

POLLUTION MONITORING DATA

Licensee: Central Coast Council, PO Box 21 Gosford NSW 2250
Location of Pollution Monitoring Point: Ocean outfall tunnel, combined treated effluent from Kincumber and Woy Woy sewage treatment plants

EPL No. 1802– Kincumber Sewage Treatment Plant
Licence Period: 1 June 2022- 31 May 2023

Publishing Date: 5 June 2023

COMPLIANCE STATUS

Results obtained for licence period are within annual concentration limits.

Biochemical Oxygen Demand (BOD) (mg/L)	Oil and Grease (O&G) (mg/L)	Total Nitrogen (TN) (mg/L)	Total Phosphorus (TP) (mg/L)	Total Suspended Solids (TSS) (mg/L)	pH
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CONCENTRATION LIMITS

100 percentile	30	10	-	-	65	6.5 - 8.5
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POLLUTION MONITORING DATA SUMMARY (provided at end of annual reporting period)

100 percentile								
Collected	Obtained	Published	BOD (mg/L)	O&G (mg/L)	TN (mg/L)	TP (mg/L)	TSS (mg/L)	pH
9/06/2022	24/06/2022	30/06/2022	2	<5	14.4	1.14	11	7.3
21/06/2022	1/07/2022	6/7/2022	<2	<5	16.0	1.01	8	7.3
4/07/2022	15/07/2022	23/7/2022	4	<5	16.0	1.33	28	7.2
15/07/2022	27/07/2022	4/7/2022	<2	<5	8.4	1.06	8	7.3
27/07/2022	09/08/2022	15/08/2022	<2	<5	9.7	0.57	7	7.3
8/08/2022	22/08/2022	27/08/2022	2	<5	12.6	0.47	7	7.4
20/08/2022	01/09/2022	07/09/2022	<2	<5	17.2	0.69	7	7.3
1/09/2022	12/09/2022	17/09/2022	<2	<10	12.4	0.70	10	7.2
13/09/2022	23/09/2022	1/10/2022	2	<5	14.20	1.15	17	7.5
25/09/2022	6/10/2022	11/10/2022	<2	<5	14.30	1.30	8	7.1
7/10/2022	24/10/2022	26/10/2022	2	<5	10.30	1.34	15	7.3
19/10/2022	31/10/2022	5/11/2022	<2	<5	10.40	1.45	8	7.5
31/10/2022	9/11/2022	14/11/2022	<2	<5	10.60	0.75	5	7.4
12/11/2022	25/11/2022	30/11/2022	<2	<5	10.30	1.55	5	7.5
24/11/2022	1/12/2022	6/12/2022	<2	<5	12.30	1.06	9	7.4
6/12/2022	20/12/2022	25/12/2022	<2	<5	11.20	1.12	10	7.4
18/12/2022	30/12/2022	16/01/2023	<2	<5	6.52	1.09	0.61	6.52
30/12/2022	09/01/2023	16/01/2023	<2	<5	11.30	1.26	3.64	11.3
11/01/2023	20/01/2023	31/01/2023	2	<5	7.84	0.75	8	7.5
23/01/2023	07/02/2023	13/02/2023	<2	<5	10.80	0.96	10	7.4
4/02/2023	16/02/2023	28/02/2023	<2	<5	8.08	0.84	6	7.5
16/02/2023	2/03/2023	5/03/2023	<2	<5	8.66	1.54	7	7.5
28/02/2023	13/03/2023	18/03/2023	<2	<5	13.7	1.35	10	7.4
12/03/2023	25/03/2023	8/04/2023	10	<5	15.9	1.71	12	7.4
24/03/2023	3/04/2023	8/04/2023	2	<5	20.3	1.42	12	7.4
5/04/2023	17/04/2023	23/04/2023	<2	<5	14.2	1.83	8	7.1
17/04/2023	10/05/2023	15/05/2023	2	<5	18.3	3.35	24	7.2
1/05/2023	9/05/2023	15/05/2023	<2	<5	20.30	2.98	22	7.3
11/05/2023	30/05/2023	4/06/2023	<2	<5	23.30	2.18	17	7.0
23/05/2023	02/06/2023	07/06/2023	<2	<5	21.9	2.34	17	7.1

< : Where this symbol is shown, the result is below the limit at which the parameter can be accurately detected and reported.
n/a means not available.
 Where results are below the laboratory detection limits (e.g. <2) half the value of the detection limit will be used for calculation purposes when all required data has been obtained. Where 50% or more of the sample results for a particular pollutant are below the detection limit, zero will be used for calculation purposes. This methodology is consistent with that outlined in the EPA's Load Calculation Protocol (June 2009) and will be applied when all required data for the licence period has been obtained.

POLLUTION MONITORING DATA

Licensee: Central Coast Council, PO Box 21 Gosford NSW 2250

EPL No. 1802– Kincumber Sewage Treatment Plant

Location of Pollution Monitoring Point: Ocean outfall tunnel, combined treated effluent from Kincumber and Woy Woy sewage treatment plants

Licence Period: 1 June 2022 – 31 May 2023

Publishing Date: 5 June 2023

COMPLIANCE STATUS

Licence Monitoring Frequency for below pollutant is twice per year. The licence does not prescribe concentration limits for these pollutants.

Unit	Aldrin	alpha-BHC	beta-BHC	Cadmium	Chlordane (cis & trans)	Chromium	Copper	Dieldrin	Endosulfan	Endrin	Gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Lead	Mercury	Methoxychlor	p,p-DDD	p,p-DDE	p,p-DDT	PCBs	Selenium	Zinc
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
No. Samples Collected																							
Minimum value																							
Mean value																							
Median value																							
Maximum value																							
Limit of laboratory detection	0.01	0.01	0.01	0.1	0.01	0.2	0.5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.1	0.3	0.01	0.01	0.01	0.01	0.1	0.2	1

POLLUTION MONITORING DATA RESULTS

Collected	Obtained	Published	Aldrin	alpha-BHC	beta-BHC	Cadmium	Chlordane (cis & trans)	Chromium	Copper	Dieldrin	Endosulfan	Endrin	Gamma-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Lead	Mercury	Methoxychlor	p,p-DDD	p,p-DDE	p,p-DDT	PCBs	Selenium	Zinc
09/06/2022	24/06/2022	30/06/2022	<0.01	<0.01	<0.01	<0.1	<0.01	0.7	4.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.1	<0.3	<0.01	<0.01	<0.01	<0.01	<0.1	<0.2	17
13/09/2022	23/09/2022	1/10/2022	<0.01	<0.01	<0.01	<0.1	<0.01	0.7	4.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.1	<0.3	<0.01	<0.01	<0.01	<0.01	<0.1	<0.2	34
23/01/2023	10/02/2023	17/02/2023	<0.01	<0.01	<0.01	<0.1	<0.01	0.6	5.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.3	<0.3	<0.01	<0.01	<0.01	<0.01	<0.1	<0.2	18
17/04/2023	10/05/2023	15/05/2023	<0.01	<0.01	<0.01	<0.1	<0.01	0.9	9.3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.2	<0.3	<0.01	<0.01	<0.01	<0.01	<0.1	<0.2	28

<: Where this symbol is shown, the result is below the level at which the parameter can be routinely tested and reported.
n/a means not available.

Where results are below the laboratory detection limits (e.g. <2) half the value of the detection limit will be used for calculation purposes when all required data has been obtained. Where 50% or more of the sample results for a particular pollutant are below the detection limit, zero will be used for calculation purposes. This methodology is consistent with that outlined in the EPA's Load Calculation Protocol (June 2009) and will be applied when all required data for the licence period has been obtained.

FLOW MONITORING DATA

Licensee: Central Coast Council, PO Box 21 Gosford NSW 2250

EPL No. 1802– Kincumber Sewage Treatment Plant

Location of Monitoring Point: Discharge to ocean outfall tunnel, combined treated effluent from Kincumber and Woy Woy sewage treatment plants

Licence Period: 1 June 2022 - 31 May 2023

Publishing Date: 5 June 2023

COMPLIANCE STATUS

Licence Monitoring Frequency for flow is daily. The licence prescribes a limit of 150,000 kilolitres/day

Date	Flow (kL)	Date	Flow (kL)	Date	Flow (kL)	Date	Flow (kL)	Date	Flow (kL)	Date	Flow (kL)	Date	Flow (kL)	Date	Flow (kL)
1/06/2022	53,787	1/07/2022	46,785	1/08/2022	51,326	1/09/2022	49,324	1/10/2022	58,491	1/11/2022	48,544	1/12/2022	43,233	1/01/2023	45,181
2/06/2022	52,916	2/07/2022	64,623	2/08/2022	51,753	2/09/2022	46,888	2/10/2022	51,447	2/11/2022	47,203	2/12/2022	42,633	2/01/2023	43,228
3/06/2022	53,083	3/07/2022	157,830	3/08/2022	51,226	3/09/2022	69,368	3/10/2022	51,682	3/11/2022	46,455	3/12/2022	43,667	3/01/2023	44,509
4/06/2022	53,493	4/07/2022	161,170	4/08/2022	51,803	4/09/2022	59,404	4/10/2022	49,623	4/11/2022	45,044	4/12/2022	43,266	4/01/2023	44,680
5/06/2022	52,339	5/07/2022	166,952	5/08/2022	53,193	5/09/2022	53,159	5/10/2022	51,861	5/11/2022	46,221	5/12/2022	43,787	5/01/2023	45,151
6/06/2022	51,442	6/07/2022	141,139	6/08/2022	52,032	6/09/2022	49,652	6/10/2022	72,587	6/11/2022	46,214	6/12/2022	43,285	6/01/2023	44,767
7/06/2022	50,428	7/07/2022	139,236	7/08/2022	50,594	7/09/2022	49,264	7/10/2022	65,205	7/11/2022	45,305	7/12/2022	43,697	7/01/2023	48,894
8/06/2022	49,950	8/07/2022	79,403	8/08/2022	49,894	8/09/2022	48,109	8/10/2022	90,553	8/11/2022	44,479	8/12/2022	45,421	8/01/2023	50,096
9/06/2022	49,974	9/07/2022	68,631	9/08/2022	47,977	9/09/2022	47,910	9/10/2022	113,042	9/11/2022	44,177	9/12/2022	43,544	9/01/2023	47,239
10/06/2022	49,838	10/07/2022	100,636	10/08/2022	47,970	10/09/2022	49,185	10/10/2022	63,684	10/11/2022	44,930	10/12/2022	43,505	10/01/2023	45,302
11/06/2022	50,638	11/07/2022	75,999	11/08/2022	48,132	11/09/2022	48,084	11/10/2022	57,338	11/11/2022	45,250	11/12/2022	44,462	11/01/2023	45,421
12/06/2022	49,885	12/07/2022	66,898	12/08/2022	47,884	12/09/2022	47,726	12/10/2022	54,835	12/11/2022	46,160	12/12/2022	45,461	12/01/2023	42,618
13/06/2022	50,880	13/07/2022	63,396	13/08/2022	51,043	13/09/2022	46,440	13/10/2022	53,635	13/11/2022	45,540	13/12/2022	43,748	13/01/2023	43,599
14/06/2022	48,912	14/07/2022	65,875	14/08/2022	49,462	14/09/2022	45,794	14/10/2022	52,393	14/11/2022	48,885	14/12/2022	39,525	14/01/2023	43,141
15/06/2022	48,702	15/07/2022	61,826	15/08/2022	48,327	15/09/2022	48,819	15/10/2022	52,172	15/11/2022	44,460	15/12/2022	42,758	15/01/2023	43,019
16/06/2022	48,611	16/07/2022	58,844	16/08/2022	47,356	16/09/2022	53,269	16/10/2022	50,625	16/11/2022	45,138	16/12/2022	43,679	16/01/2023	43,710
17/06/2022	50,025	17/07/2022	58,743	17/08/2022	46,590	17/09/2022	48,579	17/10/2022	51,687	17/11/2022	44,654	17/12/2022	42,981	17/01/2023	42,792
18/06/2022	48,818	18/07/2022	56,154	18/08/2022	45,579	18/09/2022	47,559	18/10/2022	49,359	18/11/2022	44,502	18/12/2022	45,900	18/01/2023	42,228
19/06/2022	51,666	19/07/2022	65,839	19/08/2022	44,967	19/09/2022	45,765	19/10/2022	49,946	19/11/2022	45,595	19/12/2022	46,740	19/01/2023	43,225
20/06/2022	50,861	20/07/2022	63,131	20/08/2022	46,834	20/09/2022	46,383	20/10/2022	51,456	20/11/2022	44,612	20/12/2022	45,461	20/01/2023	43,895
21/06/2022	48,506	21/07/2022	71,674	21/08/2022	46,050	21/09/2022	45,055	21/10/2022	51,429	21/11/2022	43,166	21/12/2022	45,320	21/01/2023	52,295
22/06/2022	47,855	22/07/2022	78,856	22/08/2022	46,035	22/09/2022	58,898	22/10/2022	50,155	22/11/2022	42,891	22/12/2022	45,210	22/01/2023	46,300
23/06/2022	47,069	23/07/2022	68,666	23/08/2022	47,531	23/09/2022	51,406	23/10/2022	53,781	23/11/2022	43,614	23/12/2022	44,749	23/01/2023	43,853
24/06/2022	47,054	24/07/2022	63,018	24/08/2022	48,344	24/09/2022	53,623	24/10/2022	60,002	24/11/2022	44,277	24/12/2022	46,877	24/01/2023	44,483
25/06/2022	47,423	25/07/2022	59,634	25/08/2022	46,750	25/09/2022	53,124	25/10/2022	56,160	25/11/2022	44,026	25/12/2022	47,142	25/01/2023	44,315
26/06/2022	47,207	26/07/2022	56,820	26/08/2022	46,251	26/09/2022	48,667	26/10/2022	53,802	26/11/2022	45,330	26/12/2022	43,994	26/01/2023	43,592
27/06/2022	46,820	27/07/2022	56,425	27/08/2022	47,699	27/09/2022	47,557	27/10/2022	51,526	27/11/2022	44,126	27/12/2022	45,162	27/01/2023	44,675
28/06/2022	46,945	28/07/2022	54,684	28/08/2022	47,578	28/09/2022	48,663	28/10/2022	50,292	28/11/2022	44,298	28/12/2022	46,621	28/01/2023	43,629
29/06/2022	47,900	29/07/2022	54,277	29/08/2022	46,288	29/09/2022	47,166	29/10/2022	49,490	29/11/2022	44,202	29/12/2022	46,456	29/01/2023	44,553
30/06/2022	46,555	30/07/2022	53,754	30/08/2022	45,777	30/09/2022	66,776	30/10/2022	48,617	30/11/2022	43,184	30/12/2022	44,419	30/01/2023	44,069
		31/07/2022	49,197	31/08/2022	50,526			31/10/2022	47,301			31/12/2022	45,449	31/01/2023	46,282

Summary of non-compliant data				
Date	Parameter	Result	Cause	Action taken
3-5 July 2022	Flow (greater than 150 kL)	157,830 kL 161,170 kL 166,952 kL	Stormwater infiltration in reticulation network	Review catchment flows to identify potential infiltration sources and locations