number			AE 13192	AE 13741	
Sampling Date			16-Jul-20	15-Jul-21	
Date Received			25-Aug-20	02-Aug-21	
Date Published			27-Aug-20	13-Aug-21	
Measured Parameters dry @ STP and corrected to 7% O ₂	Units	Concentration Limit			
Average stack gas temperature	°C	Not Applicable	108.0	88.0	
Average velocity at sampling plane	m/s	Not Applicable	8.1	9.7	
Gas Volumetric Flowrate	m ³ /sec	Not Applicable	20.9	47.8	
Dry Gas Density	kg/m ³	Not Applicable	1.3	1.3	
Molecular Weight of Stack Gases	g/g mole	Not Applicable	30.1	30.1	
Moisture content	%	Not Applicable	26.7	20.1	
Concentration of carbon dioxide	%	Not Applicable	10.6	11.0	
Total Solid Particles	mg/m ³	100	70.7	42.7	
Sulphuric Acid Mist & Sulphur Trioxide as SO ₃	mg/m ³	12	5.6	11.3	
Nitrogen Oxides (NOx)	mg/m ³	500	368.0	270.0	

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					
			AE 13192	AE 13401	AE 13475	AE 13616	AE 13741	AE 13901
			16-Jul-20	10-Nov-20	09-Feb-21	07-Apr-21	15-Jul-21	25-Oct-21
			25-Aug-20	23-Nov-20	02-Mar-21	26-May-21	02-Aug-21	09-Nov-21
			27-Aug-20	03-Dec-20	12-Mar-21	02-Jun-21	13-Aug-21	23-Nov-21
Measured Parameters dry @ STP and corrected to 7% O ₂	Units	Concentration Limit						
Average stack gas temperature	°C	Not Applicable	67.0	68.0	61.0	63.0	66.0	63.0
Average velocity at sampling plane	m/s	Not Applicable	14.8	15.7	13.4	17.9	19.7	17.1
Dry Gas Volumetric Flowrate	m ³ /sec	Not Applicable	58.1	65.2	57.5	77.8	124.8	72.5
Dry Gas Density	kg/m ³	Not Applicable	1.3	1.4	1.3	1.3	1.4	1.4
Molecular Weight of Stack Gases	g/g mole	Not Applicable	30.1	30.2	30.0	29.8	30.2	30.3
Moisture content	%	Not Applicable	22.8	18.8	17.7	15.9	20.0	17.7
Concentration of carbon dioxide	%	Not Applicable	10.7	11.1	9.7	7.7	11.1	11.7
Total Solid Particles	mg/m ³	100.0	15.6	41.1	24.9	48.3	17.0	54.5
Sulphuric Acid Mist & Sulphur Trioxide as SO ₃	mg/m ³	12.0	7.0	3.5	1.8	3.5	5.8	0.2
Nitrogen Oxides (NOx)	mg/m ³	500.0	325.0	300.0	146.0	93.6	228.0	141.0

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 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 ³)	Notes
02-Jan-21	14-Jan-21	20-Jan-21	7.8	
08-Jan-21	26-Feb-21	26-Feb-21	29.4	
14-Jan-21	26-Feb-21	26-Feb-21	11.5	
20-Jan-21	26-Feb-21	26-Feb-21	11.6	
26-Jan-21	26-Feb-21	26-Feb-21	25.9	
01-Feb-21	15-Mar-21	08-Apr-21	17.9	Sample paper went two cycles
07-Feb-21	15-Mar-21	08-Apr-21	17.9	
13-Feb-21	15-Mar-21	08-Apr-21	13.4	
19-Feb-21	15-Mar-21	08-Apr-21	20.1	
25-Feb-21	15-Mar-21	08-Apr-21	20.1	Sample paper went two cycles
03-Mar-21	20-Apr-21	22-Apr-21	23.8	
09-Mar-21	20-Apr-21	22-Apr-21	9.5	
15-Mar-21	20-Apr-21	22-Apr-21	10.3	Sample paper went two cycles
21-Mar-21	20-Apr-21	22-Apr-21	10.3	
27-Mar-21	20-Apr-21	22-Apr-21	13.4	
02-Apr-21	20-Apr-21	22-Apr-21	14.6	
08-Apr-21	21-May-21	02-Jun-21	7.5	
14-Apr-21	21-May-21	02-Jun-21	10.7	
20-Apr-21	21-May-21	02-Jun-21	9.9	
26-Apr-21	21-May-21	02-Jun-21	9.9	
02-May-21	21-May-21	02-Jun-21	10.7	
08-May-21	05-Jul-21	30-Jul-21	11.0	
14-May-21	05-Jul-21	30-Jul-21	9.5	
20-May-21	05-Jul-21	30-Jul-21	13.3	
26-May-21	05-Jul-21	30-Jul-21	6.3	
01-Jun-21	05-Jul-21	30-Jul-21	7.1	
07-Jun-21	05-Jul-21	30-Jul-21	11.4	
13-Jun-21	05-Jul-21	30-Jul-21	11.8	
19-Jun-21	09-Aug-21	31-Jul-21	4.8	
25-Jun-21	09-Aug-21	13-Aug-21	5	Sample paper went two cycles
01-Jul-21	09-Aug-21	13-Aug-21	5	
07-Jul-21	09-Aug-21	13-Aug-21	16	
13-Jul-21	09-Aug-21	13-Aug-21	8	
19-Jul-21	09-Aug-21	13-Aug-21	10	
25-Jul-21	09-Aug-21	13-Aug-21	6	
31-Jul-21	09-Aug-21	13-Aug-21	12	
06-Aug-21	15-Sep-21	23-Sep-21	13	
12-Aug-21	15-Sep-21	23-Sep-21	15	
18-Aug-21	15-Sep-21	23-Sep-21	8	
24-Aug-21	15-Sep-21	23-Sep-21	9	
30-Aug-21	15-Sep-21	23-Sep-21	12	
05-Sep-21	20-Oct-21	22-Oct-21	7.4	
11-Sep-21	20-Oct-21	22-Oct-21	13.6	
17-Sep-21	20-Oct-21	22-Oct-21	13.6	Sample paper went two cycles
23-Sep-21	20-Oct-21	22-Oct-21	9.8	
29-Sep-21	20-Oct-21	22-Oct-21	11.4	
05-Oct-21	20-Oct-21	22-Oct-21	14.8	

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 ² /month)	Notes
05-Jan-21	29-Jan-21	25-Jan-21	1.64	
04-Feb-21	12-Feb-21	26-Feb-21	0.41	
05-Mar-21	12-Mar-21	08-Apr-21	0.73	
07-Apr-21	16-Apr-21	22-Apr-21	0.84	
05-May-21	18-May-21	20-May-21	0.00	
02-Jun-21	04-Jun-21	17-Jun-21	0.06	
02-Jul-21	09-Jul-21	16-Jul-21	0.59	Fine org. matter
05-Aug-02	11-Aug-21	13-Aug-21	0.77	
07-Sep-21	10-Sep-21	23-Sep-21	1.64	Large org. matter
07-Oct-21	19-Oct-21	22-Oct-21	0.80	Fine org. matter
07-Dec-21	15-Dec-21	15-Dec-21	2.20	Bug, large org. matter

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 Continous 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 ² /month)	Notes
05-Jan-21	29-Jan-21	25-Jan-21	1.28	
04-Feb-21	12-Feb-21	26-Feb-21	0.18	Spider
05-Mar-21	12-Mar-21	08-Apr-21	0.90	
07-Apr-21	16-Apr-21	22-Apr-21	0.79	
05-May-21	18-May-21	20-May-21	0.56	
02-Jun-21	04-Jun-21	17-Jun-21	0.17	
02-Jul-21	09-Jul-21	16-Jul-21	0.97	Fine org. matter
05-Aug-21	11-Aug-21	13-Aug-21	1.02	
07-Sep-21	10-Sep-21	23-Sep-21	1.49	Large org. matter
07-Oct-21	19-Oct-21	22-Oct-21	1.01	Fine org. matter
07-Dec-21	15-Dec-21	15-Dec-21	0.59	Dirt, large org. matter

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 ² /month)	Notes
05-Jan-21	29-Jan-21	25-Jan-21	1.15	
04-Feb-21	12-Feb-21	26-Feb-21	1.61	
05-Mar-21	12-Mar-21	08-Apr-21	1.85	
07-Apr-21	16-Apr-21	22-Apr-21	1.15	
05-May-21	18-May-21	20-May-21	0.71	
02-Jun-21	04-Jun-21	17-Jun-21	0.52	Spiders
02-Jul-21	09-Jul-21	16-Jul-21	1.90	Fine org. matter
05-Aug-21	11-Aug-21	13-Aug-21	1.06	
07-Sep-21	10-Sep-21	23-Sep-21	2.39	Fine org. matter
07-Oct-21	19-Oct-21	22-Oct-21	1.87	Fine org. matter
07-Dec-21	15-Dec-21	15-Dec-21	3.66	Fine org. matter

Sampling Point: Monitoring Point 7 - O₂ Monitoring No 12 Boiler
 Licence 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	
28-Dec-20	10-Jan-21	20-Jan-21	No Data	No Data	No Data	Boiler Not Operating
11-Jan-21	24-Jan-21	29-Jan-21	No Data	No Data	No Data	Boiler Not Operating
25-Jan-21	07-Feb-21	10-Feb-21	No Data	No Data	No Data	Boiler Not Operating
08-Feb-21	21-Feb-21	26-Feb-21	No Data	No Data	No Data	Boiler Not Operating
22-Feb-21	07-Mar-21	12-Mar-21	No Data	No Data	No Data	Boiler Not Operating
08-Mar-21	21-Mar-21	08-Apr-21	No Data	No Data	No Data	Boiler Not Operating
22-Mar-21	04-Apr-21	08-Apr-21	No Data	No Data	No Data	Boiler Not Operating
05-Apr-21	18-Apr-21	22-Apr-21	No Data	No Data	No Data	Boiler Not Operating
19-Apr-21	02-May-21	06-May-21	No Data	No Data	No Data	Boiler Not Operating
03-May-21	16-May-21	20-May-21	No Data	No Data	No Data	Boiler Not Operating
17-May-21	30-May-21	02-Jun-21	No Data	No Data	No Data	Boiler Not Operating
31-May-21	13-Jun-21	17-Jun-21	0.00	20.58	19.22	Boiler Operational 7/6/2021
14-Jun-21	27-Jun-21	02-Jul-21	0.00	17.72	14.37	
28-Jun-21	11-Jul-21	16-Jul-21	0.00	21.00	13.02	
12-Jul-21	25-Jul-21	30-Jul-21	1.94	21.00	8.07	
26-Jul-21	08-Aug-21	13-Aug-21	0.00	21.00	11.09	
09-Aug-21	22-Aug-21	27-Aug-21	0.00	21.00	8.45	
23-Aug-21	05-Sep-21	09-Sep-21	0.00	21.00	10.67	Boiler offline 29 and 30/08/2021
06-Sep-21	19-Sep-21	23-Sep-21	3.55	21.00	11.44	
20-Sep-21	03-Oct-21	08-Oct-21	2.77	21.00	10.06	
04-Oct-21	17-Oct-21	22-Oct-21	3.73	21.00	12.11	Boiler offline from 9/10-10/10 then 14/10 -17/10
18-Oct-21	31-Oct-21	05-Nov-21	2.81	21.00	10.58	Boiler offline 18/10/21 to 24/10/21
01-Nov-21	14-Nov-21	09-Dec-21	3.43	21.00	9.97	Boiler Shutdown 9/11/2021
15-Nov-21	28-Nov-21	09-Dec-21	No Data	No Data	No Data	Boiler Not Operating
29-Nov-21	12-Dec-21	15-Dec-21	No Data	No Data	No Data	Boiler Not Operating

Sampling Point: Monitoring Point 6 - O₂ 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	
28-Dec-20	10-Jan-21	20-Jan-21	2.10	14.10	21.60	Boiler Online 5/01/21
11-Jan-21	24-Jan-21	29-Jan-21	2.90	7.26	21.10	
25-Jan-21	07-Feb-21	10-Feb-21	1.80	6.43	15.20	
08-Feb-21	21-Feb-21	26-Feb-21	1.40	6.94	21.20	
22-Feb-21	07-Mar-21	12-Mar-21	0.00	5.71	21.00	
08-Mar-21	21-Mar-21	08-Apr-21	1.80	8.01	21.40	
22-Mar-21	04-Apr-21	08-Apr-21	2.30	8.07	21.20	
05-Apr-21	18-Apr-21	22-Apr-21	3.20	7.34	21.30	
19-Apr-21	02-May-21	06-May-21	2.30	9.05	21.30	Boiler Offline 01/05/21
03-May-21	16-May-21	20-May-21	No Data	No Data	No Data	Boiler Not Operating
17-May-21	30-May-21	02-Jun-21	0.00	7.01	21.40	Boiler Offline 17/05/21 to 24/05/21
31-May-21	13-Jun-21	17-Jun-21	0.40	5.40	21.10	
14-Jun-21	27-Jun-21	02-Jul-21	0.20	3.99	14.10	
28-Jun-21	11-Jul-21	16-Jul-21	0.00	7.10	21.30	
12-Jul-21	25-Jul-21	30-Jul-21	0.50	4.04	9.80	
26-Jul-21	08-Aug-21	13-Aug-21	0.90	6.68	21.40	
09-Aug-21	22-Aug-21	27-Aug-21	0.00	4.58	21.20	
23-Aug-21	05-Sep-21	09-Sep-21	0.60	4.75	21.30	
06-Sep-21	19-Sep-21	23-Sep-21	0.30	4.71	21.10	
20-Sep-21	03-Oct-21	08-Oct-21	1.20	4.95	12.90	
04-Oct-21	17-Oct-21	22-Oct-21	0.00	5.52	21.50	
18-Oct-21	31-Oct-21	05-Nov-21	0.80	5.38	21.10	
01-Nov-21	14-Nov-21	23-Nov-21	2.81	10.60	21.00	
15-Nov-21	28-Nov-21	09-Dec-21	0.00	14.86	21.40	
29-Nov-21	12-Dec-21	15-Dec-21	-0.90	10.97	21.30	

Sampling Point: Monitoring Point 8 - Cogeneration Cooling Water Discharge
 Licence: 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: See Table
 Comments: No result may exceed the maximum limit.



MONITORING PERIOD			Temperature (°C)			Volume (kL/day)			Notes
Date Start	Date Finish	Date Published	Limit/s	Maximum	41	Limit/s	Maximum	155520	
			Min Temp	Mean Temp	Max Temp	Minimum Daily Discharge	Mean Daily Discharge	Maximum Daily Discharge	
28-Dec-20	10-Jan-21	20-Jan-21	25	31	42.2	19482	98986	137184	Boiler Online 5/01/21, excursion on 5/01/21 due to turbine control fault for 30 minutes
11-Jan-21	24-Jan-21	29-Jan-21	23	36	39.5	124752	136148	137184	
25-Jan-21	07-Feb-21	10-Feb-21	27	36	39.6	135183	137017	137184	
08-Feb-21	21-Feb-21	26-Feb-21	24	35	39	68592	124958	137184	
22-Feb-21	07-Mar-21	12-Mar-21	24	35	39	119179	134203	137184	
08-Mar-21	21-Mar-21	08-Apr-21	22	32	37	68592	128459	137184	
22-Mar-21	04-Apr-21	08-Apr-21	21	30	36	137184	137184	137184	
05-Apr-21	18-Apr-21	22-Apr-21	21	30	34	135707	137061	137184	
19-Apr-21	02-May-21	06-May-21	19	28	33	137184	137184	137184	
03-May-21	16-May-21	20-May-21	No Data	No Data	No Data	No Data	No Data	No Data	Boiler Not Operating
17-May-21	30-May-21	02-Jun-21	17	30	33	43108	64138	68592	Boiler Offline 17/05/21 to 24/05/21
31-May-21	13-Jun-21	17-Jun-21	16	30	44.8	67544	68505	68592	Fault in the side stream flush valve - high temperature 11/06/21 for 13 minutes
14-Jun-21	27-Jun-21	02-Jul-21	22	29	39	68592	68592	68592	
28-Jun-21	11-Jul-21	16-Jul-21	15	25	33	66830	68445	68592	
12-Jul-21	25-Jul-21	30-Jul-21	21	29	35	68592	68592	68592	
26-Jul-21	08-Aug-21	13-Aug-21	16	26	36	68592	72895	85311	
09-Aug-21	22-Aug-21	27-Aug-21	18	27	32	73498	122378	137184	
23-Aug-21	05-Sep-21	09-Sep-21	17	27	33	135660	137025	137184	
06-Sep-21	19-Sep-21	23-Sep-21	19	28	35	132992	136815	137184	
20-Sep-21	03-Oct-21	08-Oct-21	21	30	37	134612	136767	137184	
04-Oct-21	17-Oct-21	22-Oct-21	21	30	38	133564	136863	137184	
18-Oct-21	31-Oct-21	05-Nov-21	22	32	39	133564	136882	137184	
01-Nov-21	14-Nov-21	23-Nov-21	22	32	39	133564	136882	137184	
15-Nov-21	28-Nov-21	09-Dec-21	20	29	38	50872	125913	137184	
29-Nov-21	12-Dec-21	15-Dec-21	22	29	35	68592	122501	137184	

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/prpoeoapp/>
 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	
28-Dec-20	10-Jan-21	20-Jan-21	23.5	27.5	44.5	19482	98986	137184	Boiler Online 5/01/21
11-Jan-21	24-Jan-21	29-Jan-21	16.7	26.3	28.3	124752	136148	137184	
25-Jan-21	07-Feb-21	10-Feb-21	26.2	28.0	30.0	135183	137017	137184	
08-Feb-21	21-Feb-21	26-Feb-21	22.9	26.5	28.8	68592	124958	137184	
22-Feb-21	07-Mar-21	12-Mar-21	21.0	26.3	28.3	119179	134203	137184	
08-Mar-21	21-Mar-21	08-Apr-21	23.1	24.9	26.9	68592	128459	137184	
22-Mar-21	04-Apr-21	08-Apr-21	22.2	23.4	25.0	137184	137184	137184	
05-Apr-21	18-Apr-21	22-Apr-21	20.7	22.0	23.4	135707	137061	137184	
19-Apr-21	02-May-21	06-May-21	16.8	20.5	21.6	137184	137184	137184	
03-May-21	16-May-21	20-May-21	12.0	21.3	37.8	No Data	No Data	No Data	Boiler Not Operating
17-May-21	30-May-21	02-Jun-21	17.3	18.7	29.4	43108	64138	68592	Boiler Offline 17/05/21 to 24/05/21
31-May-21	13-Jun-21	17-Jun-21	15.9	17.6	21.0	67544	68505	68592	
14-Jun-21	27-Jun-21	02-Jul-21	15.8	16.9	18.7	68592	68592	68592	
28-Jun-21	11-Jul-21	16-Jul-21	15.9	17.5	19.4	66830	68445	68592	
12-Jul-21	25-Jul-21	30-Jul-21	15.4	16.5	17.8	68592	68592	68592	
26-Jul-21	08-Aug-21	13-Aug-21	15.2	17.0	19.0	68592	72895	85311	
09-Aug-21	22-Aug-21	27-Aug-21	11.4	18.7	21.2	73498	122378	137184	
23-Aug-21	05-Sep-21	09-Sep-21	17.4	19.7	21.7	135660	137025	137184	
06-Sep-21	19-Sep-21	23-Sep-21	19.5	20.7	22.3	132992	136815	137184	
20-Sep-21	03-Oct-21	08-Oct-21	16.0	21.6	23.3	134612	136767	137184	
04-Oct-21	17-Oct-21	22-Oct-21	21.9	23.2	24.7	133564	136863	137184	
18-Oct-21	31-Oct-21	05-Nov-21	22.5	24.4	27.1	133564	136882	137184	
01-Nov-21	14-Nov-21	23-Nov-21	22.5	24.3	27.1	133564	136882	137184	
15-Nov-21	28-Nov-21	09-Dec-21	19.9	25.6	39.8	50872	125913	137184	
29-Nov-21	12-Dec-21	15-Dec-21	22.0	24.2	26.4	68592	122501	137184	

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 ₅ (mg/L)	TSS (mg/L)	pH	Nitrogen (mg/L)	Phosphorus (mg/L)	Notes
20-Jan-21	29-Jan-21	10-Feb-21	7.6	10.0	6.4	0.9	1.2	
26-Feb-21	11-Mar-21	12-Mar-21	22.4	154.0	6.2	1.9	0.9	
16-Mar-21	06-Apr-21	08-Apr-21	19.7	150.0	6.2	<0.1	1.4	
13-Apr-21	21-Apr-21	22-Apr-21	13.0	82.0	6.0	1.0	1.1	
18-May-21	24-May-21	02-Jun-21	15.8	55.0	6.3	0.6	1.1	
22-Jun-21	01-Jul-21	02-Jul-21	3.5	5.0	6.8	0.8	0.6	
27-Jul-21	02-Aug-21	13-Aug-21	5.1	72.0	6.5	1.1	1.2	
24-Aug-21	30-Aug-21	09-Sep-21	3.2	28.0	7.6	1.5	0.4	
28-Sep-21	07-Oct-21	08-Oct-21	1.5	11.0	7.0	1.0	0.5	
25-Oct-21	04-Nov-21	05-Nov-21	5.1	32.0	6.6	1.2	1.0	
09-Nov-21	19-Nov-21	23-Nov-21	3.0	15.0	6.8	0.6	0.8	

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 ₅ (mg/L)	TSS (mg/L)	pH	Nitrogen (mg/L)	Phosphorus (mg/L)	Notes
20-Jan-21	29-Jan-21	10-Feb-21	9.9	8.0	7.0	1.6	0.7	
26-Feb-21	11-Mar-21	12-Mar-21	3.2	32.0	6.8	1.5	0.6	
16-Mar-21	06-Apr-21	08-Apr-21	22.9	72.0	6.9	1.3	0.8	
13-Apr-21	21-Apr-21	22-Apr-21	6.0	27.0	6.9	1.2	0.5	
18-May-21	24-May-21	02-Jun-21	9.6	6.0	7.0	1.5	0.4	
22-Jun-21	01-Jul-21	02-Jul-21	3.1	6.0	7.3	1.5	0.4	
27-Jul-21	27-Jul-21	13-Aug-21	1.8	18.0	7.0	1.9	0.4	
24-Aug-21	30-Aug-21	09-Sep-21	3.0	44.0	6.8	1.0	0.8	
28-Sep-21	07-Oct-21	08-Oct-21	13.0	13.0	7.5	1.7	0.4	
25-Oct-21	04-Nov-21	05-Nov-21	1.9	14.0	6.9	1.4	0.3	
09-Nov-21	19-Nov-21	23-Nov-21	3.7	10.0	7.6	1.6	0.4	

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

Monitoring Point 12 - Reverse Osmosis Sidestream
 Cape Byron Management Pty Ltd
 Broadwater Cogeneration Power Plant
 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>
 See Table
 Biannual Grab Sample
 Not Prescribed



Pollutants	Units	Date Sampled	Date Received	Date Published	Results	Notes
Aluminium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.695	
		28-Sep-21	07-Oct-21	08-Oct-21	0.205	
Ammonia	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.680	
		28-Sep-21	07-Oct-21	08-Oct-21	0.292	
Arsenic	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.003	
		28-Sep-21	07-Oct-21	08-Oct-21	0.001	
Barium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.118	
		28-Sep-21	07-Oct-21	08-Oct-21	0.078	
Bicarbonate	CaCO ₃ /kg	13-Apr-21	19-Apr-21	22-Apr-21	37.000	
		28-Sep-21	07-Oct-21	08-Oct-21	120.000	
Cadmium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<0.001	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.001	
Calcium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	26.286	
		28-Sep-21	07-Oct-21	08-Oct-21	33.689	
Chloride	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	2.206	
		28-Sep-21	07-Oct-21	08-Oct-21	1.389	
Chromium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.001	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.001	
Conductivity	dS/m	13-Apr-21	19-Apr-21	22-Apr-21	1.170	
		28-Sep-21	07-Oct-21	08-Oct-21	0.825	
Copper	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<0.001	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.001	
Hardness (as calcium)	CaCO ₃ /kg	13-Apr-21	19-Apr-21	22-Apr-21	142.124	
		28-Sep-21	07-Oct-21	08-Oct-21	33.700	
Iron	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	7.673	
		28-Sep-21	07-Oct-21	08-Oct-21	1.350	
Lead	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<0.001	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.001	
Magnesium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	18.574	
		28-Sep-21	07-Oct-21	08-Oct-21	15.500	
Manganese	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.154	
		28-Sep-21	07-Oct-21	08-Oct-21	0.046	
Mercury	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<0.0005	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.0005	
Nickel	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.002	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.001	
Nitrate	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.016	
		28-Sep-21	07-Oct-21	08-Oct-21	0.623	
Nitrite	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.248	
		28-Sep-21	07-Oct-21	08-Oct-21	0.100	
Orthophosphate	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.027	
		28-Sep-21	07-Oct-21	08-Oct-21	0.007	
Potassium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	8.177	
		28-Sep-21	07-Oct-21	08-Oct-21	11.000	
Selenium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<0.002	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.002	
Silica (total)	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	23.467	
		28-Sep-21	07-Oct-21	08-Oct-21	20.400	
Silver	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<0.001	
		28-Sep-21	07-Oct-21	08-Oct-21	<0.001	
Sodium	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	175.331	
		28-Sep-21	07-Oct-21	08-Oct-21	113.000	

Sampling Point: Monitoring Point 12 - Reverse Osmosis Sidestream
 Licencee Cape Byron Management Pty Ltd
 Location Broadwater Cogeneration Power Plant
 EPL No 20425 <http://www.epa.nsw.gov.au/prpoeoapp/>
 Parameters Measured See Table
 Frequency & Method Biannual Grab Sample
 Licence Limits Not Prescribed



Pollutants	Units	Date Sampled	Date Received	Date Published	Results	Notes
Sodium Adsorption Ratio	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	6.394	
		28-Sep-21	07-Oct-21	08-Oct-21	4.000	
Sulfate	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	115.047	
		28-Sep-21	07-Oct-21	08-Oct-21	87.000	
Total Dissolved Salts	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	795.600	
		28-Sep-21	07-Oct-21	08-Oct-21	561.000	
Total Organic Carbon	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	21.500	
		28-Sep-21	07-Oct-21	08-Oct-21	20.400	
Total Suspended Solids	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	<1	
		28-Sep-21	07-Oct-21	08-Oct-21	<1	
Zinc	mg/l	13-Apr-21	19-Apr-21	22-Apr-21	0.024	
		28-Sep-21	07-Oct-21	08-Oct-21	0.004	
pH		13-Apr-21	19-Apr-21	22-Apr-21	6.780	
		28-Sep-21	07-Oct-21	08-Oct-21	7.600	

Sampling Point:

Licencee
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)
Thursday, 31 December 2020	9:01am	Friday, 1 January 2021	9:00am	0.8	0.2
Friday, 1 January 2021	9:01am	Saturday, 2 January 2021	9:00am	15.6	0.8
Saturday, 2 January 2021	9:01am	Sunday, 3 January 2021	9:00am	0	0
Sunday, 3 January 2021	9:01am	Monday, 4 January 2021	9:00am	1.8	0.2
Monday, 4 January 2021	9:01am	Tuesday, 5 January 2021	9:00am	0	0
Tuesday, 5 January 2021	9:01am	Wednesday, 6 January 2021	9:00am	0.6	0.2
Wednesday, 6 January 2021	9:01am	Thursday, 7 January 2021	9:00am	10.6	0.4
Thursday, 7 January 2021	9:01am	Friday, 8 January 2021	9:00am	33.2	0.8
Friday, 8 January 2021	9:01am	Saturday, 9 January 2021	9:00am	11	1
Saturday, 9 January 2021	9:01am	Sunday, 10 January 2021	9:00am	1.8	0.6
Sunday, 10 January 2021	9:01am	Monday, 11 January 2021	9:00am	2.6	0.6
Monday, 11 January 2021	9:01am	Tuesday, 12 January 2021	9:00am	0.2	0.2
Tuesday, 12 January 2021	9:01am	Wednesday, 13 January 2021	9:00am	0.6	0.2
Wednesday, 13 January 2021	9:01am	Thursday, 14 January 2021	9:00am	0.2	0.2
Thursday, 14 January 2021	9:01am	Friday, 15 January 2021	9:00am	0	0
Friday, 15 January 2021	9:01am	Saturday, 16 January 2021	9:00am	2.6	0.2
Saturday, 16 January 2021	9:01am	Sunday, 17 January 2021	9:00am	0.2	0.2
Sunday, 17 January 2021	9:01am	Monday, 18 January 2021	9:00am	0	0
Monday, 18 January 2021	9:01am	Tuesday, 19 January 2021	9:00am	20	1
Tuesday, 19 January 2021	9:01am	Wednesday, 20 January 2021	9:00am	8.2	1
Wednesday, 20 January 2021	9:01am	Thursday, 21 January 2021	9:00am	6	0.2
Thursday, 21 January 2021	9:01am	Friday, 22 January 2021	9:00am	0	0
Friday, 22 January 2021	9:01am	Saturday, 23 January 2021	9:00am	0	0
Saturday, 23 January 2021	9:01am	Sunday, 24 January 2021	9:00am	0	0
Sunday, 24 January 2021	9:01am	Monday, 25 January 2021	9:00am	0	0
Monday, 25 January 2021	9:01am	Tuesday, 26 January 2021	9:00am	0	0
Tuesday, 26 January 2021	9:01am	Wednesday, 27 January 2021	9:00am	0	0
Wednesday, 27 January 2021	9:01am	Thursday, 28 January 2021	9:00am	0	0
Thursday, 28 January 2021	9:01am	Friday, 29 January 2021	9:00am	0	0
Friday, 29 January 2021	9:01am	Saturday, 30 January 2021	9:00am	0.4	0.2
Saturday, 30 January 2021	9:01am	Sunday, 31 January 2021	9:00am	0.6	0.2
Sunday, 31 January 2021	9:01am	Monday, 1 February 2021	9:00am	2.6	0.6
Monday, 1 February 2021	9:01am	Tuesday, 2 February 2021	9:00am	0	0
Tuesday, 2 February 2021	9:01am	Wednesday, 3 February 2021	9:00am	18.2	1.6
Wednesday, 3 February 2021	9:01am	Thursday, 4 February 2021	9:00am	0	0
Thursday, 4 February 2021	9:01am	Friday, 5 February 2021	9:00am	0	0
Friday, 5 February 2021	9:01am	Saturday, 6 February 2021	9:00am	0	0
Saturday, 6 February 2021	9:01am	Sunday, 7 February 2021	9:00am	0	0
Sunday, 7 February 2021	9:01am	Monday, 8 February 2021	9:00am	4.6	0.8
Monday, 8 February 2021	9:01am	Tuesday, 9 February 2021	9:00am	0.2	0.2
Tuesday, 9 February 2021	9:01am	Wednesday, 10 February 2021	9:00am	0.8	0.2
Wednesday, 10 February 2021	9:01am	Thursday, 11 February 2021	9:00am	6.6	0.6
Thursday, 11 February 2021	9:01am	Friday, 12 February 2021	9:00am	0	0
Friday, 12 February 2021	9:01am	Saturday, 13 February 2021	9:00am	0	0
Saturday, 13 February 2021	9:01am	Sunday, 14 February 2021	9:00am	12.4	0.4
Sunday, 14 February 2021	9:01am	Monday, 15 February 2021	9:00am	7	0.4
Monday, 15 February 2021	9:01am	Tuesday, 16 February 2021	9:00am	6	0.8
Tuesday, 16 February 2021	9:01am	Wednesday, 17 February 2021	9:00am	27.2	1.4
Wednesday, 17 February 2021	9:01am	Thursday, 18 February 2021	9:00am	32.2	1
Thursday, 18 February 2021	9:01am	Friday, 19 February 2021	9:00am	3.2	0.6
Friday, 19 February 2021	9:01am	Saturday, 20 February 2021	9:00am	60.6	1.4
Saturday, 20 February 2021	9:01am	Sunday, 21 February 2021	9:00am	4.6	0.4
Sunday, 21 February 2021	9:01am	Monday, 22 February 2021	9:00am	7.2	0.2
Monday, 22 February 2021	9:01am	Tuesday, 23 February 2021	9:00am	0	0
Tuesday, 23 February 2021	9:01am	Wednesday, 24 February 2021	9:00am	21.4	1
Wednesday, 24 February 2021	9:01am	Thursday, 25 February 2021	9:00am	7.6	0.8
Thursday, 25 February 2021	9:01am	Friday, 26 February 2021	9:00am	0.6	0.2
Friday, 26 February 2021	9:01am	Saturday, 27 February 2021	9:00am	0	0
Saturday, 27 February 2021	9:01am	Sunday, 28 February 2021	9:00am	0	0
Sunday, 28 February 2021	9:01am	Monday, 1 March 2021	9:00am	0	0
Monday, 1 March 2021	9:01am	Tuesday, 2 March 2021	9:00am	2.6	0.2
Tuesday, 2 March 2021	9:01am	Wednesday, 3 March 2021	9:00am	0.8	0.2
Wednesday, 3 March 2021	9:01am	Thursday, 4 March 2021	9:00am	34.6	2.4
Thursday, 4 March 2021	9:01am	Friday, 5 March 2021	9:00am	0	0
Friday, 5 March 2021	9:01am	Saturday, 6 March 2021	9:00am	3.2	0.6
Saturday, 6 March 2021	9:01am	Sunday, 7 March 2021	9:00am	3.2	0.4
Sunday, 7 March 2021	9:01am	Monday, 8 March 2021	9:00am	0.2	0.2
Monday, 8 March 2021	9:01am	Tuesday, 9 March 2021	9:00am	21.4	1
Tuesday, 9 March 2021	9:01am	Wednesday, 10 March 2021	9:00am	1.6	0.2
Wednesday, 10 March 2021	9:01am	Thursday, 11 March 2021	9:00am	12.8	0.8
Thursday, 11 March 2021	9:01am	Friday, 12 March 2021	9:00am	38.2	1.4
Friday, 12 March 2021	9:01am	Saturday, 13 March 2021	9:00am	0	0
Saturday, 13 March 2021	9:01am	Sunday, 14 March 2021	9:00am	0	0
Sunday, 14 March 2021	9:01am	Monday, 15 March 2021	9:00am	21.8	1
Monday, 15 March 2021	9:01am	Tuesday, 16 March 2021	9:00am	5.8	0.2
Tuesday, 16 March 2021	9:01am	Wednesday, 17 March 2021	9:00am	6	0.4
Wednesday, 17 March 2021	9:01am	Thursday, 18 March 2021	9:00am	40.2	1.2
Thursday, 18 March 2021	9:01am	Friday, 19 March 2021	9:00am	10	0.4
Friday, 19 March 2021	9:01am	Saturday, 20 March 2021	9:00am	14.8	1.2
Saturday, 20 March 2021	9:01am	Sunday, 21 March 2021	9:00am	37.2	1
Sunday, 21 March 2021	9:01am	Monday, 22 March 2021	9:00am	88.6	2
Monday, 22 March 2021	9:01am	Tuesday, 23 March 2021	9:00am	40	0.6
Tuesday, 23 March 2021	9:01am	Wednesday, 24 March 2021	9:00am	31.2	0.6
Wednesday, 24 March 2021	9:01am	Thursday, 25 March 2021	9:00am	0	0
Thursday, 25 March 2021	9:01am	Friday, 26 March 2021	9:00am	0	0
Friday, 26 March 2021	9:01am	Saturday, 27 March 2021	9:00am	0	0
Saturday, 27 March 2021	9:01am	Sunday, 28 March 2021	9:00am	0	0
Sunday, 28 March 2021	9:01am	Monday, 29 March 2021	9:00am	0	0
Monday, 29 March 2021	9:01am	Tuesday, 30 March 2021	9:00am	11.4	1.2
Tuesday, 30 March 2021	9:01am	Wednesday, 31 March 2021	9:00am	0.2	0.2
Wednesday, 31 March 2021	9:01am	Thursday, 1 April 2021	9:00am	24.2	1.6
Thursday, 1 April 2021	9:01am	Friday, 2 April 2021	9:00am	25.6	0.8
Friday, 2 April 2021	9:01am	Saturday, 3 April 2021	9:00am	0	0
Saturday, 3 April 2021	9:01am	Sunday, 4 April 2021	9:00am	1	0.2
Sunday, 4 April 2021	9:01am	Monday, 5 April 2021	9:00am	19.2	0.6
Monday, 5 April 2021	9:01am	Tuesday, 6 April 2021	9:00am	28.6	0.2
Tuesday, 6 April 2021	9:01am	Wednesday, 7 April 2021	9:00am	19.2	0.6
Wednesday, 7 April 2021	9:01am	Thursday, 8 April 2021	9:00am	9.8	0.8
Thursday, 8 April 2021	9:01am	Friday, 9 April 2021	9:00am	3.8	0.2

Sampling Point:

Licencee
 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)
Friday, 9 April 2021	9:01am	Saturday, 10 April 2021	9:00am	0	0
Saturday, 10 April 2021	9:01am	Sunday, 11 April 2021	9:00am	0	0
Sunday, 11 April 2021	9:01am	Monday, 12 April 2021	9:00am	2	0.2
Monday, 12 April 2021	9:01am	Tuesday, 13 April 2021	9:00am	0.2	0.2
Tuesday, 13 April 2021	9:01am	Wednesday, 14 April 2021	9:00am	0	0
Wednesday, 14 April 2021	9:01am	Thursday, 15 April 2021	9:00am	0	0
Thursday, 15 April 2021	9:01am	Friday, 16 April 2021	9:00am	0	0
Friday, 16 April 2021	9:01am	Saturday, 17 April 2021	9:00am	0	0
Saturday, 17 April 2021	9:01am	Sunday, 18 April 2021	9:00am	4.6	0.2
Sunday, 18 April 2021	9:01am	Monday, 19 April 2021	9:00am	0	0
Monday, 19 April 2021	9:01am	Tuesday, 20 April 2021	9:00am	0	0
Tuesday, 20 April 2021	9:01am	Wednesday, 21 April 2021	9:00am	0	0
Wednesday, 21 April 2021	9:01am	Thursday, 22 April 2021	9:00am	0	0
Thursday, 22 April 2021	9:01am	Friday, 23 April 2021	9:00am	0	0
Friday, 23 April 2021	9:01am	Saturday, 24 April 2021	9:00am	0	0
Saturday, 24 April 2021	9:01am	Sunday, 25 April 2021	9:00am	0	0
Sunday, 25 April 2021	9:01am	Monday, 26 April 2021	9:00am	0	0
Monday, 26 April 2021	9:01am	Tuesday, 27 April 2021	9:00am	2	0.6
Tuesday, 27 April 2021	9:01am	Wednesday, 28 April 2021	9:00am	0.4	0.2
Wednesday, 28 April 2021	9:01am	Thursday, 29 April 2021	9:00am	23	0.6
Thursday, 29 April 2021	9:01am	Friday, 30 April 2021	9:00am	12.4	1.2
Friday, 30 April 2021	9:01am	Saturday, 1 May 2021	9:00am	21.2	1.6
Saturday, 1 May 2021	9:01am	Sunday, 2 May 2021	9:00am	1.8	0.6
Sunday, 2 May 2021	9:01am	Monday, 3 May 2021	9:00am	2	0.4
Monday, 3 May 2021	9:01am	Tuesday, 4 May 2021	9:00am	0	0
Tuesday, 4 May 2021	9:01am	Wednesday, 5 May 2021	9:00am	0.2	0.2
Wednesday, 5 May 2021	9:01am	Thursday, 6 May 2021	9:00am	13.2	0.2
Thursday, 6 May 2021	9:01am	Friday, 7 May 2021	9:00am	0	0
Friday, 7 May 2021	9:01am	Saturday, 8 May 2021	9:00am	0	0
Saturday, 8 May 2021	9:01am	Sunday, 9 May 2021	9:00am	0	0
Sunday, 9 May 2021	9:01am	Monday, 10 May 2021	9:00am	1.4	0.4
Monday, 10 May 2021	9:01am	Tuesday, 11 May 2021	9:00am	0	0
Tuesday, 11 May 2021	9:01am	Wednesday, 12 May 2021	9:00am	0.8	0.2
Wednesday, 12 May 2021	9:01am	Thursday, 13 May 2021	9:00am	0.2	0.2
Thursday, 13 May 2021	9:01am	Friday, 14 May 2021	9:00am	0	0
Friday, 14 May 2021	9:01am	Saturday, 15 May 2021	9:00am	0	0
Saturday, 15 May 2021	9:01am	Sunday, 16 May 2021	9:00am	0	0
Sunday, 16 May 2021	9:01am	Monday, 17 May 2021	9:00am	0	0
Monday, 17 May 2021	9:01am	Tuesday, 18 May 2021	9:00am	0	0
Tuesday, 18 May 2021	9:01am	Wednesday, 19 May 2021	9:00am	1.4	0.2
Wednesday, 19 May 2021	9:01am	Thursday, 20 May 2021	9:00am	0.2	0.2
Thursday, 20 May 2021	9:01am	Friday, 21 May 2021	9:00am	0.2	0.2
Friday, 21 May 2021	9:01am	Saturday, 22 May 2021	9:00am	18.4	1.6
Saturday, 22 May 2021	9:01am	Sunday, 23 May 2021	9:00am	4.2	0.6
Sunday, 23 May 2021	9:01am	Monday, 24 May 2021	9:00am	7.4	1
Monday, 24 May 2021	9:01am	Tuesday, 25 May 2021	9:00am	1.6	0.2
Tuesday, 25 May 2021	9:01am	Wednesday, 26 May 2021	9:00am	0.2	0.2
Wednesday, 26 May 2021	9:01am	Thursday, 27 May 2021	9:00am	0.2	0.2
Thursday, 27 May 2021	9:01am	Friday, 28 May 2021	9:00am	0	0
Friday, 28 May 2021	9:01am	Saturday, 29 May 2021	9:00am	0	0
Saturday, 29 May 2021	9:01am	Sunday, 30 May 2021	9:00am	0	0
Sunday, 30 May 2021	9:01am	Monday, 31 May 2021	9:00am	0	0
Monday, 31 May 2021	9:01am	Tuesday, 1 June 2021	9:00am	0	0
Tuesday, 1 June 2021	9:01am	Wednesday, 2 June 2021	9:00am	0	0
Wednesday, 2 June 2021	9:01am	Thursday, 3 June 2021	9:00am	0	0
Thursday, 3 June 2021	9:01am	Friday, 4 June 2021	9:00am	1.8	0.2
Friday, 4 June 2021	9:01am	Saturday, 5 June 2021	9:00am	0	0
Saturday, 5 June 2021	9:01am	Sunday, 6 June 2021	9:00am	0	0
Sunday, 6 June 2021	9:01am	Monday, 7 June 2021	9:00am	0	0
Monday, 7 June 2021	9:01am	Tuesday, 8 June 2021	9:00am	0.2	0.2
Tuesday, 8 June 2021	9:01am	Wednesday, 9 June 2021	9:00am	2.6	0.4
Wednesday, 9 June 2021	9:01am	Thursday, 10 June 2021	9:00am	0.2	0.2
Thursday, 10 June 2021	9:01am	Friday, 11 June 2021	9:00am	0	0
Friday, 11 June 2021	9:01am	Saturday, 12 June 2021	9:00am	0	0
Saturday, 12 June 2021	9:01am	Sunday, 13 June 2021	9:00am	0	0
Sunday, 13 June 2021	9:01am	Monday, 14 June 2021	9:00am	0	0
Monday, 14 June 2021	9:01am	Tuesday, 15 June 2021	9:00am	0	0
Tuesday, 15 June 2021	9:01am	Wednesday, 16 June 2021	9:00am	0	0
Wednesday, 16 June 2021	9:01am	Thursday, 17 June 2021	9:00am	4.6	0.4
Thursday, 17 June 2021	9:01am	Friday, 18 June 2021	9:00am	0	0
Friday, 18 June 2021	9:01am	Saturday, 19 June 2021	9:00am	0	0
Saturday, 19 June 2021	9:01am	Sunday, 20 June 2021	9:00am	0	0
Sunday, 20 June 2021	9:01am	Monday, 21 June 2021	9:00am	0	0
Monday, 21 June 2021	9:01am	Tuesday, 22 June 2021	9:00am	2.2	0.4
Tuesday, 22 June 2021	9:01am	Wednesday, 23 June 2021	9:00am	3.2	0.4
Wednesday, 23 June 2021	9:01am	Thursday, 24 June 2021	9:00am	0.8	0.2
Thursday, 24 June 2021	9:01am	Friday, 25 June 2021	9:00am	0.4	0.2
Friday, 25 June 2021	9:01am	Saturday, 26 June 2021	9:00am	1.8	0.2
Saturday, 26 June 2021	9:01am	Sunday, 27 June 2021	9:00am	0.2	0.2
Sunday, 27 June 2021	9:01am	Monday, 28 June 2021	9:00am	0	0
Monday, 28 June 2021	9:01am	Tuesday, 29 June 2021	9:00am	18.4	0.8
Tuesday, 29 June 2021	9:01am	Wednesday, 30 June 2021	9:00am	6	0.8
Wednesday, 30 June 2021	9:01am	Thursday, 1 July 2021	9:00am	29	1.6
Thursday, 1 July 2021	9:01am	Friday, 2 July 2021	9:00am	22.2	0.8
Friday, 2 July 2021	9:01am	Saturday, 3 July 2021	9:00am	7.8	1
Saturday, 3 July 2021	9:01am	Sunday, 4 July 2021	9:00am	6.4	0.4
Sunday, 4 July 2021	9:01am	Monday, 5 July 2021	9:00am	0	0
Monday, 5 July 2021	9:01am	Tuesday, 6 July 2021	9:00am	0	0
Tuesday, 6 July 2021	9:01am	Wednesday, 7 July 2021	9:00am	0.2	0.2
Wednesday, 7 July 2021	9:01am	Thursday, 8 July 2021	9:00am	0	0
Thursday, 8 July 2021	9:01am	Friday, 9 July 2021	9:00am	8.4	0.2
Friday, 9 July 2021	9:01am	Saturday, 10 July 2021	9:00am	3.4	0.6
Saturday, 10 July 2021	9:01am	Sunday, 11 July 2021	9:00am	0	0
Sunday, 11 July 2021	9:01am	Monday, 12 July 2021	9:00am	9.6	0.6
Monday, 12 July 2021	9:01am	Tuesday, 13 July 2021	9:00am	0.6	0.2
Tuesday, 13 July 2021	9:01am	Wednesday, 14 July 2021	9:00am	0.2	0.2
Wednesday, 14 July 2021	9:01am	Thursday, 15 July 2021	9:00am	0	0
Thursday, 15 July 2021	9:01am	Friday, 16 July 2021	9:00am	0	0
Friday, 16 July 2021	9:01am	Saturday, 17 July 2021	9:00am	0.8	0.2

Sampling Point:

Licencee
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)
Saturday, 17 July 2021	9:01am	Sunday, 18 July 2021	9:00am	0	0
Sunday, 18 July 2021	9:01am	Monday, 19 July 2021	9:00am	0	0
Monday, 19 July 2021	9:01am	Tuesday, 20 July 2021	9:00am	0	0
Tuesday, 20 July 2021	9:01am	Wednesday, 21 July 2021	9:00am	0	0
Wednesday, 21 July 2021	9:01am	Thursday, 22 July 2021	9:00am	0	0
Thursday, 22 July 2021	9:01am	Friday, 23 July 2021	9:00am	0	0
Friday, 23 July 2021	9:01am	Saturday, 24 July 2021	9:00am	0.6	0.2
Saturday, 24 July 2021	9:01am	Sunday, 25 July 2021	9:00am	0	0
Sunday, 25 July 2021	9:01am	Monday, 26 July 2021	9:00am	0	0
Monday, 26 July 2021	9:01am	Tuesday, 27 July 2021	9:00am	0	0
Tuesday, 27 July 2021	9:01am	Wednesday, 28 July 2021	9:00am	0	0
Wednesday, 28 July 2021	9:01am	Thursday, 29 July 2021	9:00am	0	0
Thursday, 29 July 2021	9:01am	Friday, 30 July 2021	9:00am	0	0
Friday, 30 July 2021	9:01am	Saturday, 31 July 2021	9:00am	0	0
Saturday, 31 July 2021	9:01am	Sunday, 1 August 2021	9:00am	0	0
Sunday, 1 August 2021	9:01am	Monday, 2 August 2021	9:00am	0	0
Monday, 2 August 2021	9:01am	Tuesday, 3 August 2021	9:00am	1.2	0.2
Tuesday, 3 August 2021	9:01am	Wednesday, 4 August 2021	9:00am	2.6	0.6
Wednesday, 4 August 2021	9:01am	Thursday, 5 August 2021	9:00am	0	0
Thursday, 5 August 2021	9:01am	Friday, 6 August 2021	9:00am	0	0
Friday, 6 August 2021	9:01am	Saturday, 7 August 2021	9:00am	0	0
Saturday, 7 August 2021	9:01am	Sunday, 8 August 2021	9:00am	0	0
Sunday, 8 August 2021	9:01am	Monday, 9 August 2021	9:00am	4.4	0.4
Monday, 9 August 2021	9:01am	Tuesday, 10 August 2021	9:00am	0	0
Tuesday, 10 August 2021	9:01am	Wednesday, 11 August 2021	9:00am	0	0
Wednesday, 11 August 2021	9:01am	Thursday, 12 August 2021	9:00am	0	0
Thursday, 12 August 2021	9:01am	Friday, 13 August 2021	9:00am	0	0
Friday, 13 August 2021	9:01am	Saturday, 14 August 2021	9:00am	0.2	0.2
Saturday, 14 August 2021	9:01am	Sunday, 15 August 2021	9:00am	0.6	0.2
Sunday, 15 August 2021	9:01am	Monday, 16 August 2021	9:00am	0	0
Monday, 16 August 2021	9:01am	Tuesday, 17 August 2021	9:00am	0.2	0.2
Tuesday, 17 August 2021	9:01am	Wednesday, 18 August 2021	9:00am	1.6	0.2
Wednesday, 18 August 2021	9:01am	Thursday, 19 August 2021	9:00am	0	0
Thursday, 19 August 2021	9:01am	Friday, 20 August 2021	9:00am	0	0
Friday, 20 August 2021	9:01am	Saturday, 21 August 2021	9:00am	0	0
Saturday, 21 August 2021	9:01am	Sunday, 22 August 2021	9:00am	0	0
Sunday, 22 August 2021	9:01am	Monday, 23 August 2021	9:00am	0	0
Monday, 23 August 2021	9:01am	Tuesday, 24 August 2021	9:00am	0.6	0.2
Tuesday, 24 August 2021	9:01am	Wednesday, 25 August 2021	9:00am	7.8	0.8
Wednesday, 25 August 2021	9:01am	Thursday, 26 August 2021	9:00am	0	0
Thursday, 26 August 2021	9:01am	Friday, 27 August 2021	9:00am	0	0
Friday, 27 August 2021	9:01am	Saturday, 28 August 2021	9:00am	0	0
Saturday, 28 August 2021	9:01am	Sunday, 29 August 2021	9:00am	0	0
Sunday, 29 August 2021	9:01am	Monday, 30 August 2021	9:00am	3.2	1.6
Monday, 30 August 2021	9:01am	Tuesday, 31 August 2021	9:00am	0	0
Tuesday, 31 August 2021	9:01am	Wednesday, 1 September 2021	9:00am	0	0
Wednesday, 1 September 2021	9:01am	Thursday, 2 September 2021	9:00am	0	0
Thursday, 2 September 2021	9:01am	Friday, 3 September 2021	9:00am	0	0
Friday, 3 September 2021	9:01am	Saturday, 4 September 2021	9:00am	10	0.4
Saturday, 4 September 2021	9:01am	Sunday, 5 September 2021	9:00am	0	0
Sunday, 5 September 2021	9:01am	Monday, 6 September 2021	9:00am	0.8	0.2
Monday, 6 September 2021	9:01am	Tuesday, 7 September 2021	9:00am	0	0
Tuesday, 7 September 2021	9:01am	Wednesday, 8 September 2021	9:00am	0	0
Wednesday, 8 September 2021	9:01am	Thursday, 9 September 2021	9:00am	0	0
Thursday, 9 September 2021	9:01am	Friday, 10 September 2021	9:00am	0	0
Friday, 10 September 2021	9:01am	Saturday, 11 September 2021	9:00am	0	0
Saturday, 11 September 2021	9:01am	Sunday, 12 September 2021	9:00am	0	0
Sunday, 12 September 2021	9:01am	Monday, 13 September 2021	9:00am	0	0
Monday, 13 September 2021	9:01am	Tuesday, 14 September 2021	9:00am	0	0
Tuesday, 14 September 2021	9:01am	Wednesday, 15 September 2021	9:00am	0	0
Wednesday, 15 September 2021	9:01am	Thursday, 16 September 2021	9:00am	0	0
Thursday, 16 September 2021	9:01am	Friday, 17 September 2021	9:00am	0	0
Friday, 17 September 2021	9:01am	Saturday, 18 September 2021	9:00am	0	0
Saturday, 18 September 2021	9:01am	Sunday, 19 September 2021	9:00am	0	0
Sunday, 19 September 2021	9:01am	Monday, 20 September 2021	9:00am	0	0
Monday, 20 September 2021	9:01am	Tuesday, 21 September 2021	9:00am	5.4	0.6
Tuesday, 21 September 2021	9:01am	Wednesday, 22 September 2021	9:00am	0.8	0.2
Wednesday, 22 September 2021	9:01am	Thursday, 23 September 2021	9:00am	0	0
Thursday, 23 September 2021	9:01am	Friday, 24 September 2021	9:00am	0	0
Friday, 24 September 2021	9:01am	Saturday, 25 September 2021	9:00am	0	0
Saturday, 25 September 2021	9:01am	Sunday, 26 September 2021	9:00am	9.2	0.8
Sunday, 26 September 2021	9:01am	Monday, 27 September 2021	9:00am	7.2	0.4
Monday, 27 September 2021	9:01am	Tuesday, 28 September 2021	9:00am	0	0
Tuesday, 28 September 2021	9:01am	Wednesday, 29 September 2021	9:00am	0	0
Wednesday, 29 September 2021	9:01am	Thursday, 30 September 2021	9:00am	13.4	0.4
Thursday, 30 September 2021	9:01am	Friday, 1 October 2021	9:00am	5.6	0.2
Friday, 1 October 2021	9:01am	Saturday, 2 October 2021	9:00am	9.2	0.4
Saturday, 2 October 2021	9:01am	Sunday, 3 October 2021	9:00am	0	0
Sunday, 3 October 2021	9:01am	Monday, 4 October 2021	9:00am	0	0
Monday, 4 October 2021	9:01am	Tuesday, 5 October 2021	9:00am	0	0
Tuesday, 5 October 2021	9:01am	Wednesday, 6 October 2021	9:00am	0	0
Wednesday, 6 October 2021	9:01am	Thursday, 7 October 2021	9:00am	0	0
Thursday, 7 October 2021	9:01am	Friday, 8 October 2021	9:00am	0	0
Friday, 8 October 2021	9:01am	Saturday, 9 October 2021	9:00am	0	0
Saturday, 9 October 2021	9:01am	Sunday, 10 October 2021	9:00am	0	0
Sunday, 10 October 2021	9:01am	Monday, 11 October 2021	9:00am	0	0
Monday, 11 October 2021	9:01am	Tuesday, 12 October 2021	9:00am	26.2	0.2
Tuesday, 12 October 2021	9:01am	Wednesday, 13 October 2021	9:00am	51.4	0.8
Wednesday, 13 October 2021	9:01am	Thursday, 14 October 2021	9:00am	4.2	0.4
Thursday, 14 October 2021	9:01am	Friday, 15 October 2021	9:00am	0	0
Friday, 15 October 2021	9:01am	Saturday, 16 October 2021	9:00am	0	0
Saturday, 16 October 2021	9:01am	Sunday, 17 October 2021	9:00am	0	0
Sunday, 17 October 2021	9:01am	Monday, 18 October 2021	9:00am	0	0
Monday, 18 October 2021	9:01am	Tuesday, 19 October 2021	9:00am	19.8	1
Tuesday, 19 October 2021	9:01am	Wednesday, 20 October 2021	9:00am	1.2	0.2
Wednesday, 20 October 2021	9:01am	Thursday, 21 October 2021	9:00am	0.2	0.2
Thursday, 21 October 2021	9:01am	Friday, 22 October 2021	9:00am	20.2	2.4
Friday, 22 October 2021	9:01am	Saturday, 23 October 2021	9:00am	0	0
Saturday, 23 October 2021	9:01am	Sunday, 24 October 2021	9:00am	0	0

Sampling Point:

Licencee
 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)
Sunday, 24 October 2021	9:01am	Monday, 25 October 2021	9:00am	0	0
Monday, 25 October 2021	9:01am	Tuesday, 26 October 2021	9:00am	1.6	0.2
Tuesday, 26 October 2021	9:01am	Wednesday, 27 October 2021	9:00am	0	0
Wednesday, 27 October 2021	9:01am	Thursday, 28 October 2021	9:00am	0	0
Thursday, 28 October 2021	9:01am	Friday, 29 October 2021	9:00am	0	0
Friday, 29 October 2021	9:01am	Saturday, 30 October 2021	9:00am	0	0
Saturday, 30 October 2021	9:01am	Sunday, 31 October 2021	9:00am	0.8	0.2
Sunday, 31 October 2021	9:01am	Monday, 1 November 2021	9:00am	0	0
Monday, 1 November 2021	9:01am	Tuesday, 2 November 2021	9:00am	0	0
Tuesday, 2 November 2021	9:01am	Wednesday, 3 November 2021	9:00am	1.6	0.4
Wednesday, 3 November 2021	9:01am	Thursday, 4 November 2021	9:00am	0	0
Thursday, 4 November 2021	9:01am	Friday, 5 November 2021	9:00am	0	0
Friday, 5 November 2021	9:01am	Saturday, 6 November 2021	9:00am	0	0
Saturday, 6 November 2021	9:01am	Sunday, 7 November 2021	9:00am	0	0
Sunday, 7 November 2021	9:01am	Monday, 8 November 2021	9:00am	3.8	0.4
Monday, 8 November 2021	9:01am	Tuesday, 9 November 2021	9:00am	7.6	1.2
Tuesday, 9 November 2021	9:01am	Wednesday, 10 November 2021	9:00am	0	0
Wednesday, 10 November 2021	9:01am	Thursday, 11 November 2021	9:00am	24.8	1.6
Thursday, 11 November 2021	9:01am	Friday, 12 November 2021	9:00am	2.6	0.2
Friday, 12 November 2021	9:01am	Saturday, 13 November 2021	9:00am	0.6	0.2
Saturday, 13 November 2021	9:01am	Sunday, 14 November 2021	9:00am	0	0
Sunday, 14 November 2021	9:01am	Monday, 15 November 2021	9:00am	0	0
Monday, 15 November 2021	9:01am	Tuesday, 16 November 2021	9:00am	0	0
Tuesday, 16 November 2021	9:01am	Wednesday, 17 November 2021	9:00am	22.6	3.6
Wednesday, 17 November 2021	9:01am	Thursday, 18 November 2021	9:00am	0	0
Thursday, 18 November 2021	9:01am	Friday, 19 November 2021	9:00am	0	0
Friday, 19 November 2021	9:01am	Saturday, 20 November 2021	9:00am	0	0
Saturday, 20 November 2021	9:01am	Sunday, 21 November 2021	9:00am	18.2	1.2
Sunday, 21 November 2021	9:01am	Monday, 22 November 2021	9:00am	8.4	0.6
Monday, 22 November 2021	9:01am	Tuesday, 23 November 2021	9:00am	17.8	1
Tuesday, 23 November 2021	9:01am	Wednesday, 24 November 2021	9:00am	0.4	0.2
Wednesday, 24 November 2021	9:01am	Thursday, 25 November 2021	9:00am	15.6	0.8
Thursday, 25 November 2021	9:01am	Friday, 26 November 2021	9:00am	0.6	0.2
Friday, 26 November 2021	9:01am	Saturday, 27 November 2021	9:00am	6	0.4
Saturday, 27 November 2021	9:01am	Sunday, 28 November 2021	9:00am	0	0
Sunday, 28 November 2021	9:01am	Monday, 29 November 2021	9:00am	0	0
Monday, 29 November 2021	9:01am	Tuesday, 30 November 2021	9:00am	3.8	0.2
Tuesday, 30 November 2021	9:01am	Wednesday, 1 December 2021	9:00am	114.2	1.8
Wednesday, 1 December 2021	9:01am	Thursday, 2 December 2021	9:00am	6.8	0.2
Thursday, 2 December 2021	9:01am	Friday, 3 December 2021	9:00am	1	0.2
Friday, 3 December 2021	9:01am	Saturday, 4 December 2021	9:00am	0	0
Saturday, 4 December 2021	9:01am	Sunday, 5 December 2021	9:00am	18.2	1.6
Sunday, 5 December 2021	9:01am	Monday, 6 December 2021	9:00am	36.6	1
Monday, 6 December 2021	9:01am	Tuesday, 7 December 2021	9:00am	10	0.6
Tuesday, 7 December 2021	9:01am	Wednesday, 8 December 2021	9:00am	0.6	0.2
Wednesday, 8 December 2021	9:01am	Thursday, 9 December 2021	9:00am	8	0.6
Thursday, 9 December 2021	9:01am	Friday, 10 December 2021	9:00am	24	2.2
Friday, 10 December 2021	9:01am	Saturday, 11 December 2021	9:00am	0	0
Saturday, 11 December 2021	9:01am	Sunday, 12 December 2021	9:00am	3.4	0.4
Sunday, 12 December 2021	9:01am	Monday, 13 December 2021	9:00am	4.2	0.6
Monday, 13 December 2021	9:01am	Tuesday, 14 December 2021	9:00am	0	0

