



Environmental Monitoring Report

Condong Biomass Power Plant 153 McLeod Street Condong NSW

Licencee Cape Byron Management Pty Ltd
Address 153 McLeod Street Condong NSW
EPL No 20424 <http://www.epa.nsw.gov.au/prpoeoapp/>

This data is published 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 1 Boiler Stack Emissions

Cape Byron Management Pty Ltd

Condong Cogeneration Power Plant

20424 www.environment.nsw.gov.au

see individual parameters in table

Annually in accordance with EPA protocols

see individual parameters in table



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Test Number Sampling Date Date Received Date Published	Results Table							
	AE 13192	AE 13401	AE 13475	AE 13616	AE 13741	AE 13900	AE 14170	
	17/07/2020	11/11/2020	10/02/2021	18/05/2021	16/07/2021	26/10/2021	8/02/2022	
	25/08/2020	23/11/2020	2/03/2002	26/05/2021	2/08/2021	9/11/2021	23/02/2022	
28/08/2020	3/12/2020	12/03/2021	2/06/2021	13/08/2021	23/11/2021	22/04/2022		

Measured Parameters dry @ STP and corrected to 7% O ₂	Units	Concentration Limit								
Average stack gas temperature	°C	Not Applicable	50.00	66.00	60.00	65.00	67.00	69.00	60.00	
Average velocity at sampling plane	m/s	Not Applicable	10.90	13.40	12.90	12.90	13.90	14.50	14.20	
Dry Gas Volumetric Flowrate	m ³ /sec	Not Applicable	50.90	57.85	54.85	55.58	59.45	59.43	63.43	
Dry Gas Density	kg/m ³	Not Applicable	1.30	1.34	1.33	1.35	1.34	1.35	1.33	
Molecular Weight of Stack Gases	g/g mole	Not Applicable	29.10	30.00	29.80	30.20	30.00	30.30	29.90	
Moisture content	%	Not Applicable	13.10	15.30	18.00	15.40	16.00	19.10	13.80	
Concentration of carbon dioxide	%	Not Applicable	2.75	10.00	7.74	11.60	9.70	12.20	8.67	
Total Solid Particles	mg/m ³	100.00	97.00	38.50	20.20	56.20	14.10	17.40	14.10	
Sulphuric Acid Mist & Sulphur Trioxide as SO ₃	mg/m ³	30.00	4.45	1.85	3.57	14.20	15.20	4.88	13.80	
Nitrogen Oxides (NO _x)	mg/m ³	500.00	102.00	241.00	186.00	216.00	263.00	224.00	169.00	

Sampling Point: **Monitoring Point 2 - Ambient Air Monitoring Fuel Stockpile**
 Licencee Cape Byron Management Pty Ltd
 Location Condong Cogeneration Power Plant
 EPL No 20424
 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
06-Jan-21	25-Jan-21	29-Jan-21	0.78	35 day sample. Bottles stuck in transit (0.67g/m2/month)
05-Feb-21	12-Feb-21	26-Feb-21	0.77	
04-Mar-21	12-Mar-21	08-Apr-21	3.51	
06-Apr-21	16-Apr-21	22-Apr-21	1.06	
04-May-21	18-May-21	20-May-21	2.16	
04-Jun-21	18-Jun-21	02-Jul-21	1.83	
05-Jul-21	09-Jul-21	16-Jul-21	6.97	Fine org. matter, brown
03-Aug-21	11-Aug-21	13-Aug-21	1.43	Fine org. matter
06-Sep-21	10-Sep-21	23-Sep-21	3.56	Fine org. matter
05-Oct-21	14-Oct-21	22-Oct-21	3.31	Fine org. matter
03-Nov-21	05-Nov-21	15-Dec-21	0.50	
06-Dec-21	15-Dec-21	15-Dec-21	2.07	
04-Jan-22	21-Jan-22	28-Jan-22	7.79	
01-Feb-22	NA	22-Apr-22	NA	Flood damage to plant operations
01-Mar-22	NA	22-Apr-22	NA	Bottles flood damaged and not serviceable, new bottles set 08/04/2022, plant not operational
05-May-22				

Sampling Point: Monitoring Point 2 - Ambient Air Monitoring Fuel Stockpile

Licencee Cape Byron Management Pty Ltd
 Location Condong Cogeneration Power Plant
 EPL No 20424
 Parameters Monitored PM10
 Monitoring Frequency Once every 6 days when operating at stockpile
 Limits Not Applicable
 Comments



Date Sample Collected	Date Received	Date Published	Results (ug/m ³)	Notes
05-Jan-21	12-Feb-21	26-Feb-21	22.2	
11-Jan-21	12-Feb-21	26-Feb-21	10.2	
17-Jan-21	12-Feb-21	26-Feb-21	17.4	
23-Jan-21	12-Feb-21	26-Feb-21	9.9	
29-Jan-21	12-Feb-21	26-Feb-21	13.4	
04-Feb-21	09-Mar-21	12-Mar-21	18.7	
10-Feb-21	09-Mar-21	12-Mar-21	19.9	
16-Feb-21	09-Mar-21	12-Mar-21	11.4	
22-Feb-21	09-Mar-21	12-Mar-21	13.0	
28-Feb-21	09-Mar-21	12-Mar-21	6.9	
06-Mar-21	14-Apr-21	22-Apr-21	6.6	
12-Mar-21	14-Apr-21	22-Apr-21	7.7	
18-Mar-21	14-Apr-21	22-Apr-21	8.9	
24-Mar-21	14-Apr-21	22-Apr-21	6.3	
30-Mar-21	14-Apr-21	22-Apr-21	8.0	
05-Apr-21	14-Apr-21	22-Apr-21	13.4	
11-Apr-21	14-May-21	20-May-21	6.4	
17-Apr-21	14-May-21	20-May-21	27.2	
23-Apr-21	14-May-21	20-May-21	9.4	
29-Apr-21	14-May-21	20-May-21	12.3	
05-May-21	02-Jul-21	02-Jul-21	11.4	
11-May-21	02-Jul-21	02-Jul-21	1.4	
17-May-21	02-Jul-21	02-Jul-21	19.5	
23-May-21	02-Jul-21	02-Jul-21	1.4	
29-May-21	02-Jul-21	02-Jul-21	19.5	
04-Jun-21	05-Aug-21	13-Aug-21	13.7	
10-Jun-21	05-Aug-21	13-Aug-21	11.3	
16-Jun-21	05-Aug-21	13-Aug-21	8.5	
22-Jun-21	05-Aug-21	13-Aug-21	22.4	
28-Jun-21	05-Aug-21	13-Aug-21	46.9	
04-Jul-21	05-Aug-21	13-Aug-21	2.5	
10-Jul-21	05-Aug-21	13-Aug-21	6.9	
16-Jul-21	05-Aug-21	13-Aug-21	15.5	
22-Jul-21	05-Aug-21	13-Aug-21	15.5	
28-Jul-21	16-Sep-21	23-Sep-21	18.2	
03-Aug-21	16-Sep-21	23-Sep-21	35.6	
09-Aug-21	16-Sep-21	23-Sep-21	13.2	
15-Aug-21	16-Sep-21	23-Sep-21	7.3	
21-Aug-21	16-Sep-21	23-Sep-21	17.2	
27-Aug-21	16-Sep-21	23-Sep-21	30.6	
02-Sep-21	16-Sep-21	23-Sep-21	11.4	
08-Sep-21	20-Oct-21	22-Oct-21	45.6	
14-Sep-21	20-Oct-21	22-Oct-21	45.6	This filter went two cycles
20-Sep-21	20-Oct-21	22-Oct-21	21.2	
26-Sep-21	20-Oct-21	22-Oct-21	26.8	
02-Oct-21	20-Oct-21	22-Oct-21	8.3	
08-Oct-21	15-Dec-21	22-Dec-21	45.6	
14-Oct-21	15-Dec-21	22-Dec-21	4.6	
20-Oct-21	15-Dec-21	22-Dec-21	20.6	
26-Oct-21	15-Dec-21	22-Dec-21	21.2	
01-Nov-21	15-Dec-21	22-Dec-21	7.0	
07-Nov-21	15-Dec-21	22-Dec-21	7.4	
13-Nov-21	15-Dec-21	22-Dec-21	32.5	
19-Nov-21	15-Dec-21	22-Dec-21	14.0	
25-Nov-21	15-Dec-21	22-Dec-21	1.5	
01-Dec-21	15-Dec-21	22-Dec-21	4.4	
07-Dec-21	21-Jan-22	28-Jan-22	15.1	
13-Dec-21	21-Jan-22	28-Jan-22	42.6	
19-Dec-21	21-Jan-22	28-Jan-22	9.4	
25-Dec-21	21-Jan-22	28-Jan-22	9.4	
31-Dec-21	21-Jan-22	28-Jan-22	12.2	
06-Jan-22	21-Jan-22	28-Jan-22	11.2	
12-Jan-22	NR	22-Apr-22	NR	28 Feb - PM10 sampler flood damaged no data
18-Jan-22	NR	22-Apr-22	NR	Flood damage to plant operations
24-Jan-22	NR	22-Apr-22	NR	Flood damage to plant operations
30-Jan-22	NR	22-Apr-22	NR	Flood damage to plant operations
05-Feb-22	NR	22-Apr-22	NR	Flood damage to plant operations
11-Feb-22	NR	22-Apr-22	NR	Flood damage to plant operations
17-Feb-22	NR	22-Apr-22	NR	Flood damage to plant operations

Sampling Point: Monitoring Point 2 - Ambient Air Monitoring Fuel Stockpile

Licencee Cape Byron Management Pty Ltd
 Location Condong Cogeneration Power Plant
 EPL No 20424
 Parameters Monitored [PM10](#)
 Monitoring Frequency Once every 6 days when operating at stockpile
 Limits Not Applicable
 Comments



Date Sample Collected	Date Received	Date Published	Results (ug/m ³)	Notes
23-Feb-22	NR	22-Apr-22	NR	Flood damage to plant operations
01-Mar-22	NR	22-Apr-22	NR	Flood damage to plant operations
07-Mar-22	NR	22-Apr-22	NR	Flood damage to plant operations
13-Mar-22	NR	22-Apr-22	NR	Flood damage to plant operations
19-Mar-22	NR	22-Apr-22	NR	Flood damage to plant operations
25-Mar-22	NR	22-Apr-22	NR	PM10 sampler flood damaged new unit on order
31-Mar-22	NR	22-Apr-22	NR	PM10 sampler flood damaged new unit on order
06-Apr-22	NR	22-Apr-22	NR	PM10 sampler flood damaged new unit on order
12-Apr-22	NR	22-Apr-22	NR	PM10 sampler flood damaged new unit on order
18-Apr-22	NR	06-May-22	NR	PM10 sampler flood damaged new unit on order
24-Apr-22	NR	06-May-22	NR	PM10 sampler flood damaged new unit on order
30-Apr-22	NR	06-May-22	NR	PM10 sampler flood damaged new unit on order
06-May-22	NR	06-May-22	NR	PM10 sampler flood damaged new unit on order

Sampling Point: **Monitoring Point 4 - Ambient Air Monitoring North of Bowling Club**
 Licencee Cape Byron Management Pty Ltd
 Location Condong Cogeneration Power Plant
 EPL No 20424
 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
06-Jan-21	25-Jan-21	29-Jan-21	1.59	35 day sample. Bottles stuck in transit (1.36g/m2/month)
05-Feb-21	12-Feb-21	26-Feb-21	0.32	
04-Mar-21	12-Feb-21	08-Apr-21	1.65	
06-Apr-21		22-Apr-21	N/A	Sample was void
04-May-21	18-May-21	20-May-21	1.50	
04-Jun-21	18-Jun-21	02-Jul-21	0.60	
05-Jul-21	09-Jul-21	16-Jul-21	1.33	Fine org. matter
03-Aug-21	11-Aug-21	13-Aug-21	1.15	Fine org. matter
06-Sep-21	10-Sep-21	23-Sep-21	1.94	Large org. matter, cloudy
05-Oct-21	14-Oct-21	22-Oct-21	3.31	ants, fine org. matter
03-Nov-21	05-Nov-21	23-Nov-21	0.50	Leaf, fine org. matter
06-Dec-21	15-Dec-21	15-Dec-21	0.56	Spider, large org. matter
04-Jan-22	21-Jan-22	28-Jan-22	3.42	Fine org. matter
01-Feb-22	NA	22-Apr-22	NA	Flood damage to plant operations
01-Mar-22	NA	22-Apr-22	NA	Bottles flood damaged and not serviceable, new bottles set 08/04/2022
05-May-22				

Sampling Point: Monitoring Point 5 - Ambient Air Monitoring South of Mill

Licencee Cape Byron Management Pty Ltd
 Location Condong Cogeneration Power Plant
 EPL No 20424

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
06-Jan-21	25-Jan-21	29-Jan-21	2.73	35 day sample. Bottles stuck in transit (2.34g/m2/month)
05-Feb-21	12-Feb-21	26-Feb-21	0.83	
04-Mar-21	12-Mar-21	08-Apr-21	2.53	Ants
06-Apr-21	16-Apr-21	22-Apr-21	4.30	
04-May-21	18-May-21	20-May-21	1.94	
04-Jun-21	18-Jun-21	02-Jul-21	1.88	
05-Jul-21	09-Jul-21	16-Jul-21	2.72	Fine org. matter
03-Aug-21	11-Aug-21	13-Aug-21	3.25	Fine org. matter, cloudy
06-Sep-21	10-Sep-21	23-Sep-21	3.43	Large org. matter, cloudy
05-Oct-21	14-Oct-21	22-Oct-21	6.57	Fine org. matter, cloudy
03-Nov-21	05-Nov-21	23-Nov-21	2.29	Fine org. matter
06-Dec-21	15-Dec-21	15-Dec-21	6.12	Dirt, fine org. matter
04-Jan-22	21-Jan-22	28-Jan-22	5.07	Fine org. matter
NA	01-Feb-22	22-Apr-22	NA	Flood damage to plant operations
NA	01-Mar-22	22-Apr-22	NA	Bottles flood damaged and not serviceable, new bottles set 08/04/2021
05-May-22				

Sampling Point: Monitoring Point 6 - O₂ Boiler Prior to Primary Air Heater

Licencee Cape Byron Management Pty Ltd
 Location Condong Cogeneration Power Plant
 EPL No 20424



Parameter/s Monitored Oxygen
 Frequency & Method Continuous Online Sampling
 Limit No Limits Prescribed

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

MONITORING PERIOD		Oxygen (%)				Notes
Date Start	Date Finish	Date Published	Minimum Value	Maximum Value	Mean Value	
28-Dec-20	3-Jan-21	6-Jan-21	n/a	n/a	n/a	Boiler Offline
4-Jan-21	10-Jan-21	20-Jan-21	n/a	n/a	n/a	Boiler Offline
11-Jan-21	17-Jan-21	20-Jan-21	2.95	19.69	10.07	Boiler Online 11/01/21
18-Jan-21	24-Jan-21	29-Jan-21	4.77	20.35	8.42	
25-Jan-21	31-Jan-21	10-Feb-21	4.81	20.56	10.61	
1-Feb-21	7-Feb-21	10-Feb-21	4.98	20.57	10.79	
8-Feb-21	14-Feb-21	26-Feb-21	-0.01	20.61	9.57	
15-Feb-21	21-Feb-21	26-Feb-21	4.66	16.39	8.60	
22-Feb-21	28-Feb-21	12-Mar-21	4.75	20.53	9.68	
1-Mar-21	7-Mar-21	12-Mar-21	4.82	20.58	11.83	
8-Mar-21	14-Mar-21	8-Apr-21	4.19	20.43	9.37	
15-Mar-21	21-Mar-21	8-Apr-21	4.58	20.15	12.79	
22-Mar-21	28-Mar-21	8-Apr-21	5.05	20.48	14.98	Offline 26/03/21
29-Mar-21	4-Apr-21	8-Apr-21	6.61	20.37	17.84	Online 29/03/21 and 30/03/21
5-Apr-21	11-Apr-21	22-Apr-21	N/A	N/A	N/A	Boiler offline
12-Apr-21	18-Apr-21	22-Apr-21	N/A	N/A	N/A	Boiler offline
19-Apr-21	25-Apr-21	6-May-21	N/A	N/A	N/A	Boiler offline
26-Apr-21	2-May-21	6-May-21	3.74	19.77	11.16	
3-May-21	9-May-21	20-May-21	4.09	20.13	9.60	
10-May-21	16-May-21	20-May-21	4.20	19.80	14.30	
17-May-21	23-May-21	2-Jun-21	2.56	16.57	7.67	
24-May-21	30-May-21	2-Jun-21	3.04	20.62	11.72	
31-May-21	6-Jun-21	17-Jun-21	3.61	20.64	12.93	
7-Jun-21	13-Jun-21	17-Jun-21	3.08	20.63	12.65	
14-Jun-21	20-Jun-21	2-Jul-21	3.45	20.55	11.31	
21-Jun-21	27-Jun-21	2-Jul-21	0.51	12.46	4.49	
28-Jun-21	4-Jul-21	16-Jul-21	1.58	20.78	10.83	
5-Jul-21	11-Jul-21	16-Jul-21	1.56	20.36	10.87	
12-Jul-21	18-Jul-21	30-Jul-21	0.34	19.81	5.22	
19-Jul-21	25-Jul-21	30-Jul-21	0.09	20.54	4.85	
26-Jul-21	1-Aug-21	13-Aug-21	0.89	10.89	4.60	
2-Aug-21	8-Aug-21	13-Aug-21	0.88	12.93	4.85	
9-Aug-21	15-Aug-21	26-Aug-21	0.59	20.36	9.80	
16-Aug-21	22-Aug-21	26-Aug-21	0.34	20.54	4.71	
23-Aug-21	29-Aug-21	9-Sep-21	0.09	20.55	5.39	
30-Aug-21	5-Sep-21	9-Sep-21	0.01	12.51	5.92	
6-Sep-21	12-Sep-21	23-Sep-21	0.01	20.37	5.90	
13-Sep-21	19-Sep-21	23-Sep-21	0.01	13.77	4.21	
20-Sep-21	26-Sep-21	8-Oct-21	0.08	12.70	4.33	
27-Sep-21	3-Oct-21	8-Oct-21	0.08	20.66	6.57	
4-Oct-21	10-Oct-21	22-Oct-21	0.01	11.26	4.61	
11-Oct-21	17-Oct-21	22-Oct-21	1.22	20.74	11.02	
18-Oct-21	24-Oct-21	5-Nov-21	0.01	12.71	4.61	
25-Oct-21	31-Oct-21	5-Nov-21	0.40	12.39	4.18	
1-Nov-21	7-Nov-21	23-Nov-21	0.14	13.48	4.26	
8-Nov-21	14-Nov-21	23-Nov-21	0.49	20.66	6.23	
15-Nov-21	21-Nov-21	15-Dec-21	0.01	15.48	4.16	
22-Nov-21	28-Nov-21	15-Dec-21	1.19	20.46	9.20	
29-Nov-21	5-Dec-21	15-Dec-21	2.91	20.31	17.78	
6-Dec-21	12-Dec-21	15-Dec-21	3.91	20.42	13.06	Boiler Shutdown 11/12/21
13-Dec-21	19-Dec-21	22-Dec-21	N/A	N/A	N/A	Boiler offline
20-Dec-21	26-Dec-21	14-Jan-22	4.47	20.12	17.07	Boiler offline 23/12/21 to 26/12/21
27-Dec-21	2-Jan-22	14-Jan-22	N/A	N/A	N/A	Boiler offline
3-Jan-22	9-Jan-22	14-Jan-22	4.01	19.65	18.67	Online 9/01
10-Jan-22	16-Jan-22	28-Jan-22	3.60	20.30	15.94	Boiler Offline 12/1/22 - 16/1/22
17-Jan-22	23-Jan-22	28-Jan-22	-0.01	19.69	19.54	Online 21/1/22
24-Jan-22	30-Jan-22	11-Feb-22	-1.00	20.39	7.53	Boiler Offline 24/1/22, 26/1/22 and 30/1/22
31-Jan-22	6-Feb-22	11-Feb-22	-0.95	-0.93	-0.93	Boiler Offline 1/2/22, 3/2/22 - 6/2/22
7-Feb-22	13-Feb-22	25-Feb-22	-0.95	-0.93	-0.94	Boiler offline 1/2/22, 12/2/22
14-Feb-22	20-Feb-22	25-Feb-22	-0.95	-0.93	-0.94	Boiler offline 14/2/22, 15/2/22, 16/2/22, 19/2/22, 20/2/22
21-Feb-22	27-Feb-22	22-Apr-22	NA	NA	NA	Boiler off line 24/2/22 - 28/2/22
28-Feb-22	6-Mar-22	22-Apr-22	NA	NA	NA	Flood damage to plant operations Boiler off line 28/2/22 - 10/2/22
7-Mar-22	13-Mar-22	22-Apr-22	NA	NA	NA	Boiler off line 28/3/22 - 10/3/22 No data due to no power from flood
14-Mar-22	20-Mar-22	22-Apr-22	NA	NA	NA	Flood damage to plant operations Boiler offline flood and annual shut down
21-Mar-22	27-Mar-22	22-Apr-22	NA	NA	NA	Boiler offline 21/3/22 - 27/3/22
28-Mar-22	3-Apr-22	22-Apr-22	NA	NA	NA	Boiler offline 28/2/22 - 03/3/22
4-Apr-22	10-Apr-22	22-Apr-22	NA	NA	NA	Boiler offline - 04/03/22 - 10/4/22
11-Apr-22	17-Apr-22	6-May-22	NA	NA	NA	Hard drive failure DCS
18-Apr-22	24-Apr-22	6-May-22	NA	NA	NA	Hard drive failure DCS
25-Apr-22	1-May-22	6-May-22	NA	NA	NA	Hard drive failure DCS

Sampling Point: Monitoring Point 8 - Injection Water Inlet, Background River Water Temperature
 Licence: Cape Byron Management Pty Ltd
 Location: Condong Cogeneration Power Plant
 EPL No: 20424
 Parameters Monitored: Temperature (°C)
 Frequency & Method: Fortnightly Representative Sample
 Limit/s: Not Applicable - Background river data is used to determine temperature of cooling water discharged at monitoring point 9



Comments

Date Sampled & Received	Date Published	Temp (°C)	Notes
6-Jan-21	20-Jan-21	27.0	
27-Jan-21	29-Jan-21	28.0	
8-Feb-21	10-Feb-21	28.0	
22-Feb-21	26-Feb-21	28.0	
8-Mar-21	12-Mar-21	27.0	
15-Mar-21	08-Apr-21	27.0	
29-Mar-21	08-Apr-21	27.0	
6-Apr-21	08-Apr-21	25.0	
19-Apr-21	22-Apr-21	24.5	
27-Apr-21	06-May-21	26.0	
10-May-21	20-May-21	22.0	
24-May-21	02-Jun-21	20.0	
4-Jun-21	17-Jun-21	20.0	
16-Jun-21	02-Jul-21	20.0	
23-Jun-21	02-Jul-21	20.0	
7-Jul-21	16-Jul-21	19.5	
12-Jul-21	16-Jul-21	20.0	
26-Jul-21	30-Jul-21	19.0	
9-Aug-21	13-Aug-21	19.0	
23-Aug-21	26-Aug-21	19.0	
31-Aug-21	09-Sep-21	19.0	
10-Sep-21	23-Sep-21	19.5	
21-Sep-21	23-Sep-21	22.5	
4-Oct-21	08-Oct-21	22.0	
11-Oct-21	22-Oct-21	24.0	
22-Oct-21	05-Nov-21	24.0	
2-Nov-21	05-Nov-21	24.5	
12-Nov-21	15-Dec-21	24.0	
6-Dec-21	15-Dec-21	24.0	
20-Dec-21	15-Dec-21	25.0	
29-Dec-21	14-Jan-22	24.0	
11-Jan-22	14-Jan-22	26.5	
11-Jan-22	22-Apr-22	26.0	
26-Jan-22	22-Apr-22	25.0	
31-Jan-22	22-Apr-22	28.0	
21-Jan-22	22-Apr-22	30.0	
3-Feb-22	22-Apr-22	24.0	
11-Feb-22	22-Apr-22	24.0	
12-Feb-22	22-Apr-22	24.0	
17-Feb-22	22-Apr-22	25.0	
18-Feb-22	22-Apr-22	29.0	
19-Feb-22	22-Apr-22	24.0	
21-Feb-22	22-Apr-22	24.0	Flood damage to plant operations
11-Apr-22	22-Apr-22	23.1	Flood damage to plant operations
21-Apr-22	22-Apr-22	26.0	
28-Apr-22	06-May-22	25.0	
5-May-22	06-May-22	26.0	

Samaline Point: Monitorino Point 9 - Co-generation Cooling Water Discharge
Licence: Case Byron Management Pty Ltd
Location: Concorrig Co-generation Power Plant
EPL No: 20424
Parameter/s Monitored: See Table
Frequency & Method: Continuous Online
Limits: See Table
Comments: A 90 percentile limit means 90% of results must comply with the specified limit. No result may exceed the maximum
 The results in the table below provide a summary of the minimum, maximum and mean values for the period indicated. Any exceedances for period (if applicable) are described in the notes
 > Background means the temperature of the discharge above ambient river temperature. This value is determined by subtracting the river temperature from the discharged cooling water temperature. The reported temp values provide this difference between the discharge and river temp.



MONITORING PERIOD			pH			Temperature Difference			Volume			Notes
Date Start	Date Finish	Date Published	Minimum Reading	Maximum Reading	Mean Reading	Minimum Temp Diff	Maximum Temp Diff	Mean Temp Diff	Minimum Daily Discharge	Maximum Daily Discharge	Mean Daily Discharge	
28-Dec-20	3-Jan-21	6-Jan-21	7.52	7.72	7.62	-7.3	-0.8	-6.8	200	401	395	Cooling tower not operational 28/12/20 to 3/01/21. Data only for 3/01/2021
4-Jan-21	10-Jan-21	20-Jan-21	7.51	7.82	7.69	-7.0	6.7	-6.4	0	594.72	425.45	Cooling tower operational till 05/01/21
11-Jan-21	17-Jan-21	20-Jan-21	7.76	8.24	8.07	-10.0	4.9	2.2	0	958	424	Cooling Tower Operational 11/01/21
18-Jan-21	24-Jan-21	29-Jan-21	7.70	8.21	8.06	-7.7	4.3	1.6	0	841	540	
25-Jan-21	31-Jan-21	10-Feb-21	7.74	8.19	8.06	-7.8	4.2	1.2	0	796	632	
1-Feb-21	7-Feb-21	10-Feb-21	7.72	8.19	8.05	-8.2	4.0	0.1	0	727	611	
8-Feb-21	14-Feb-21	23-Feb-21	7.99	8.25	8.05	-9.0	6.4	0.4	0	744	542	Multiple occasions <10 minutes 14/02/21
15-Feb-21	21-Feb-21	28-Feb-21	7.25	8.22	8.05	0.5	6.4	2.8	0	609	496	<10 minutes 15/02/21
22-Feb-21	28-Feb-21	10-Mar-21	7.66	8.21	8.06	-5.9	4.2	1.9	0	542	479	
1-Mar-21	7-Mar-21	12-Mar-21	7.46	8.19	8.06	-6.0	4.7	-1.0	0	510	420	
8-Mar-21	14-Mar-21	8-Apr-21	7.99	8.32	8.04	-7.6	6.0	2.3	0	465	373	10 Minutes 13/03/21
15-Mar-21	21-Mar-21	8-Apr-21	7.99	8.23	8.04	-1.5	7.0	2.0	0	792	395	10 Minutes 13/03/21
22-Mar-21	28-Mar-21	8-Apr-21	7.81	8.16	8.06	-5.6	3.9	1.1	0	769	84	Offline 26/03/21
29-Mar-21	4-Apr-21	8-Apr-21	7.07	8.28	7.82	-7.5	0.8	-3.6	0	684	31	Online 26/03/21 and 30/03/21
5-Apr-21	11-Apr-21	22-Apr-21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Boiler offline
12-Apr-21	18-Apr-21	22-Apr-21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Boiler offline
19-Apr-21	25-Apr-21	6-May-21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Boiler offline
26-Apr-21	2-May-21	6-May-21	7.67	8.22	8.04	-9.8	2.1	-0.8	0	709	272	Boiler offline until 27/04/21
3-May-21	9-May-21	20-May-21	7.84	8.19	8.02	-15.3	2.6	-0.5	0	649	219	
10-May-21	16-May-21	20-May-21	7.84	8.16	8.06	-15.8	1.2	-2.7	0	571	129	
17-May-21	23-May-21	2-Jun-21	7.83	8.19	8.09	-8.0	4.4	1.8	0	536	376	
24-May-21	30-May-21	6-Jun-21	7.71	8.36	8.10	-6.8	4.7	1.7	0	1001	249	
31-May-21	6-Jun-21	17-Jun-21	7.76	8.20	8.09	-14.1	3.6	1.2	0	555	250	
7-Jun-21	13-Jun-21	13-Jun-21	7.89	8.08	8.08	-18.3	6.8	-0.6	0	725	266	Off 10 seconds on 07/06/21
10-Jun-21	20-Jun-21	16-Jul-21	7.83	8.40	8.10	-8.2	5.4	1.4	0	711	294	<10 minutes 16/06/21
21-Jun-21	27-Jun-21	16-Jul-21	7.71	8.17	8.10	-10.9	5.9	2.7	0	683	432	<10 minutes 25/06/21
28-Jun-21	4-Jul-21	16-Jul-21	7.62	8.19	8.09	-11.6	6.0	1.6	0	546	296	<10 minutes 01/07/21
5-Jul-21	11-Jul-21	16-Jul-21	7.67	8.20	8.09	-10.3	4.0	1.7	0	653	185	
12-Jul-21	18-Jul-21	30-Jul-21	7.87	8.19	8.08	-8.9	3.8	0.5	0	641	272	
19-Jul-21	25-Jul-21	30-Jul-21	7.57	8.31	8.09	-9.0	4.0	-0.7	0	521	309	
26-Jul-21	1-Aug-21	13-Aug-21	7.33	8.19	8.09	-7.4	5.1	0.3	0	439	357	5.1 for 50 minutes 11/08/2021
2-Aug-21	8-Aug-21	13-Aug-21	7.74	8.30	8.11	-5.7	4.9	0.8	0	668	396	<10 minutes 8/01/21
9-Aug-21	15-Aug-21	26-Aug-21	7.60	8.20	8.09	-8.9	3.4	0.8	0	641	183	
16-Aug-21	22-Aug-21	26-Aug-21	7.92	8.21	8.09	-6.5	4.0	-0.6	0	641	268	
23-Aug-21	29-Aug-21	6-Sep-21	8.48	8.07	8.07	-11.0	5.0	0.7	0	776	353	
30-Aug-21	5-Sep-21	9-Sep-21	7.26	8.25	8.05	-2.0	5.0	2.3	257	439	407	
6-Sep-21	12-Sep-21	23-Sep-21	7.09	8.25	8.07	-4.1	5.0	0.9	0	450	398	
13-Sep-21	19-Sep-21	23-Sep-21	7.45	8.21	8.09	-0.8	4.0	2.5	289	394	366	
20-Sep-21	26-Sep-21	8-Oct-21	7.35	8.28	8.09	-2.3	4.0	0.8	0	746	500	2 minutes temperature due to control
27-Sep-21	3-Oct-21	8-Oct-21	7.42	8.25	8.09	-10.5	11.4	1.2	0	710	531	boiler
4-Oct-21	10-Oct-21	22-Oct-21	7.06	8.22	8.06	-4.3	2.6	-0.1	0	605	430	
11-Oct-21	17-Oct-21	22-Oct-21	6.62	8.24	8.07	-6.2	4.0	-0.7	0	660	492	
18-Oct-21	24-Oct-21	2-Nov-21	7.46	8.20	8.07	-3.9	4.0	-1.7	0	660	466	
25-Oct-21	31-Oct-21	6-Nov-21	7.36	8.31	8.07	0.7	4.0	2.7	0	308	432	
1-Nov-21	7-Nov-21	23-Nov-21	7.37	8.23	8.08	-0.9	4.0	1.1	336	647	440	Maintenance and recommissioning of valves. Discharge at 666s <1min.
8-Nov-21	14-Nov-21	23-Nov-21	7.43	8.21	8.08	-8.5	6.0	0.5	0	745	455	
15-Nov-21	21-Nov-21	15-Dec-12	7.18	8.45	8.07	-8.8	4.0	0.9	414	728	506	
22-Nov-21	28-Nov-21	15-Dec-12	7.43	8.45	7.96	-5.5	4.0	1.9	300	719	519	
29-Nov-21	5-Dec-21	15-Dec-12	7.56	8.23	8.04	-5.3	3.9	1.0	0	680	250	
6-Dec-21	12-Dec-21	15-Dec-12	6.98	8.20	8.08	-5.0	4.0	-0.3	0	741	554	Cooling Tower Shutdown 12/12/21
13-Dec-21	19-Dec-21	22-Dec-21	7.62	8.20	7.93	-5.0	13.4	-0.9	0	700	223	Temperature due to recommissioning of cooling tower on new system from shutdown. <5 minute excursions.
20-Dec-21	26-Dec-21	14-Jan-22	7.62	8.21	7.93	-3.4	4.0	-0.7	0	555	447	
27-Dec-21	2-Jan-22	14-Jan-22	7.29	7.84	7.50	-4.3	5.2	1.9	0	194	194	Boiler Offline
3-Jan-22	9-Jan-22	14-Jan-22	7.41	8.13	7.66	-1.4	8.4	2.7	0	571	3	Boiler Offline
10-Jan-22	16-Jan-22	28-Jan-22	6.57	8.20	8.02	-5.8	5.6	-4.1	0	543	179	Boiler Offline 12/1/22 - 16/1/22
13-Jan-22	20-Jan-22	28-Jan-22	6.93	8.20	7.95	-2.8	13.4	2.8	0	546	9	Boiler Offline 24/1/22
24-Jan-22	30-Jan-22	11-Feb-22	6.38	8.19	8.04	-7.3	7.7	-1.8	0	732	319	Boiler Offline 24/1/22, 26/1/22 and 30/1/22
31-Jan-22	6-Feb-22	11-Feb-22	7.11	8.23	8.08	-9.0	4.0	-0.9	0	712	253	Boiler Offline 1/2/22, 3/2/22, 6/2/22
7-Feb-22	13-Feb-22	25-Feb-22	7.18	8.23	8.08	-7.7	6.2	1.2	0	733	359	Boiler offline 12/2/22, 12/2/22, 19/2/22, 20/2/22
14-Feb-22	20-Feb-22	25-Feb-22	7.90	8.40	8.00	-7.9	7.7	0.6	0	781	359	Boiler offline 28/02/22, 28/02/22
21-Feb-22	27-Feb-22	8-Apr-22	0.00	8.20	8.09	-2.4	7.1	1.9	0	769	239	Boiler offline 28/02/22, 28/02/22
28-Feb-22	6-Mar-22	8-Apr-22	7.03	8.23	7.17	-4.3	4.2	-3.1	0	1296	857	Flood damage to plant operations
7-Mar-22	13-Mar-22	22-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	Flood damage to plant operations and annual shut down
14-Mar-22	20-Mar-22	22-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	Flood damage to plant operations and annual shut down
21-Mar-22	27-Mar-22	22-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	Flood damage to plant operations and annual shut down
28-Mar-22	3-Apr-22	22-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	Flood damage to plant operations and annual shut down
4-Apr-22	10-Apr-22	22-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	Flood damage to plant operations and annual shut down
11-Apr-22	17-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Hard drive failure DCS
18-Apr-22	24-Apr-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Hard drive failure DCS
25-Apr-22	1-May-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Hard drive failure DCS
2-May-22	8-May-22	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Hard drive failure DCS

Sampling Point: Monitoring Point 12 - Stormwater Discharge From Stockpile Catchment Basin
 Licence: Cape Byron Management Pty Ltd
 Location: Condong Cogeneration Power Plant
 EPL No: 20424
 Parameter/s Monitored: See Table
 Frequency & Method: Sampling any discharge, whether controlled or otherwise, which has not occurred from rainfall exceeding 82mm over any consecutive five day period
 Limit/s: See Table
 Comments: A 90 percentile limit means 90% of results must comply with the specified limit. No result may exceed the maximum limit.



Date Sampled	Date Received	Date Published						Notes	
			90 Percentile Limit	BOD ₅ (mg/L)	Nitrogen (mg/L)	pH	Phosphorus (mg/L)		TSS (mg/L)
			30	30	10	6.5 - 8.5	No Limit	50.0	
			Maximum Limit	55	20				
19-Jan-21	28-Jan-21	29-Jan-21		8.2	1.3	7.88	0.3	32.00	
23-Feb-21	01-Mar-21	12-Mar-21		10.0	2.1	7.17	0.9	37.00	
15-Mar-21	22-Mar-21	08-Apr-21		5.5	1.2	7.47	0.5	44.00	
25-Mar-21	31-Mar-21	08-Apr-21		15.0	0.9	6.99	0.4	38.00	
13-May-21	19-May-21	02-Jun-21		3.7	0.8	7.65	0.2	11.00	
09-Jul-21	14-Jul-21	16-Jul-21		9.7	1.0	6.89	0.2	37.00	
13-Oct-21	20-Oct-21	22-Oct-21		15.0	1.0	7.15	0.2	27.00	
08-Dec-21	15-Dec-21	22-Dec-21		6.6	1.3	7.60	0.4	17.00	
30-Dec-21	05-Jan-22	14-Jan-22		5.2	0.8	7.35	0.2	23.00	
									Flood damage to plant operations

Licencee Cape Byron Management Pty Ltd
Location Condong Power Plant
EPL No 20424



MONITORING REPORT CORRECTIONS LOG

Date / Period	Monitoring Point	Pollutant/Parameter	Original Data	Corrected Data	Date Corrected	Date Originally Published	Reason