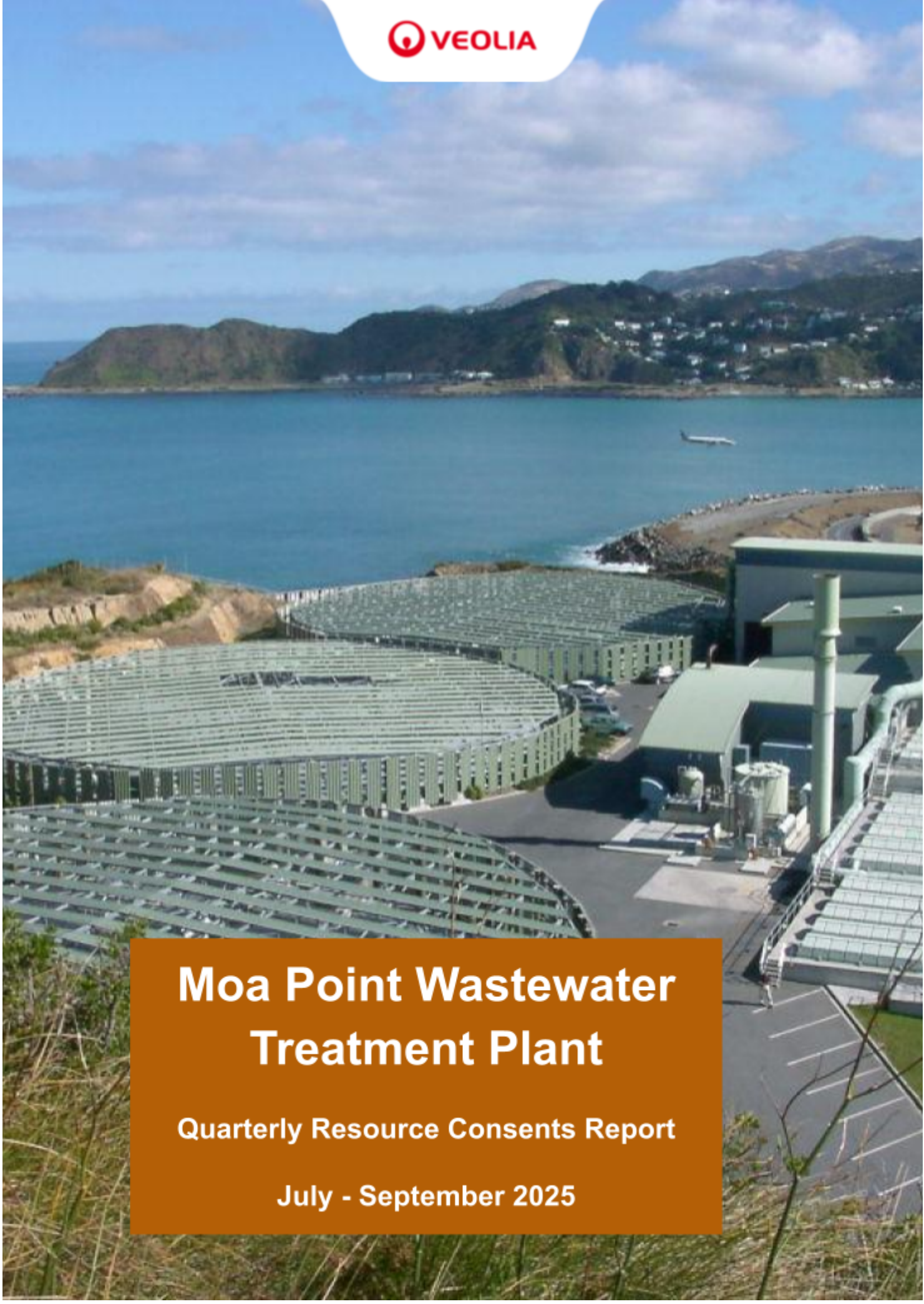


An aerial photograph of the Moa Point Wastewater Treatment Plant. The plant features several large, circular, green-roofed aeration tanks arranged in a semi-circle. To the right of the tanks is a modern industrial building with a green roof and a tall, slender smokestack. A parking lot with several cars is situated between the tanks and the building. In the background, a large body of water (the sea) stretches to the horizon, with a small boat visible. Beyond the water, there are rolling hills and mountains under a blue sky with scattered clouds. The foreground shows some dry, grassy vegetation.

Moa Point Wastewater Treatment Plant

Quarterly Resource Consents Report

July - September 2025

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Control sheet

Document Title:	Moa Point Wastewater Treatment Plant Quarterly Resource Consents Report - July - September 2025
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Document Control Register

Version	Status	Date	Details of Revision
0.1	Draft	22/10/2025	Original version for review.
0.2	Review	28/10/2025	Internal review.
0.3	Revise	30/10/2025	Post review edits
1.0	Final	30/10/2025	Final and Publish

Executive Summary

The following report was prepared by Veolia on behalf of the Wellington City Council (WCC) and Wellington Water for the Greater Wellington Regional Council (GWRC). This report includes results and observations that satisfy the reporting requirements of the following Moa Point Inlet Pump Station (IPS) and Wastewater Treatment Plant (WWTP) resource consents:

Discharge to the Coastal Marine Area - WGN080003 [31505]

Effluent discharge from the Moa Point WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN8003 [31505]. In general, the consent allows the continuous discharge of up to 260,000 cubic metres per day of secondary treated and disinfected wastewater from Moa Point Wastewater Treatment Plant into coastal marine area via an existing submarine outfall.

The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition		Compliant / Non-Compliant / Not Applicable
Monitoring flow rates and volume - Condition 6		Compliant
Daily Composite - TSS and BOD - Condition 9a		Compliant
Daily Grab - Faecal Coliform - Condition 9b		Compliant
Effluent Quality Criteria - Condition 10	5-Day Carbonaceous Biochemical Oxygen Demand - Condition 10a	Compliant
	Suspended Solids - Condition 10b	Non-Compliant
	Faecal Coliforms - Condition 10c	Non-Compliant
Analysis for metals and other - Condition 11		Compliant
Monitoring Results' Reporting - Condition 12		Compliant
Notification of Non Compliant Effluent - Condition 13		Compliant
Noticeable Effects Beyond the Discharge Point - Condition 14		Compliant
Complaints - Condition 18		Compliant
Quarterly Reporting - Condition 19		Compliant

Table 1 WGN080003 [31505] Resource Consent Condition Compliance

Occasional Weather Induced Discharges - WGN080003 [35047]

Discharges from the Moa Point WWTP are governed by consent file number WGN8003 [35047]. In general, the consent allows the discharge up to 4500 litres per second of mixed disinfected secondary treated and milli-screened wastewater to the coastal marine area via an existing submarine outfall during and/or immediately after heavy rainfall, when the quantity of wastewater arriving at the Moa Point Wastewater Treatment Plant exceeds 3000 litres per second.

Note that weather-induced discharges during the period were outside the conditions as the WWTP was operating at reduced full treatment capacity due to the Clarifier refurbishment works.

The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition		Compliant / Non-Compliant / Not Applicable
Reporting Bypass Discharges - Condition 8		Compliant
Shoreline Monitoring Sites - Condition 10		Compliant
Monitoring of Bypass Discharges - Condition 16		Non-Compliant
Complaints - Condition 18		Compliant

Table 2 WGN080003 [35047] Resource Consent Condition Compliance

Occupying foreshore and seabed with outfall pipeline - WGN080003 [26182]

The outfall pipeline from the Moa Point WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN8003 [26182]. In general, the WCC is allowed to occupy the foreshore and seabed of the coastal marine area with an existing submarine outfall pipeline.

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
Annual Outfall Inspection and Assessment - Condition 3	Not applicable

Table 3: WGN080003 [26182] Resource Consent Condition Compliance

Discharge to Air - WGN080003 [26183]

Emissions from the Moa Point WWTP are governed by the resource consent under the Greater Wellington Regional Council consent file number WGN8003 [26183]. In general, the WCC is allowed to continuously discharge contaminants (including odour) to air from the Moa Point Wastewater Treatment Plant ventilation system.

The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
Monitoring - Condition 7	Compliant
Monitoring of Hydrogen Sulphide (H ₂ S) - Condition 8	Non compliant
H ₂ S and TRS Concentrations Limits - Condition 9	Non compliant
Smoke Testing - Condition 10	Not applicable
Complaints - Condition 13	Compliant

Table 4: WGN080003 [26183] Resource Consent Condition Compliance

Discharge to Air - Moa Point Inlet Pumping Station - WGN960094 [1471]

Emissions from the Moa Point Inlet Pump Station (IPS) are governed by the resource consent under the Greater Wellington Regional Council consent file number WGN960094 [1471]. In general, the WCC is allowed to continuously discharge contaminants (including odour) to air from Moa Point IPS ventilation system.

The report will cover the quarterly period from January - March 2024 as requested in this resource consent. The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
Monitoring of Hydrogen Sulphide (H ₂ S) - Condition 11	Non compliant
Complaints - Condition 13	Compliant

Table 5: WGN960094 [1471] Resource Consent Condition Compliance

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WGN080003 [31505] - Discharge to the Coastal Marine Area

Condition 6 - Monitoring flow rates and volume

The permit holder shall continuously monitor and record the flow rate and volume of treated wastewater entering the submarine outfall pipeline, to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council. A summary of the records listing the daily discharge volumes and average and maximum flow rates shall be forwarded to the Manager, Environmental Regulation, Wellington Regional Council at quarterly intervals, in accordance with condition 19 of this permit.

Condition met - the following tables list the daily total effluent volume, average daily effluent flow rate, and maximum daily effluent flow rate from the Moa Point WWTP.

Day	July 2025			August 2025			September 2025		
	Average Daily Flow Rate	Maximum Daily Flow Rate	Daily Total Volume	Average Daily Flow Rate	Maximum Daily Flow Rate	Daily Total Volume	Average Daily Flow Rate	Maximum Daily Flow Rate	Daily Total Volume
	L/s	L/s	m ³	L/s	L/s	m ³	L/s	L/s	m ³
1	736	1,144	63,618	739	1,345	63,808	745	1,331	64,395
2	729	1,266	63,022	692	1,284	59,782	713	1,257	61,590
3	1,675	2,597	144,754	671	1,214	57,975	663	1,243	57,316
4	2,306	4,000	199,209	664	1,130	57,369	688	1,240	59,418
5	1,589	2,522	137,298	668	1,177	57,728	786	1,911	67,949
6	1,035	1,655	89,459	698	1,206	60,311	679	1,221	58,679
7	880	1,230	76,052	689	1,208	59,526	701	1,272	60,565
8	808	1,347	69,780	1,167	2,450	100,768	716	1,248	61,879
9	803	1,376	69,374	970	1,379	83,775	724	1,253	62,532
10	805	1,409	69,511	1,028	1,601	88,819	767	1,252	66,262
11	1,634	2,682	141,190	881	1,359	76,097	694	1,237	59,941
12	1,276	2,107	110,237	842	1,378	72,693	707	1,233	61,126
13	1,265	2,525	109,264	753	1,399	65,121	739	1,338	63,849
14	893	1,506	77,185	763	1,365	65,892	721	1,387	62,303
15	891	1,464	76,948	722	1,299	62,388	702	1,323	60,691
16	843	1,412	72,853	719	1,264	62,155	704	1,211	60,844
17	798	1,230	68,960	758	1,325	65,453	674	1,135	58,262
18	761	1,241	65,763	897	2,445	77,492	737	1,359	63,661
19	876	1,336	75,674	1,124	2,184	97,095	664	1,207	57,337
20	804	1,431	69,510	862	1,523	74,470	619	1,206	53,518
21	759	1,484	65,582	752	1,233	64,987	717	1,568	61,916
22	726	1,139	62,733	654	1,328	56,508	2,003	2,954	173,018
23	725	1,230	62,635	710	1,341	61,302	1,650	2,739	142,544
24	710	1,153	61,329	698	1,343	60,310	1,010	1,624	87,292
25	679	1,249	58,678	689	1,328	59,551	833	1,309	71,984
26	652	1,225	56,292	693	1,355	59,853	755	1,413	65,204
27	662	1,174	57,218	677	1,404	58,470	742	1,172	61,396
28	697	1,236	60,247	727	1,258	62,848	701	1,264	60,604
29	882	1,368	76,248	728	1,349	62,912	728	1,299	62,930
30	1,129	2,344	97,601	695	1,244	60,065	694	1,332	59,952
31	1,040	2,048	89,826	1,139	2,144	98,418			
Limit			260,000			260,000			260,000

Table 6: Effluent Flow Rate

Condition 9 a) - Daily Composite - TSS and BOD

The permit holder shall obtain daily representative 24-hour flow-proportional composite samples of the treated wastewater discharged from the treatment plant to the outfall. These samples shall be analysed for total suspended solids and 5-day carbonaceous biochemical oxygen demand (cBOD₅).

Condition met - the effluent cBOD₅ and suspended solids results from daily representative 24-hour flow-proportional composite samples can be found under resource consent WGN080003 [31505] Condition 10 a) and b).

Condition 9 b) - Daily Grab - Faecal Coliform

The permit holder shall between the hours of 9:00 am and 5:00 pm each day, obtain a representative grab sample of the treated wastewater discharged from the treatment plant to the outfall. This sample shall be analysed for faecal coliforms.

Condition met - the effluent faecal coliforms results from daily representative grab samples can be found under resource consent WGN080003 [31505] Condition 10 c).

Condition 10 - Effluent Quality Criteria

The wastewater discharged from the Moa Point Wastewater Treatment Plant to the coastal waters shall comply with the following effluent quality criteria:

- a. cBOD₅
The geometric mean of 90 consecutive daily sampling results shall not exceed 20 g/m³ and no more than 10% of 90 consecutive sample results shall exceed 45 g/m³.
- b. Suspended solids
The geometric mean of 90 consecutive daily sampling results shall not exceed 30g/m³ and no more than 10% of 90 consecutive daily values shall exceed 68g/m³.
- c. Faecal Coliforms
The geometric mean of 90 consecutive daily sampling results shall not exceed 200 colony forming units per 100mL and no more than 10% of 90 consecutive sample results shall exceed 950 colony forming units per 100mL. Compliance with the effluent quality criteria shall be determined from the results of wastewater monitoring undertaken in accordance with conditions (9)(a) and (9)(b) of this permit, with a running geometric mean and ninetieth percentile calculated following each sampling event using the preceding 90 consecutive sample results.

a) 5-Day Carbonaceous Biochemical Oxygen Demand

The following is a summary of the daily results, geometric mean, and ninetieth percentile for carbonaceous biochemical oxygen demand.

Day	July 2025			August 2025			Sept 2025		
	Daily Results	Geometric Mean	90th Percentile	Daily Results	Geometric Mean	90th Percentile	Daily Results	Geometric Mean	90th Percentile
	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
1	6	9	16	7	9	17	6	10	18
2	7	9	16	8	9	17	8	10	18
3	26	9	17	6	9	17	10	10	18
4	27	9	17	6	9	17	11	10	18
5	18	10	18	7	9	17	18	10	18
6	6	9	18	8	9	17	9	9	18
7	6	9	18	40	9	17	10	9	18
8	6	9	18	12	9	17	10	9	18
9	6	9	18	6	9	17	13	9	18
10	8	10	18	12	9	17	7	9	18
11	22	10	19	6	9	17	6	9	18
12	16	10	19	6	9	17	20	9	18
13	13	10	19	7	9	17	19	9	18
14	6	10	19	8	9	17	22	10	19
15	6	10	19	10	9	17	19	10	19
16	6	10	19	10	9	17	17	10	19
17	6	10	19	17	9	17	16	10	19
18	6	10	19	13	9	17	10	10	19
19	7	10	19	61	9	18	10	10	19
20	6	10	19	11	9	18	6	10	19
21	7	10	19	9	9	18	6	10	19
22	7	10	19	7	9	18	23	10	19
23	6	10	19	9	9	18	19	10	19
24	6	10	19	7	9	18	4	10	19
25	7	10	19	15	9	18	6	10	19
26	8	10	19	16	9	18	12	10	19
27	7	10	19	16	9	17	9	10	19
28	12	10	19	14	9	17	10	10	19
29	12	9	18	8	9	17	15	10	19
30	8	9	17	18	9	18	8	10	19
31	11	9	17	53	10	18			
Limits	N/A	20	45	N/A	20	45	N/A	20	45

Table 7: 5-Day Carbonaceous Biochemical Oxygen Demand Results, Geometric Mean, and 90th Percentile

Please note that highlighted results are above the applicable condition limits.

b) Suspended Solids

The following is a summary of the daily results, geometric mean, and ninetieth percentile for the suspended solids.

Day	July 2025			August 2025			Sept 2025		
	Daily Results	Geometric Mean	90th Percentile	Daily Results	Geometric Mean	90th Percentile	Daily Results	Geometric Mean	90th Percentile
	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
1	11	23	40	27	23	43	28	26	68
2	15	23	40	21	23	43	29	26	68
3	52	23	41	72	23	45	40	26	68
4	88	23	42	22	23	45	29	26	68
5	42	23	42	30	23	45	69	27	69
6	9	23	42	31	23	45	31	26	68
7	16	23	42	125	24	47	46	26	68
8	26	23	42	45	24	47	23	26	68
9	10	23	42	18	24	47	52	26	68
10	14	23	42	42	24	47	47	27	68
11	52	24	47	12	24	47	46	27	68
12	43	24	47	15	23	47	64	27	68
13	35	24	47	18	23	47	80	28	69
14	16	25	47	21	23	47	73	28	72
15	10	24	47	27	23	47	58	28	72
16	13	25	47	32	23	47	53	29	72
17	12	25	47	56	24	51	44	29	72
18	16	25	47	87	24	52	66	30	72
19	16	25	47	186	24	52	60	30	72
20	12	24	47	32	25	52	48	31	72
21	16	24	47	29	25	52	30	31	72
22	13	24	47	19	25	52	44	31	72
23	12	24	47	27	25	52	36	32	72
24	21	24	47	27	25	52	12	32	72
25	32	24	47	38	25	52	18	31	72
26	35	24	47	63	25	57	29	31	72
27	23	24	47	55	25	55	37	32	72
28	22	24	47	72	25	57	48	32	72
29	33	23	43	49	25	57	41	33	72
30	27	23	42	89	25	64	47	33	72
31	45	23	43	256	26	68			
Limits	N/A	30	68	N/A	30	68	N/A	30	68

Table 8: Suspended Solids Results, Geometric Mean, and 90th Percentile

Please note that highlighted results are above the applicable condition limits. GWRC was advised of the exceedances (via WWL) when the results came to hand.

c) Faecal Coliforms

The following is a summary of the daily results, geometric mean, and ninetieth percentile for faecal coliforms.

Day	July 2025			August 2025			Sept 2025		
	Daily Results	Geometric Mean	90th Percentile	Daily Results	Geometric Mean	90th Percentile	Daily Results	Geometric Mean	90th Percentile
	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL
1	10	123	806	32	94	741	45	80	645
2	10	118	806	49	95	741	17	79	645
3	20	118	806	28	94	741	49	79	645
4	155	119	806	305	95	741	10	76	645
5	13491	126	930	169	95	741	24	73	466
6	112	122	806	447	97	741	39	73	466
7	17	119	806	55	92	595	22	72	466
8	224	120	806	80	94	595	17	71	466
9	28	117	806	46	95	595	158	73	466
10	28	118	806	10	95	595	1,897	74	466
11	17	115	806	10	91	550	2,000	77	645
12	35	113	806	57	90	550	600	77	645
13	77	113	806	10	86	550	669	78	678
14	20	110	806	335	86	550	620	80	678
15	14	109	806	632	87	643	2,646	84	822
16	35	107	806	339	87	539	346	86	822
17	124	107	806	166	86	539	1,631	88	1,387
18	73	107	806	1,400	88	649	394	90	1,387
19	30	106	806	10	88	665	124	91	1,387
20	35	98	741	20	87	665	140	91	1,387
21	4690	101	806	24	83	550	180	92	1,387
22	12649	103	806	24	81	550	200	94	1,387
23	7348	106	930	215	81	539	22	91	1,387
24	13	103	930	53	81	539	20	92	1,387
25	10	101	930	110	83	539	20	92	1,387
26	77	103	930	20	82	539	28	91	1,387
27	45	103	930	759	82	645	77	92	1,387
28	99	100	806	167	81	645	177	95	1,387
29	60	98	806	410	82	645	877	104	1,387
30	88	94	741	1,386	82	645	240	108	1,387
31	75	95	741	193	82	645			
Limits	N/A	200	950	N/A	200	950	N/A	200	950

Table 9: Faecal Coliform Results, Geometric Mean, and 90th Percentile

Please note that highlighted results are above the applicable condition limits. GWRC was advised of the exceedances (via WWL) when the results came to hand.

Condition 11 - Analysis for metals and other

The permit holder shall at least once every three months obtain a sample of the treated wastewater discharged from the treatment plant to the outfall. This sample shall be analysed for and not exceed the following:

Total arsenic	0.26 g/m ³	This sample shall also be analysed for:
Total cadmium	0.08 g/m ³	
Total chromium	0.48 g/m ³	
Total copper	0.14 g/m ³	
Total lead	0.48 g/m ³	
Total mercury	0.01 g/m ³	
Total nickel	0.77 g/m ³	
Total zinc	1.65 g/m ³	
Phenol	0.80 g/m ³	
Cyanide as CN	0.10 g/m ³	
		pH
		Ammoniacal Nitrogen
		Oil and Grease

Condition met - see table below.

Compound	Units	Limit	26/07/2025
Total Arsenic	g/m ³	0.26	0.002
Total Cadmium	g/m ³	0.08	0.001
Total Chromium	g/m ³	0.48	0.001
Total Copper	g/m ³	0.14	0.011
Total Lead	g/m ³	0.48	0.001
Total Mercury	g/m ³	0.01	0.001
Total Nickel	g/m ³	0.77	0.002
Total Zinc	g/m ³	1.65	0.026
Phenol	g/m ³	0.80	0.0100
Cyanide as CN	g/m ³	0.10	0.0200
pH	--	--	6.9
Ammoniacal Nitrogen	g/m ³	--	12.5
Oil and Grease	g/m ³	--	4.0

Table 10: Analytical Results for Quarterly Metals and other Specified Compounds

Condition 12 - Monitoring Results' Reporting

The results of monitoring undertaken in accordance with conditions 9a, 9b and 11 of this permit shall be forwarded to the Manager, Environmental Regulation, Wellington Regional Council on a quarterly basis, in accordance with condition 19 of this permit.

Condition met - all monitoring performed at the Moa Point WWTP has been provided in the previous sections of this report under the designated resource consent conditions. A summary of the monitoring parameters, the resource consent condition the data is listed under, the monitoring frequency, the limits for each parameter, and compliance with the resource consent can be found under WGN080003 [31505] Condition 19.

Condition 13 - Notification of Non Compliant Effluent

The permit holder shall notify the Manager, Environmental Regulation, Wellington Regional Council immediately in the event that a running geometric mean and/or ninetieth percentile effluent quality value or other value calculated following each wastewater quality sampling event exceeds the criteria stipulated in conditions 10 and 11 of this permit for more than three consecutive sampling events. Such a notification shall include the likely reason for exceedance, and measures to be undertaken by the permit holder to remedy the situation.

The permit holder shall also immediately notify the Medical Officer of Health of any such event.

Moa Point WWTP was compliant with both the BOD₅ 90-day percentile and 90-day geometric mean for all of the reporting period.

The Total Suspended Solids 90-day percentile and 90-day geometric mean were compliant for most of the reporting period. 90-day geomean became non compliant on 20 September and remained so for the duration of the reporting period (quarter ended 30 September). The 90 day 90th percentile became non compliant on 13 September and remained so for the duration of the reporting period (quarter ended 30 September).

The Faecal Coliforms 90-day geometric mean were compliant for all of the reporting period. The 90-day percentile was compliant for most of the reporting period but became non-compliant on 17 September and remained so for the duration of the reporting period (quarter ended 30 September).

GWRC was advised of the exceedances (via WWL) when the results came to hand

Condition met - the non compliances were notified as required by the condition.

Condition 14 - Noticeable Effects Beyond the Discharge Point

The discharge shall not result in any of the following effects beyond a 100-metre radius of the discharge point (described in condition 3 of this permit):

- a. The production of any conspicuous oil or grease films, scums or foams or floatable or suspended material;
- b. Any conspicuous change in colour or visual clarity;
- c. Any emission of objectionable odour; or
- d. Any significant adverse effects on aquatic life.

Condition met - nothing to report.

Condition 18 - Complaints

The permit holder shall keep a record of any complaints that are received. The record shall contain the following details, where practicable:

- a. Name and address of the complainant;
- b. Identification of the nature of the complaint;
- c. Date and time of the complaint and of the alleged event;
- d. Weather conditions at the time of the complaint; and
- e. Any measures taken to address the cause of the complaint.

The permit holder shall notify the Manager, Environmental Regulation, Wellington Regional Council of any complaints relating to the exercise of this permit within 24 hours of being received by the permit holder or the next working day.

Condition met - there were no complaints received regarding this resource consent for the reporting period.

Condition 19 - Quarterly Reporting

A quarterly monitoring report for each three-month period ending 31 March, 30 June, 30 December and 31 December shall be provided to the Manager, Environmental Regulation, Wellington Regional Council within 30 days of the end of each three month period.

The quarterly report shall include, but not be limited to, the following:

- a. The results of all monitoring undertaken, as required by conditions 9a, 9b and 11 of this permit. These results shall be provided in an electronic format and a hard-copy format;
- b. An assessment of compliance with conditions 10, 11 and 14 of this permit; and
- c. Reasons for any non-compliance and subsequent actions undertaken to remedy any non-compliance.

This condition is met by providing this report.

All monitoring performed at the Moa Point WWTP has been provided in the applicable sections of this report under the designated resource consent conditions.

WGN080003 [35047] - Occasional Weather Induced Discharges

Condition 8 - Reporting Bypass Discharges

The permit holder shall monitor and record the flow rate, total volume and duration of any bypass discharge from the Moa Point Wastewater Treatment Plant to the long outfall, and calculate and record a dilution ratio (secondary treated: screened effluent) for each bypass event based on average rates of flow during that event. The results of this monitoring shall be forwarded to the Manager, Environmental Regulation, Wellington Regional Council, within 10 working days of the bypass discharge occurring.

Condition met - Discharges were notified after each event and further details are set out below:

Date	Duration	Inlet Flow		Discharge Flow			Dilution Ratio	Consented	Cause
		Average	Peak	Average	Peak	Total Volume			
d/m	hr:min	L/s	L/s	L/s	L/s	m ³	--	Y/N	
3-Jul	57:16	2170	4045	236	1779	48628	8.7:1	N	Wet weather, inflows exceeded plant capacity which was reduced due to clarifier refurbishment works
11-Jul	17:18	1994	3041	116	790	7201	16.7:1	N	
13-Jul	0:38	1999	2385	19	123	43	108:1	N	

Table 11: Discharges

Note that during the start of the period, the WWTP was operating at reduced full treatment capacity due to the Clarifier refurbishment works. There were no discharges in August and September.

Condition 10 - Shoreline Monitoring Sites

During a bypass discharge (if during normal working hours) and on days one, two and three after the discharge, the permit holder shall take a grab sample of coastal water at each of the following locations, providing safe access is available:

- Dorrie Leslie Park at boat ramp;
- Hue Te Taka Peninsula;
- Tarakena Bay Beach at boat ramp;
- Tarakena Bay Beach, Western side;
- Hue te Taka Peninsula, Western side;
- Moa Point Road, opposite number 49;
- Lyall Bay Beach, Eastern side;
- Dorrie Leslie Park, South side of boat ramp;
- Dorrie Leslie Park, West of boat ramp;
- Peninsula at Queens Drive and The Esplanade;
- Houghton Bay, Western side;
- Marine Centre, Island Bay, Eastern side;
- Island Bay, Western side

Each sample shall be analysed for faecal coliforms and enterococci.

The permit holder shall identify and record the location of the sampling points (including map references) and supply this information to the Manager, Environmental Regulation, Wellington Regional Council, within three months of the commencement of this permit.

The details of the monitoring programme, as outlined in the Overflow Contingency Plan (required under condition 12 of this permit), shall be to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

Note: These sample locations have been selected to act as audit sites to determine if the results obtained from the modelling undertaken in regards to public health risks from bypass discharges are substantiated by sample results.

The resource consent WGN080003 [35047], Condition 10 was amended on 13 December 2017 to add another ten (10) shoreline monitoring sites. These additional shoreline monitoring sites are located near storm water discharges which may affect the monitoring results.

Condition met - the following map displays the (13) sites for shoreline sampling:

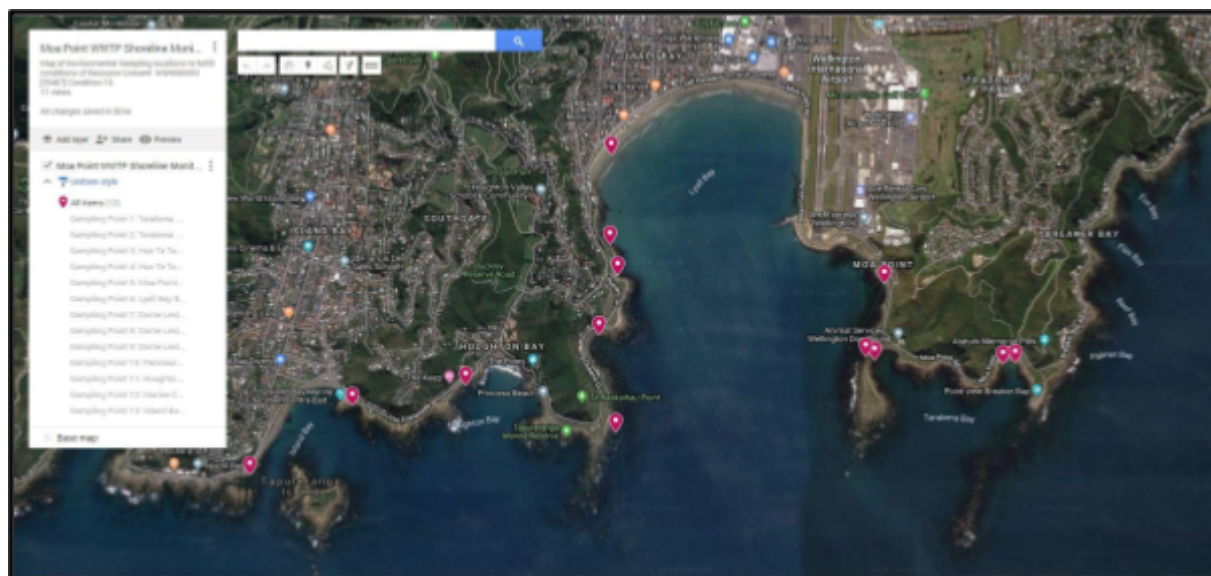


Figure 1: Moa Point WWTP Shoreline Monitoring Sites

Conditions at Time of Sampling - All Sites									
Date	Time	Wind Direction	Wind Strength	Weather	Tide Height	Tide Ebb / Flow	Rain in last 24 Hrs	Discolouration	Visible Surface Debris
03/07	14:00 - 15:15	SW	Light	Rain	Mid	Ebb	Yes	None	None
04/07	06:53 - 07:59	N	Light	Rain	Low	Flood	Yes	None	None
05/07	05:15 - 06:30	S	Moderate	Rain	Low	Ebb	Yes	None	None
06/07	05:26 - 06:39	SE	Moderate	Overcast	Low	Ebb	Yes	None	None
07/07	06:43 - 07:45	SW	Moderate	Clear	Low	Ebb	Yes	None	None
12/07	05:16 - 06:26	N	Light	Rain	High	Flood / Ebb	Yes	None	None
13/07	06:29 - 07:42	N	Light	Overcast	High	Ebb	Yes	None	None
14/07	06:36 - 07:43	NW	Moderate	Rain	High	Flood	Yes	None	None
15/07	05:55 - 07:00	N	Light	Cloudy	High	Flood	Yes	None	None
16/07	06:05 - 07:07	None	None	Cloudy	Mid	Flood	Yes	None	None

Table 12: Shoreline Monitoring Conditions

Shoreline Monitoring

The following is a summary of the shoreline monitoring performed as part of resource consent WGN080003 [35047], Condition 10 for the events set out above (Condition 9 refers).

Date			Island Bay Western Side	Island Bay Marine Centre Eastern Side	Houghton Bay West Side	Dorrie Leslie Park South Side	Dorrie Leslie Park West Side	Dorrie Leslie Park at Boat Ramp	Peninsula at Queens Drive	Lyal Bay Beach Eastern Side	49 Moa Point Rd	Hue Te Taka Peninsula West	Hue Te Taka Peninsula	Tarakena Bay at Boat Ramp	Tarakena Bay Western Side
3-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	320	< 10	50	< 10	< 10	20	10	440	40	10	10	< 10	30
3-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	440	< 10	90	20	40	80	30	600	120	20	40	20	120
4-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	130	140	10	30	40	80	20	40	40	20	80	20	50
4-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	130	100	30	10	40	40	80	10	< 10	20	900	30	50
5-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	70	250	100	70	60	10	50	20	40	20	260	200	90
5-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	1000	900	900	600	20	80	30	10	10	10	1700	1200	30
6-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	40	10	< 10	20	20	350	20	50	20	40	20	330	50
6-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	10	40	100	40	50	290	20	10	260	60	10	200	40
7-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	220	300	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10	< 10	< 10	< 10
7-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	80	90	< 10	< 10	10	< 10	< 10	< 10	10	180	50	40	70
12-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	< 10	20	10	20	< 10	80	70	< 10	90	20	80	120	10
12-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	< 10	70	< 10	1200	20	220	260	50	300	600	220	260	900
13-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	< 10	50	< 10	< 10	< 10	10	10	< 10	< 10	< 10	< 10	40	20
13-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	20	20	10	30	50	40	20	20	< 10	< 10	10	70	90
14-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	90	< 10	< 10	< 10	20	10	< 10	10	< 10	10	10	20	60
14-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	210	700	10	40	50	30	10	80	20	10	10	< 10	40
15-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	20	< 10	< 10	< 10	30	10	10	< 10	< 10	< 10	< 10	< 10	< 10
15-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	10	< 10	10	10	40	30	20	< 10	20	< 10	< 10	50	10
16-Jul	Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	40	80	< 10	10	< 10	10	10	40	< 10	30	< 10	< 10	10
16-Jul	Enumeration of Enterococci by Membrane Filtration	cfu/100 ml	90	10	10	< 10	< 10	< 10	40	20	20	410	20	20	< 10

Table 13: Shoreline Monitoring Guidelines

- The tests for enterococci and faecal in shoreline monitoring were analysed by the contract laboratory.

Condition 16 - Monitoring of bypass discharges

1. The permit holder shall provide suitable wastewater sampling locations for monitoring the quality of:
 - a. the bypass flows; and
 - b. secondary treated wastewater (i.e. both wastewater streams prior to mixing) during bypass discharges.
2. The permit holder shall obtain grab samples of both wastewater streams within the first two hours of a bypass discharge occurring during normal working hours or as soon as practicable for those events occurring outside normal working hours. These samples shall be analysed for:
 - cBOD5
 - suspended solids
 - faecal coliform
 - pH
 - ammoniacal nitrogen
 - oil and grease
3. On at least one bypass event each year these samples shall also be analysed for the following indicator contaminants:
 - Total cadmium
 - Total chromium
 - Total copper
 - Total lead
 - Total nickel
 - Total zinc

The wastewater quality results, together with the results of wastewater flow monitoring shall be used to calculate, by mass balance, the quality of the wastewater discharge after both wastewater streams have mixed. The mass balance calculation for a contaminant (a) is: $C_{mixed(a)} = (C_{tr(a)} * Q_{tr} + C_{by(a)} * Q_{by}) / Q_{mixed}$

Where:

C is contaminant concentration

Q is the flow rate (litres/sec)

tr subscript relates to parameter of the secondary treated wastewater stream

by subscript relates to parameter of the bypassed wastewater stream

mixed subscript relates to parameter of the mixed secondary treated and bypassed wastewater streams

The calculated mixed wastewater discharge quality results shall be reported to the Manager, Environmental Regulation, Wellington Regional Council, within 10 working days of the overflow event occurring.

Condition not met - Sampling locations are set out above - see Condition 10a. While sampling results for this condition are set out below, they were not furnished within 10 days of the event.:

Product Type		Surface Water	Surface Water
Sampled Datetime		03/07/2025 15:40:00	03/07/2025 15:45:00
Parameter Name	Units	Moa Secondary Treated Wastewater	Moa By-Pass Flow Discharge
Carbonaceous Biochemical Oxygen Demand	mg/l	30	113
Total Cadmium	mg/l	<0.001	<0.001
Total Chromium	mg/l	0.002	0.005
Total Copper	mg/l	0.021	0.04
Total Lead	mg/l	0.003	0.01
Total Nickel	mg/l	0.002	0.003
Total Zinc	mg/l	0.054	0.112
Oil & Grease	mg/l	6	5
pH (Tested beyond 15 minute APHA holding time)		6.9	6.6
Suspended Solids	mg/l	46	155
Ammonia Nitrogen	mg/l	<0.01	9.88

Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	> 60000	
Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml		900000
Product Type		Surface Water	Surface Water
Sampled Datetime		12/07/2025 05:10:00	12/07/2025 05:05:00
Parameter Name	Units	Moa Secondary Treated Wastewater	Moa By-Pass Flow Discharge
Carbonaceous Biochemical Oxygen Demand	mg/l	<6	21
Total Cadmium	mg/l	<0.001	<0.001
Total Chromium	mg/l	<0.001	0.002
Total Copper	mg/l	0.007	0.018
Total Lead	mg/l	0.001	0.005
Total Nickel	mg/l	0.001	0.002
Total Zinc	mg/l	0.019	0.056
Oil & Grease	mg/l	<4	6
pH (Tested beyond 15 minute APHA holding time)		6.8	6.9
Suspended Solids	mg/l	13	41
Ammonia Nitrogen	mg/l	6.36	7.55
Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	40	
Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml		240000
Product Type		Surface Water	Surface Water
Sampled Datetime		14/07/2025 08:35:00	14/07/2025 08:15:00
Parameter Name	Units	Moa Secondary Treated Wastewater	Moa By-Pass Flow Discharge
Carbonaceous Biochemical Oxygen Demand	mg/l	<6	60
Total Cadmium	mg/l	<0.001	<0.001
Total Chromium	mg/l	<0.001	<0.001
Total Copper	mg/l	0.004	0.012
Total Lead	mg/l	<0.001	<0.001
Total Nickel	mg/l	0.001	0.002
Total Zinc	mg/l	0.024	0.031
Oil & Grease	mg/l	6	<4
pH (Tested beyond 15 minute APHA holding time)		6.8	7.3
Suspended Solids	mg/l	12	70
Ammonia Nitrogen	mg/l	5.88	12.9
Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml	30	
Enumeration of Faecal Coliforms by Membrane Filtra	cfu/100 ml		1300000

Condition 18 - Complaints

The permit holder shall keep a record of any complaints that are received. The record shall contain the following details, where practicable:

- a. Name and address of the complainant;
- b. Identification of the nature of the complaint;
- c. Date and time of the complaint and of the alleged event;
- d. Weather conditions at the time of the complaint; and
- e. Any measures taken to address the cause of the complaint.

The permit holder shall notify the Manager, Environmental Regulation, Wellington Regional Council of any complaints relating to the exercise of this permit, within 24 hours of being received by the permit holder or the next working day. The permit holder shall forward to the Manager, Environmental Regulation, Wellington Regional Council a copy of any complaints recorded annually.

Condition met - no complaints were received regarding this resource consent for the reporting period.

WGN080003 [26182] - Occupying foreshore and seabed with outfall pipeline

Condition 3 - Annual Outfall Inspection and Assessment

The permit holder shall undertake an annual physical assessment of the condition of the outfall pipeline. This assessment shall include, but not be limited to, the following:

- a. An assessment of the structural condition of the pipeline;
- b. An inspection of the diffuser ports;
- c. An assessment of the erosion or scour around exposed sections of the pipeline; and
- d. Recommend any maintenance that is required.

The results of the assessment shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council no later than three months after the assessment has been undertaken.

Not required for this reporting period.

WGN080003 [26183] - Discharge to Air (WWTP)

Condition 7 - Monitoring

The permit holder shall monitor air quality in the vicinity of the plant to confirm the absence of faecal coliforms and salmonella originating from the plant. Sampling is to be carried out at least once every six months. The sampling method and locations are to be agreed with the Manager, Environmental Regulation, Wellington Regional Council within three months of the granting of this permit. Tests are to be carried out at a minimum of three sites downwind and three sites upwind of the plant, with at least one in the vicinity of Air New Zealand kitchens and one at a level of Kekerenga Street. The other sites are to be located outside of/and within 100 metres of the site boundary. The results shall be provided annually in the annual report required under condition 14 of this permit, or on request. Should the presence of faecal coliforms or salmonella be measured at any time, the Wellington Regional Council may direct that the applicant sample at least once every month for six months before returning to the six monthly sampling regime.

Condition met - Source Testing New Zealand Ltd (STNZ) was commissioned by Veolia to undertake regular ambient microbe monitoring in the vicinity of Moa Point WWTP. The air quality monitoring was performed in August 2025. Excerpts of the report can be found in Appendix iii: Ambient Microbe Monitoring. The full report is available on request.

Condition 8 - Monitoring of Hydrogen Sulphide (H₂S)

Hydrogen sulphide (H₂S) and other reduced sulphur compounds shall be monitored in the deodorised gas discharge. Monitoring shall be undertaken in the stack leading from the chemical scrubber system on a monthly basis. The results shall be provided annually in the annual report required under condition 14 of this permit, or on request.

Condition not met. The hydrogen sulphide (H₂S) concentration in the deodorised gas discharged from the Moa Point WWTP scrubber system is continuously monitored by an online analyser. To meet the requirements of this consent condition, the daily maximum value is recorded for each day. The maximum of these values is reported as the monthly maximum H₂S concentration. For all the maximum values please see Appendix ii: H₂S Concentrations. The Moa Point analyser was not operating during part of the reporting period due to lack of consumables (tape) for the equipment. The analyser is an aged piece of equipment; the tape, which is an essential component, is sourced from Europe and due to the age of the equipment is difficult to obtain. Replacement equipment has been sourced and is expected to be installed before the end of the next quarterly reporting period.

The total reduced sulphur compounds (TRS) concentration are measured once a month by an independent contractor.

Condition 9 - H₂S and TRS Concentrations Limits

The discharge to air from the chemical scrubber system shall contain no more than **0.01ppm hydrogen sulphide (H₂S)** and no more than **0.05ppm total reduced sulphur** compounds (including H₂S).

The limits have been included in the table under WGN080003 [26183] Condition 8 and Appendix ii: H₂S Concentrations.

Condition not met as Total Reduced Sulphur exceeded the condition limit and H₂S not recorded.

GWRC issued an abatement notice in September for unauthorised discharges following a series of non-compliant TRS results over prior months. Following correspondence with WWL, GWRC withdrew the TRS Abatement Notice.

Date	Hydrogen Sulphide	Total Reduced Sulphur Compound
MMM YYYY	ppm	ppm
July 2025	Not recorded	<0.002
August 2025	Not recorded	0.243
September 2025	Not recorded	<0.002
Limit	0.01	0.05

Table 14: H₂S and TRS Concentrations

Condition 10 - Smoke Testing

The permit holder shall undertake **smoke testing** of the Moa Point wastewater treatment plant and ventilation system. The smoke tests are to be carried out on an **annual** basis between the months of August and November.

The results of the smoke test shall be submitted to the Manager, Environmental Regulation, Wellington Regional Council within one month of the testing being carried out by the permit holder. A copy of the analysed results shall also be provided to the Community Liaison Group, if requested.

Not applicable - Smoke testing of the Moa Point WWTP wasn't undertaken in the reporting period. This typically occurs in the next reporting period.

Condition 13 - Complaints

The permit holder shall keep a permanent record of any complaints received alleging adverse effects from the permit holder's operations. The complaints record shall contain the following where practicable:

- The name and address of the complainant, if supplied;
- Identification of the nature of the complaint;
- Date and time of the complaint and alleged event;
- Weather conditions at the time of the alleged event;
- Results of the permit holder's investigations; and
- Any mitigation measures adopted.

The permit holder shall notify the Manager, Environmental Regulation, Wellington Regional Council of any complaints relating to the exercise of this permit, within twenty-four hours of being received by the permit holder or the next working day.

The permit holder shall forward to the Manager, Environmental Regulation, Wellington Regional Council a copy of any complaints recorded in the annual report required by condition 14 of this permit.

Condition met - there were no complaints in the reporting period.

WGN960094 [1471] - Discharge to Air - Moa Point Inlet Pumping Station

Condition 11 - Monitoring of Hydrogen Sulphide (H₂S)

The following monitoring shall be carried out and the results shall be forwarded to the Wellington Regional Council:

- a. The pumping station stack shall be tested for hydrogen sulphide and total reduced sulphur compounds. The concentrations shall not exceed 0.01ppm and 0.05ppm respectively. This testing shall be carried out monthly for the first six months of operation of the pumping station. The Regional Council shall then review the frequency. The method of testing shall be agreed to with the Wellington Regional Council.
- b. Records of the pH and the Oxidation Reduction potential of the scrubber solutions shall be kept by the consent holder and made available to the Wellington Regional Council. The form of these records shall be agreed to with the Wellington Regional Council prior to commissioning of the pumping station.

a) H₂S and TRS

Condition not met H₂S not recorded.

The total reduced sulphur compounds (TRS) concentration are measured once a month by an independent contractor.

Date	Hydrogen Sulphide	Total Reduced Sulphur Compound
MMM YYYY	ppm	ppm
July 2025	Not recorded	<0.002
August 2025	Not recorded	<0.002
September 2025	Not recorded	<0.002
Limit	0.01	0.05

Table 15: H₂S and TRS Concentrations

b) pH and Oxidation Reduction Potential

Records are automatically recorded by the Plant's telemetry system and are available on request.

Condition 13 - Complaints

The consent holder shall keep a record of any complaints they receive. The complaints shall be forwarded to the Wellington Regional Council within twenty-four hours of being received by the consent holder.

Condition met - No complaints in the period.

Appendix i: Heavy Metals Analysis

The heavy metals sampling for Consent WGN080003 [31505] Condition 11 was conducted on 26 July 2025.



Customer name	Veolia Water - Wellington	Disclaimer
Order number	EUNZWE-00267551	-This excel report is provided for the convenience and analysis by customers. Only the results of the original Analytical Report are authorised.
Submission reference		Caption
AR number and version	AR-25-NW-064661-01	see below for an explanation of the cell colouring.
Specifications Name	Veolia Moa Point Effluent Quarterly	Out of specification Over detection limit

Client Sample Code	
Sample Reference	
Sample Description	Waste water MOA_EFF_G_1Q:Moa Effluent Grab
Sampling Point	1Quarterly
Product Type	Waste water
Sampled Datetime	26/07/2025 8:45 AM
D : Sampler Name	Marty
Collected By Eurofins	False

Test Code	Test Name	Standard Reference	Parameter Code	Parameter Name	Units	Specification	812-2025-00123490
NW00U	Chlorophenols	Internal Method, LC-MS/ 7053J001	Phenol	mg/l	<0.80 mg/L	<0.01	
NW00U	Chlorophenols	Internal Method, LC-MS/ 7300A036	Pentachlorophenol	mg/l		<0.005	
NW00U	Chlorophenols	Internal Method, LC-MS/ 7300J080	2,6-Dichlorophenol	mg/l		<0.2	
NW00U	Chlorophenols	Internal Method, LC-MS/ 7300J083	3,4,5-Trichlorophenol	mg/l		<0.01	
NW00U	Chlorophenols	Internal Method, LC-MS/ 7300J084	2,3,4,6-Tetrachlorophenol	mg/l		<0.01	
NW00U	Chlorophenols	Internal Method, LC-MS/ C005C120	2,4-Dichlorophenol	mg/l		<0.01	
NW00U	Chlorophenols	Internal Method, LC-MS/ C005C125	2-Chlorophenol (o-chloropl	mg/l		<0.01	
NW00U	Chlorophenols	Internal Method, LC-MS/ C005C131	4-Chloro-3-cresol	mg/l		<0.01	
NW00U	Chlorophenols	Internal Method, LC-MS/ SF000123	Total of 2,4,5 & 2,4,6 -Trichl	mg/l		<0.02	
NW149	Total Arsenic	APHA Online Edition 312 7003A001	Total Arsenic	mg/l	<0.26 mg/L	<0.002	
NW154	Total Cadmium	APHA Online Edition 312 7003A016	Total Cadmium	mg/l	<0.08 mg/L	<0.001	
NW157	Total Chromium	APHA Online Edition 312 7003A005	Total Chromium	mg/l	<0.48 mg/L	0.001	
NW159	Total Copper	APHA Online Edition 312 7001A010	Total Copper	mg/l	<0.14 mg/L	0.011	
NW161	Total Lead	APHA Online Edition 312 7003A003	Total Lead	mg/l	<0.48 < mg/L	<0.001	
NW165	Total Mercury	APHA Online Edition 312 7003A019	Total Mercury	mg/l	<0.01 mg/L	<0.001	
NW167	Total Nickel	APHA Online Edition 312 7003A007	Total Nickel	mg/l	<0.77 mg/L	0.002	
NW177	Total Zinc	APHA Online Edition 312 7001A013	Total Zinc	mg/l	<1.65 mg/L	0.026	
NW192	Oil & Grease	APHA Online Edition 552 MF000023	Oil & Grease	mg/l		<4	
NW195	pH (Tested beyond 15 minute APHA hol	APHA 24th Edition 4500- 7027A005	pH (Tested beyond 15 minute APHA holding time)			6.9	
NW676	Ammonia Nitrogen	Internal Method, Spectrc	Ammonia Nitrogen	mg/l		12.5	
NW679	Cyanide	APHA Online Edition 450 ST00003Q	Cyanide	mg/l	<0.10 mg/L	<0.02	

Appendix ii: H₂S Concentrations

Daily Maximum H₂S Concentrations from the Moa Point IPS and WWTP

Day	July 2025		August 2025		September 2025	
	IPS	WWTP	IPS	WWTP	IPS	WWTP
	ppb		ppb		ppb	
1	0.000	0.000	0.000	0.00	0.000	0.00
2	0.000	0.000	0.000	0.00	0.000	0.00
3	0.000	0.000	0.000	0.00	0.000	0.00
4	0.000	0.000	0.000	0.00	0.000	0.00
5	0.000	0.000	0.000	0.00	0.000	0.00
6	0.000	0.000	0.000	0.00	0.000	0.00
7	0.000	0.000	0.000	0.00	0.000	0.00
8	0.000	0.000	0.000	0.00	0.000	0.00
9	0.000	0.000	0.000	0.00	0.000	0.00
10	0.000	0.000	0.000	0.00	0.000	0.00
11	0.000	0.000	0.000	0.00	0.000	0.00
12	0.000	0.000	0.000	0.00	0.000	0.00
13	0.000	0.000	0.000	0.00	0.000	0.00
14	0.000	0.000	0.000	0.00	0.000	0.00
15	0.000	0.000	0.000	0.00	0.000	0.00
16	0.000	0.000	0.000	0.00	0.000	0.00
17	0.000	0.000	0.000	0.00	0.000	0.00
18	0.000	0.000	0.000	0.00	0.000	0.00
19	0.000	0.000	0.000	0.00	0.000	0.00
20	0.000	0.000	0.000	0.00	0.000	0.00
21	0.000	0.000	0.000	0.00	0.000	0.00
22	0.000	0.000	0.000	0.00	0.000	0.00
23	0.000	0.000	0.000	0.00	0.000	0.00
24	0.000	0.000	0.000	0.00	0.000	0.00
25	0.000	0.000	0.000	0.00	0.000	0.00
26	0.000	0.000	0.000	0.00	0.000	0.00
27	0.000	0.000	0.000	0.00	0.000	0.00
28	0.000	0.000	0.000	0.00	0.000	0.00
29	0.000	0.000	0.000	0.00	0.000	0.00
30	0.000	0.000	0.000	0.00	0.000	0.00
31	0.000	0.000	0.000	0.00		
Limit	0.0100 ppm (= 10 ppb)					

Appendix iii: Ambient Microbe Monitoring

Source Testing New Zealand Ltd (STNZ) was commissioned by Veolia to undertake ambient microbe monitoring in the vicinity of Moa Point WWTP. This is required under Condition 7 of Resource Consent (WGN080003 (26183)). Below are excerpts from the STNZ report. The full report is available on request.

■ **Table 1: Moa Pt WWTP Ambient Microbes Monitoring, 28 August 2025**

Site	Total Count (CFU/m ³) ^a	Filter 1 Breakdown of Total Count					Filter 2		Filter 3		
		Total Bacteria (CFU/m ³) ^b	Total Actinomyces (CFU /m ³) ^b	Total Fungi ^b (CFU /m ³) ^b	Total Yeasts (CFU/m ³) ^b	<i>Aspergillus Fumigatus</i> ^c (CFU /m ³) ^b	Gram Negative (CFU/m ³) ^b	Enterococci (CFU /m ³) ^b	Salmonella Present/Absent	Total Coliforms Present/Absent	Faecal Coliforms Present/Absent
Site 1	245	16	<3	229	<3	<3	<4	<4	Absent	Absent	Absent
Site 2	116	10	<2	104	2	<2	>3	>3	Absent	Absent	Absent
Site 3	77	<3	<3	77	<3	<3	>3	>3	Absent	Absent	Absent
Site 4	198	7	<2	191	<2	<2	>3	<3	Absent	Absent	Absent
Site 5	134	7	<2	127	<2	<2	<2	<2	Absent	Absent	Absent
Site 6	125	<3	<3	125	<3	<3	>3	<3	Absent	Absent	Absent

a) CFU/m³ = Colony forming units per cubic meter of air at actual temperature and pressure

b) F/Fungi = Filamentous Fungi

c) *Aspergillus fumigatus* count is included in the Total Fungi count

4. Meteorological Conditions

To assess the potential sources of any detected airborne microbes, the wind speed and direction were recorded along with temperature and ambient pressure periodically over the day. The results of the meteorological monitoring conducted on 28 August 2025 are presented in Tables 2 through 4 for Sites 1 through 6 respectively. On the day of the assessment, the wind was initially light to moderate northerlies increasing to strong over the day. There was light rain at times with a temperature of around 12 °C. The wind conditions on the day would have resulted in Sites 1 and 2 and to a lesser extent Sites 3, 4 and 6 potentially being impacted by discharges from the site.

■ **Table 2: Moa Pt WWTP Site 1, 28 August 2025**

Time	Wind Speed (m/s)	Wind Direction (from, degrees)	Temperature (°C)	Ambient Pressure (kPa)
7:38	1.3	Swirl	11.6	99.79
9:20	4.4	340	11.8	
10:20	5.1	320	12.1	
11:45	2.3	320	12.4	
12:40	15.1	Swirl	12.5	
14:35	11.1	Swirl	12.5	

■ **Table 3: Moa Pt WWTP Site 2, 28 August 2025**

Time	Wind Speed (m/s)	Wind Direction (from, degrees)	Temperature (°C)	Ambient Pressure (kPa)
9:11	12.2	340	12.0	100.03
10:10	10.6	340	12.0	
11:35	7.6	340	12.4	
12:15	8.2	340	12.4	
13:25	8.4	320	12.5	
15:40	12.7	300	15.1	

■ **Table 4: Moa Pt WWTP Site 3, 28 August 2025**

Time	Wind Speed (m/s)	Wind Direction (from, degrees)	Temperature (°C)	Ambient Pressure (kPa)
8:01	3.2	290	11.0	999.8
9:33	4.6	300	12.1	
10:22	6.2	300	12.1	
11:50	5.7	300	12.4	
12:50	6.1	300	12.4	
14:00	6.2	300	12.5	
14:50	12.1	300	12.5	

■ Table 5: Moa Pt WWTP Site 4, 28 August 2025

Time	Wind Speed (m/s)	Wind Direction (from, degrees)	Temperature (°C)	Ambient Pressure (kPa)
8:05	6.0	300	11.0	998.6
9:33	4.6	290	12.1	
10:33	5.6	280	12.1	
11:50	6.1	280	12.4	
12:50	6.1	280	12.5	
14:00	6.9	320	12.5	
14:55	12.1	320	12.5	

■ Table 6: Moa Pt WWTP Site 5, 28 August 2025

Time	Wind Speed (m/s)	Wind Direction (from, degrees)	Temperature (°C)	Ambient Pressure (kPa)
8:26	4.3	320	12.0	100.13
9:50	4.9	300	12.0	
10:35	6.2	300	12.0	
11:53	6.1	300	12.4	
13:03	4.2	N	12.4	
14:05	6.1	N	12.5	
15:05	2.1	N	14.1	

■ Table 7: Moa Pt WWTP Site 6, 28 August 2025

Time	Wind Speed (m/s)	Wind Direction (from, degrees)	Temperature (°C)	Ambient Pressure (kPa)
8:50	2.8	280	12.0	99.22
10:00	3.2	300	12.0	
11:20	4.5	300	12.5	
12:05	5.6	300	12.4	
13:10	6.2	300	12.5	
14:15	6.7	300	12.5	
15:20	5.0	300	15.3	