Porirua Wastewater Treatment Plant

Quarterly Resource Consents Report

January - March 2025

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Control Sheet

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	January - March 2025
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Executive Summary

The following report was prepared by Veolia on behalf of the Porirua City Council (PCC) for the Greater Wellington Regional Council (GWRC). This report includes results and observations that satisfy the reporting requirements of Porirua Wastewater Treatment Plant resource consents.

Coastal Discharge Permit - WGN200229 [36816]

The Porirua WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN200229. In general, the consent allows the discharge of treated effluent from the Porirua City Council's Wastewater Treatment Plant at Rukutane Point through an existing outfall at or about map reference NZMS 260:R27;320.097. The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
Volumes of Inflows to and Effluent from Plant - Condition (4)	Compliant
5J (c) Ecological Survey - Condition (5J(c))	Not applicable
Wastewater Sampling Point - Condition (6)	Compliant
Wastewater Analysis - Condition (7)	Compliant
Analysis for UV transmissivity, faecal coliforms and enterococci - Condition (8)	Compliant
Analysis for Total Ammonia Nitrogen - Condition (9A)	Compliant
Bacterophage Analysis - Condition (10)	Compliant
Sampling shall be performed by an International Accreditation New Zealand (IANZ) registered laboratory - Condition (11)	Compliant
Wastewater Quality - Condition (12)	Compliant
Analysis for metals and other - Condition (9)	Compliant
Concentrations of metals and other compounds - Condition (12A)	Compliant
UV Transmissivity monitoring probe - Condition (12C)	Compliant
Hourly average UV transmissivity - Condition (12D)	Non-compliant
Monthly Environmental Monitoring - Condition (14)	Compliant
Monthly Environmental Monitoring Analysis - Condition (15)	Compliant
Incident Notifications - Condition (16)	Compliant
Ecological survey - Condition (28)	Not applicable
Ecological survey - Condition (29)	Not applicable
UV disinfection performance - Condition (35A)	Compliant

Table 1: WGN200229 [36816] Resource Consent Condition Compliance

Air Discharge Permit - WGN200229 [36727]

The Porirua WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN200229 [36727]. In general, the consent allows the discharge of contaminants (odour) from the Porirua City Council's Wastewater Treatment Plant to the air at or about map reference NZMS 260: R27;632.096. The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable		
Record of Complaints - Condition (5)	Compliant		
Incident Notifications - Condition (6)	Compliant		

Table 2: WGN200229 [36727] Resource Consent Condition Compliance

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Volumes of Inflows to and Effluent from Plant - Condition (4)

4. The consent holder shall continuously monitor and record the daily volume of the inflow to and effluent from the wastewater treatment plant. The records shall be supplied to the Manager in accordance with conditions 18 and 19, and on request of the Manager.

Condition met - below are the daily volumes of the inflow to and effluent from the Porirua WWTP:

	Janua	iry 2025	Februa	ary 2025	March 2025		
	Daily	Volume	Daily	Volume	Daily V	/olume	
Day	Inflow Effluent		Inflow	Effluent	Inflow Effluent		
		m ³	I	m³	n	n ³	
1	24834	26411	23,499	25,180	20,029	21,390	
2	21736	23240	23,746	25,097	22,349	23,848	
3	41132	39387	20,419	22,624	19,232	21,304	
4	26198	27000	19,797	21,764	23,653	24,571	
5	24524	25292	18,582	20,435	20,734	22,021	
6	23060	24706	21,167	22,555	19,535	20,411	
7	23227	24174	19,028	20,252	18,676	19,606	
8	21493	22755	19,628	21,283	19,289	19,917	
9	21423	22247	20,994	22,420	22,001	21,489	
10	20145	21622	19,920	21,145	18,945	20,392	
11	20314	21480	19,336	20,558	18,233	19,949	
12	21286	22151	19,218	21,352	21,317	20,067	
13	20105	21468	19,575	20,999	18,944	19,800	
14	20082	21233	18,453	20,204	17,880	19,555	
15	19773	21086	19,904	21,150	19,740	20,611	
16	20333	21574	21,433	22,744	20,706	20,834	
17	19527	21389	19,704	21,634	19,229	20,169	
18	19736	21387	23,633	25,279	23,427	23,450	
19	19247	20957	20,910	22,894	29,521	24,941	
20	21096	22784	20,228	21,814	20,624	21,722	
21	19986	21783	20,062	21,956	19,267	21,068	
22	19535	21696	20,768	22,383	19,822	21,114	

	Janua	ry 2025	Februa	ary 2025	March 2025		
	Daily	Volume	Daily	Volume	Daily	Volume	
Day	Inflow	Effluent	Inflow	Effluent	Inflow	Effluent	
	r	n³	1	m ³	r	n³	
23	18980	21333	21,615	22,924	21,825	21,087	
24	18282	20300	19,501	21,429	18,944	19,862	
25	19376	21341	19,062	20,700	19,360	19,853	
26	23497	25525	19,203	20,656	19,631	19,706	
27	20326	22377	19,395	20,620	20,078	20,129	
28	19601	21565	18,342	19,788	17,825	19,291	
29	19448	21214			20,407	19,839	
30	26282	28181			21,681	21,439	
31	20211	22201			18,759	19,779	

Table 3. Daily Influent and Effluent volumes

Ecological Survey - Condition (5J(c))

5J (c). If the alternate WWTPWG is established in accordance with condition 5I then the consent holder shall prepare, implement and review a Monitoring Plan in accordance with conditions 5E and 5F, except that the requirement in condition 5F(b) shall be replaced with the following:

i. The consent holder shall engage a suitable qualified coastal ecologist to conduct a visual survey of the quantity and size of range of paua, kina and lobster along the six transects used in the Cawthron (2019) ecological survey. The survey shall be undertaken once before the third anniversary of the commencement of the consent and also be included within the scope of any ecological survey undertaken in accordance with condition 28.

Not applicable - noting that the consent became effective on 14 July 2023, the survey required under this condition is initially due before 14 July 2026 and then (under condition 28) between 15 July 2031 and 14 July 2032 and between 15 July 2037 and 14 July 2038. The ecological survey was not required during this reporting period.

Wastewater Sampling Point - Condition (6)

6. The consent holder shall, to the satisfaction of the Manager, identify a suitable place to sample the wastewater after it leaves the treatment plant but prior to it entering the Rakutane Point outfall. That sampling point shall be used for the sampling required by conditions 7 and 10.

Condition met - Sampling point as required by condition 6 has been established.

Wastewater Analysis - Condition (7)

7. The consent holder shall each day, including weekends and public holidays, obtain a representative 24-hour flow-proportioned composite sample of the wastewater from the location identified in accordance with condition 6. This sample shall be analysed for total suspended solids and biochemical oxygen demand.

Condition met - the results of the analysis required by Condition 7 are reported and assessed under Condition 12.

Analysis for UV transmissivity, faecal coliforms and enterococci - Condition (8)

8. The consent holder shall each day, including weekends and public holidays, between the hours of 9am and 5pm, obtain a representative grab sample of the wastewater from the location identified in accordance with condition 6. Prior to certification of the enterococci trigger under condition 21B this sample shall be analysed for UV transmissivity, faecal coliforms and enterococci. Following certification of the enterococci trigger under condition 21B the sample shall be analysed for enterococci and UV transmissivity.

	January 2025			F	ebruary 2025		March 2025			
Day	Faecal Coliforms	Enterococci	UVT	Faecal Coliforms	Enterococci	UVT	Faecal Coliforms	Enterococci	UVT	
	cfu/100mL	cfu/100mL	%	cfu/100mL	cfu/100mL	%	cfu/100mL	cfu/100mL	%	
1	167	10	65	167	10.0	67.0	127	20.0	62.5	
2	41	10	66	41	140.0	67.1	134	80.0	60.9	
3	39	10	66	39	50.0	66.7	412	480.0	61.3	
4	17	10	64	17	420.0	65.7	1,549	1300.0	61.1	
5	10	10	62	10	180.0	63.1	10,040	5800.0	61.8	
6	30	10	67	30	6000.0	64.9	2,098	2000.0	66.1	
7	32	10	65	32	160.0	64.0	2,121	2800.0	65.3	
8	24	10	63	24		62.6	261	490.0	65.1	
9	57	10	65	57	10.0	63.2	28	60.0	62.3	
10	33	10	63	33	700.0	63.2	16,912	6000.0	62.4	
11	10	10	62	10	450.0	62.9	81	30.0	61.4	
12	10	10	60	10	250.0	63.7	32	10.0	61.0	
13	10	10	58	10	400.0	58.4	65	10.0	62.0	
14	10	10	65	10	10.0	64.6	77	10.0	64.8	
15	10	10	64	10	190.0	63.8	55	30.0	58.8	
16	14	10	65	14	40.0	62.2	37	10.0	65.7	
17	47	70	66	47	560.0	61.9	50	30.0	64.1	
18	42	20	65	42	2000.0	63.8	135	70.0	66.4	
19	63	10	65	63	10.0	63.4	47	70.0	65.6	
20	42	10	64	42	10.0	63.5	200	110.0	67.6	
21	191	90	65	191	10.0	64.9	69	70.0	67.4	
22	420	1200	64	420	10.0	65.4	20	40.0	66.0	
23	186	60	64	186	10.0	64.3	32	60.0	62.6	
24	51	130	62	51	140.0	63.4	1,876	1800.0	62.5	
25	22	10	62	22	400.0	63.1	1,273	1500.0	61.9	
26	14	10	62	14	120.0	61.6	1,200	1200.0	62.1	
27	620	360	62	620	10.0	60.4	2,020	2400.0	61.3	
28	98	30	66	98	30.0	60.8	63	10.0	59.3	
29	63	10	68				84	10.0	60.2	
30	63	30	68				51	10.0	63.7	
31	141	60	69				10	20.0	63.4	
Limits	2000	-	-	2000	-	-	2000	-	-	

Condition met - the following is a summary of the sampling and testing required under Condition 8. Faecal coliform exceedances were reported as required under Condition 35A.¹

Table 4. Daily Faecal coliform, Enterococci and UVT results

¹ An investigation report was completed for the exceedances highlighted in March. The report was provided on 11 April 2025.

Analysis for Total Ammonia Nitrogen - Condition (9A)

9A. The consent holder shall on at least one occasion each week, on a normal working day, obtain a representative 24-hour flow-proportioned composite sample of the wastewater from the location identified in accordance with condition 6. This sample shall be analysed for Total Ammonia Nitrogen.

Condition met - the following are the results of the sampling performed under Condition 9(A).

Composite Weekly (Date)	Result (mg/l)
02 January 2025	27.0
08 January 2025	22.1
16 January 2025	32.8
22 January 2025	36.4
29 January 2025	39.7
05 February 2025	33.4
12 February 2025	34.5
19 February 2025	29.4
27 February 2025	28.2
05 March 2025	29.7
13 March 2025	29.3
18 March 2025	32.0
20 March 2025	24.7
27 March 2025	22.4
Limit	6g/m ³
(Note that the limit is set in c	condition 33b)

Table 5. Weekly Total ammonia nitrogen

Bacterophage Analysis - Condition (10)

10. The consent holder shall:

a. At least once a calendar month between the hours of 9am and 5pm, obtain a representative grab sample of the influent to the wastewater treatment plant.

b. At least once a week between the hours of 9am and 5pm, obtain a representative grab sample of the wastewater from the location identified in accordance with condition 6.

These samples shall be analysed for a suitable viral indicator, such as F-RNA bacteriophage. The requirement in this condition may be varied by certified updates to the Monitoring Plan under condition 10A.

Condition met - the following are the results of the sampling performed under Condition 10.

	January 2025				February 2025				March 2025			
Inflı Month	Influent Effluent Monthly grab Weekly grab		nt grab	Influent Monthly grab		Effluent Weekly grab		Influent Monthly grab		Effluent Weekly grab		
Date	PFU/I	Date	PFU/I	Date	PFU/I	Date	PFU/I	Date	PFU/I	Date	PFU/I	
		03/01	20			04/02	180			04/03	390	
		07/01	<10			11/024	69			11/03	210	
		14/01	50			18/02	4000	18/03	500000	18/03	<10	
21/01	300000	21/01	530	25/02	1200000	25/02	110			25/03	640	
		28/01	<10									

Table 6. Viral indicator testing

Sampling shall be performed by an International Accreditation New Zealand (IANZ) registered laboratory - Condition (11)

11. All sampling techniques employed in respect of the conditions of this content shall be acceptable to the Wellington Regional Council.All analyses undertaken in the connection with this consent shall be performed by an International Accreditation New Zealand (IANZ) registered laboratory, or otherwise as especially approved by the Greater Wellington Regional Council.

Condition met - analysis is undertaken by Eurofins.

Wastewater Quality - Condition (12)

Condition met - results are set out below

12. The quality of the wastewater sampled in accordance with condition 7 of this consent shall not exceed the following limits:

a. Suspended solids – The geometric mean of 90 consecutive daily suspended solid values shall not exceed 30 g/m3 and no more than 10% of 90 consecutive daily values shall exceed 75 g/m3

b. Biochemical oxygen demand –The geometric mean of 90 consecutive daily biological oxygen demand values shall not exceed 30 g/m3 and no more than 10% of 90 consecutive daily values shall exceed 75 g/m3

(a) Final Effluent Suspended Solids										
		January 2025			February 2028	5	March 2025			
Day	Results	90-day Geometric Mean	90-day 90th Percent Compliance	Results	90-day Geometric Mean	90-day 90th Percent Compliance	Results	90-day Geometric Mean	90-day 90th Percent Compliance	
	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	
1	6	8.5	15.2	7	8.6	18.1	5	7.9	17.1	
2	6	8.5	15.2	11	8.7	18.1	6	7.9	17.1	
3	5	8.5	15.2	6	8.6	18.1	10	8	17.1	
4	6	8.4	15	10	8.7	18.1	10	8	17.1	
5	6	8.3	15	5	8.6	18.1	20	8.1	18.1	
6	6	8.3	15	6	8.6	18.1	13	8.1	18.1	
7	6	8.3	15	5	8.6	18.1	5	8.1	18.1	
8	6	8.3	15	7	8.6	18.1	6	8.1	18.1	
9	6	8.2	15	12	8.6	18.1	12	8.1	18.1	
10	6	8.1	15	60	8.8	19	10	8.1	18.1	
11	6	8.1	15	11	8.8	19	14	8.1	18.1	
12	10	8.1	15	6	8.8	19	10	8.1	18.1	
13	6	8	15	7	8.7	19	6	8.1	18.1	
14	6	8	15	5	8.6	19	13	8.2	18.1	
15	9	8	15	5	8.5	19	11	8.2	18.1	
16	6	7.9	15	8	8.5	18.1	10	8.2	18.1	
17	6	7.9	15	6	8.5	18.1	12	8.2	18.1	
18	10	7.8	15	5	8.4	18.1	10	8.3	18.1	
19	9	7.8	15	5	8.4	18.1	9	8.3	18.1	
20	19	7.9	15	5	8.3	18.1	20	8.3	18.1	
21	27	8	15	5	8.3	18.1	26	8.3	19	
22	17	8.1	15.1	5	8.2	18.1	16	8.4	19	
23	21	8.2	16	5	8.1	17.1	16	8.4	19	
24	22	8.3	16	9	8.1	17.1	7	8.4	19	
25	23	8.4	16.1	5	8	17.1	5	8.4	19	
26	13	8.5	16.1	7	7.9	17.1	5	8.4	19	
27	19	8.6	17.2	6	7.9	17.1	6	8.4	19	
28	18	8.6	18.1	5	7.9	17.1	6	8.4	19	
29	6	8.6	18.1				6	8.4	19	
30	15	8.7	18.1				8	8.4	19	
31	6	8.7	18.1				12	8.5	19	
Limits		30	75		30	75		30	75	

Table 7: Suspended Solid Geometric Mean and Percent Compliance

(b) Final Effluent Biochemical Oxygen Demand

		January 2025	5		February 202	5			
Day	Results	90-day Geometric Mean	90-day 90th Percent Compliance	Results	90-day Geometric Mean	90-day 90th Percent Compliance	Results	90-day Geometric Mean	90-day 90th Percent Compliance
	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³
1	6	16	28	6	10.9	21	11	10	19
2	6	15.8	28	7	10.8	21	42	10	20
3	12	15.8	28	9	10.7	20.1	21	10	20
4	6	15.5	27.2	10	10.6	20.1	17	10	20
5	6	15.2	27.2	6	10.5	20.1	19	10	20
6	6	15	27.2	6	10.3	20	28	10	20
7	5	14.9	27.2	6	10.2	20	31	10	20
8	8	14.7	27.2	6	10	20	22	10	21
9	5	14.6	27.2	11	10	20	51	10	21
10	5	14.3	27.2	12	10	20	44	10	21
11	6	14.2	27.2	17	10	20	45	10	22
12	8	14.1	27.2	10	9.9	20	29	10	24
13	8	13.9	24.6	18	9.9	20	23	10	24
14	7	13.7	24.6	8	9.9	20	11	10	24
15	7	13.6	24.6	6	9.8	20	20	10	24
16	4	13.5	24.6	19	9.8	20	15	10	24
17	6	13.3	24	9	9.7	19.1	19	10	24
18	4	13	23.2	7	9.6	19.1	23	10	24
19	6	12.8	22.2	9	9.6	19.1	15	10	24
20	4	12.6	22.2	13	9.6	19.1	21	10	24
21	5	12.5	22.1	14	9.6	19.1	20	10	24
22	10	12.4	22.1	14	9.5	19.1	21	11	24
23	6	12.3	22.1	21	9.6	19.1	15	11	24
24	6	12.1	22.1	35	9.6	20	22	10.6	23.5
25	6	12	22.1	17	9.6	20	6	11	24
26	6	11.8	22.1	18	9.7	20	6	11	24
27	11	11.8	22.1	30	9.7	20	6	11	24
28	6	11.6	22	16	9.7	20	6	10.6	23.5
29	6	11.4	22				10	10.6	23.5
30	9	11.3	22				6	10.6	23.5
31	6	11.2	21.1				18	10.7	23.5
Limits	-	30	75	-	30	75	-	30	75

Table 8: BOD Geometric Mean and Percent Compliance

Please note that analytical results highlighted in amber are above the applicable parameter's geometric mean limit. Analytical results highlighted in red are above the applicable parameter's percent compliance limit.

Analysis for metals and other - Condition (9)

 9. The consent holder shall on at least one occasion each month, on a normal working day, obtain a representative 24-hour flow-proportioned composite sample of the wastewater from the location identified in accordance with condition 6. This sample shall be collected on the same day as the representative receiving water samples are collected under condition 14. This sample shall be analysed for: a) Nitrate Nitrogen b) Nitrite Nitrogen c) Dissolved Reactive Phosphorus d) Total Nitrogen e) Total Phosphorus f) Total Arsenic g) Total Cadmium h) Total Corper j) Total Copper j) Total Nickel k) Total Lead l) Total Zinc
n) Phenol

Condition met - samples have been taken in accordance with Condition 9. The results are reported and assessed in Condition 12A.

Concentrations of metals and other compounds - Condition (12A)

12A. Concentrations of metals and other compounds in the sample required under condition 9 shall not exceed: Metals/metalloids and phenols a. Total Arsenic 0.023 g/m3 b. Total Cadmium 0.055 g/m3 c. Total Chromium 0.044 g/m3 d. Total Copper 0.013 g/m3 e. Total Nickel 0.07 g/m3 f. Total Lead 0.044 g/m3 g. Total Zinc 0.08 g/m3 h. Total Mercury 0.001 g/m3 i. Phenol 2.7 g/m3											
Condition met - result	s are set o	out below:									
Compound	Units	Limit	January 2025	February 2025	March 2025						
Total Arsenic	g/m³	0.023	<0.002	<0.0020	<0.0020						
Total Cadmium	g/m³	0.055	<0.001	<0.0010	<0.0010						
Total Chromium	g/m³	0.044	0.002	0.0010	0.0020						
Total Copper	g/m³	0.013	0.006	<0.0020	0.0030						
Total Nickel	g/m³	0.07	<0.001	<0.0010	0.0010						
Total Lead	g/m³	0.044	<0.001	<0.0010	0.0010						
Total Zinc	g/m³	0.08	0.024	0.0170	0.0170						
Total Mercury	g/m³	0.001	<0.001	<0.0010	<0.0010						
Phenol	g/m³	2.7	<0.01	0.0100	0.0100						
Nitrate Nitrogen	g/m³	-	0.54	1.16	1.44						
Nitrite Nitrogen	g/m³	-	0.02	1.55	0.21						
Dissolved Reactive Phosphorus g/m ³ - 2.73 0.010 2.88											
Total Nitrogen	g/m³	-	42.7	35.5000	36.7000						
Total Phosphorus	g/m³	-	2.57	2.5200	4.3500						

Table 9. Monthly heavy metals and phenol

UV Transmissivity monitoring probe - Condition (12C)

12C The consent holder shall maintain a UV Transmissivity monitoring probe in the Duron UV system. The probe shall be linked to the treatment plant's SCADA system, with records of the hourly average UV transmissivity kept by the consent holder based on values observed at 5-minute intervals.

Condition met - the graph below summarises the UVT hourly average.



Figure 1: UVT values during January - March 2025 - online measurement

Note that due to issues with the Duron UV System effluent penstock, operation of the Duron UV system was deemed unreliable and, consequently, the TAK UV system was on duty during the period.

Hourly average UV transmissivity - Condition (12D)

12D If the hourly average UV transmissivity recorded in accordance with 12C reduces below 45% then the consent holder shall:

a. Notify the Manager as soon as practicable; and

b. Initiate an investigation that meets the following requirements.

The investigation shall:

i. Be undertaken by a suitably qualified and experienced professional.

ii. Consider the results of the suspended solids monitoring, UV transmissivity from the daily grab samples, and other relevant plant performance measurements routinely taken by the consent holder.

iii. Assess the likely cause of the UV transmissivity reducing below 45%.

iv. If considered necessary, recommend further investigations, improvements, operational actions (including changes to the OMCP) or upgrades to reduce the risk of similar UV transmissivity records occurring in the future.

v. Include an implementation programme for the recommendations, if any, set out in accordance with (iv).

vi. Within 10 working days of the hourly average UV transmissivity falling below 45%, the consent holder shall inform the Manager of the outcomes of the investigation and which of the recommendations made in accordance with (iv) and (v) above it proposes to implement or has already implemented.

Date	Course
d/m	Cause
19/01	UV transmissivity below 45%. Hourly average UV transmissivity probe disinfection fell below 45%; lowest reading went to 36.95%. Cause identified as a small piece of algae fouling the probe. This was immediately resolved and notified to GWRC by email [19 Jan 25 08:21].
19/02	The UVT value decreased below the 45% limit on 19/20 February. A report for this event identified a probe defect as the likely cause. As this report wasn't provided within 10 working days of the event, this condition is not met.

Monthly Environmental Monitoring - Condition (14)

14. The consent holder shall collect representative receiving water samples from approximately 150 mm below the surface of water that is at least 500mm deep, once each calendar month at the following locations:

a. At or about 140 metres generally east of the outfall.

b. At or about 200 metres generally southwest of the outfall.

c. Titahi Bay Beach generally at Toms Road.

d. A control site, at a location to the satisfaction of the Manager.

Coordinates for all sampling sites shall also be recorded using a handheld GPS and provided in annual monitoring reports required under condition 19.

For each water sample collected under this condition, the consent holder shall record the site name, date, time, weather, wind, tidal conditions, pH, salinity, dissolved oxygen and water temperature at each sampling location.

Condition met - the following is a summary of the monthly shoreline monitoring performed as part of resource consent WGN200229 [36816], Condition 14:

Date	Time	Total Ammonia Nitrogen	Dissolved Reactive Phosphor us	Enterococ ci	Nitrate Nitroge n	Nitrite Nitrogen	Salinity	Total Nitrogen	Total Phosphor us
dd/mm	hh:mm	g/m3	g/m3	cfu/100mL g/m3 g/m3		g/m3	g/m3		
140m East of Outfall									
28/01	08:34	0.30	0.007	<10	<0.01	<0.1	33	0.178	0.049
200m So	uth West	of Outfall		-		-			
28/01	09:00	0.34	0.010	<10	<0.01	<0.1	34	0.195	<0.025
Control			_			-			
28/01	08:11	0.21	0.010	<10	<0.01	<0.1	34	0.118	0.023
Titahi Bay	/ Surf Clu	du							
28/01	08:24	NA	NA	10	NA	NA	NA	NA	NA
			Table 11 - N	Ionthly Sho	reline Mo	nitoring.			
Date	Time	Total Ammonia Nitrogen	Dissolved Reactive Phosphor us	Enterococ ci	Nitrate Nitroge n	Nitrite Nitrogen	Salinity	Total Nitrogen	Total Phosphor us
dd/mm	hh:mm	g/m3	g/m3	cfu/100mL	g/m3	g/m3		g/m3	g/m3
140m Ea:	st of Outf	all							
27/02	27/02 09:53 0.44 <0.002 <10 <0.01 0.52 34 0.264 0.005								0.005
200m So	uth West	of Outfall							

27/02 09:32 1.16 0.037 <10 <0.01 0.37 33 1.80 0.068 Control 0.006 27/02 10:19 0.50 0.002 < 0.01 0.50 0.270 <10 34 Titahi Bay Surf Club 27/02 10:06 NA NA 330 NA NA NA NA NA

Table 12 - Monthly Shoreline Monitoring.

Date	Time	Total Ammonia Nitrogen	Dissolved Reactive Phosphor us	ssolved eactive nosphor us		Nitrite Nitrogen	Salinity	Total Nitrogen	Total Phosphor us
dd/mm	hh:mm	g/m3	g/m3	cfu/100mL	g/m3	g/m3		g/m3	g/m3
140m Eas	st of Outf	all							
24/03	08:17	0.02	0.008	<10	<0.01	<0.01	36	0.180	0.047
200m Soi	uth West	of Outfall							
24/03	08:37	0.05	0.006	40	<0.01	<0.01	36	0.289	0.049
Control									
24/03	07:46	<0.01	0.005	<10	<0.01	<0.1	36	0.123	0.049
Titahi Bay Surf Club									
24/03	07:58	NA	NA	10	NA	NA	NA	NA	NA

Table 13 - Monthly Shoreline Monitoring.

Please note that the enterococci for the shoreline monitoring samples were analysed by the contract laboratory

Please note that bathing beach guidelines were used to generate the colouring for the Enterococci samples. The following are the limits for both bacterial species:

Posterial Species	Amber Limit	Red Limit
Bacterial Species	cfu/100mL	cfu/100mL
Enterococci	140	280

Date	Time		Temp		ро	Wind	Wind		Tide	Tide	Rain in	
dd/mm	hh:mm	Site	C	Ph	mg/l	Direction	Strength	Weather	Height	Ebb / Flow	last 24 hrs	Discoloration
	09:00	200 South West of Outfall	16.8	8.12	9.82							
29/04	08:34	140m East of Outfall	15.5	8.23	10.3]						
20/01	08:24	Surf Club	15.9	8.17	10.41]						
	08:10	Control	16	8.15	9.19	N	Light	Cloudy	High	Flood	No	None
		-	Table 14	4 - Mor	nthly Sh	noreline M	onitoring.					
Date	Time		Temp		ро	Wind	Wind		Tide	Tide	Rain in	
dd/mm	hh:mm	Site	C	Ph	mg/l	Direction	Strength	Weather	Height	Ebb / Flow	last 24 hrs	Discoloration
	09:32	200 South West of Outfall	19.9	8.17	8.39							
27/02	09:53	140m East of Outfall	18.7	8.09	8.77							
21/02	10:06	Surf Club	18.9	8.15	8.81							
	10.19	Control	20.1	8 21	9.36	None	None	Cloudy	High	Flood	Yes	None

Table 15 - Monthly Shoreline Monitoring.

Date	Time		Temn		00	Wind	Wind		Tide	Tide	Rain in	
dd/mm	hh:mm	Site	C	Ph	mg/l	Direction	Strength	Weather	Height	Ebb / Flow	last 24 hrs	Discoloration
	08:37	200 South West of Outfall	17.9	8.11	8.43							
24/02	08:17	140m East of Outfall	17.7	8.14	9.97							
24/03	07:58	Surf Club	17.7	8.12	9.69							
07:46		Control	18.1	8.21	9.56	SW	Light	Overcast	Low	Ebb	Yes	None
			Table 1	e Mor	thu Ck	orolino M	onitoring					

Table 16 - Monthly Shoreline Monitoring.

Monthly Environmental Monitoring Analysis - Condition (15)

15. The samples collected from sites (a) to (d) in condition 14 shall be analysed for enterococci. In addition, the samples collected from sites (a), (b) and (d) shall be analysed for total ammonia nitrogen, nitrate nitrogen, nitrite nitrogen, dissolved reactive phosphorus, total nitrogen and total phosphorus.

Condition met - monitoring performed for the condition has been provided in the previous sections of this report under Condition 14.

Incident Notifications and Sampling - Condition (16)

16. In the event of an incident notified under condition 22A and / or a discharge of partially treated wastewater, the consent holder shall:

a. Notify the Manager as soon as practicable of the timing of the discharge, and the reason for the incident and / or the partially treated discharge.

b. Take samples at the locations specified in condition 14 as soon as it is safe to do so, within 24 hours of the discharge commencing, and also approximately 48 hours after the discharge commenced, if it is safe to do so.

c. Analyse the samples in accordance with condition 15.

d. Assess compliance with condition 13.

Condition met - Notifications and sampling is set out below. Notifications were issued for the following:

Date	Duration	Total Volume of	Course
d/m	hr:min	Discharge (m ³⁾	Cause
19/01	00:40	274	UV transmissivity below 45%. Hourly average UV transmissivity probe disinfection fell below 45%; lowest reading went to 36.95%. Cause identified as a small piece of algae fouling the probe. This was immediately resolved and notified to GWRC by email [19 Jan 25 08:21]
21/01	00:07	103	Commissioning of the generator, which involved switching power supply from mains to the generator during the day.
14/03	00:13	198	Mechanical breakdown in the Duron UV system
On 18 Ma An investi On 16 Ap	rch GWRC issue gation was under ril GWRC issued	d a Please Explair rtaken and an expl a formal warning i	n letter for this event. Repairs were completed on 26 March. anation was provided to GWRC on 8 April. n relation to this event.

00:21

650

18/03

UV by-pass failure Table 17 - Notified Discharges.

Shoreline Monitoring Date Time Tide Rain in Temp. DO Wind Wind Tide Ph Ebb / last 24 Discoloration Site Weather С mg/l Direction Strength Height dd/mm hh.mm Flow hrs 06:38 200m South West of Outfall 168 8 0 8 11.88 Ν Cloudy Ebb No None Light I ow 06:55 140m East of Outfall 15.9 8.17 12.07 Ν Light Cloudy Low Ebb No None 19/01 07:10 Surf Club 16.3 8.15 11.79 Ν Light Cloudy Low Ebb No None 07.29 174 8.18 12 58 Ν Ebb Control Light Cloudy I ow No None 09:22 200m South West of Outfall 17.3 8.11 12.08 Ν Moderate Overcast Low Flood No None 11.77 09:45 140m East of Outfall 15.8 8.04 Ν Moderate Overcast I ow Flood No None 20/01 Surf Club 16.4 8 0 8 12.22 10:04 Ν Moderate Overcast I ow Flood No None 10:22 Control 17.8 8.15 12.56 Ν Moderate Overcast Low Flood No None

Table 18 - Discharge related Shoreline Monitoring.

	Shorel	ine Monitoring										
Date dd/mm	Time hh:mm	Site	Temp. C	Ph	DO mg/l	Wind Direction	Wind Strength	Weather	Tide Height	Tide Ebb / Flow	Rain in last 24 hrs	Discoloration
	09:22	200m South West of Outfall	15.9	8.17	10.87	S	Light	Clear	Low	Flood	No	None
01/01	09:45	140m East of Outfall	16.4	8.09	11.14	S	Light	Clear	Low	Flood	No	None
21/01	10:04	Surf Club	16.3	8.14	11.29	S	Light	Clear	Low	Flood	No	None
	10:22	Control	17.4	8.08	11.21	S	Light	Clear	Low	Flood	No	None
	09:22	200m South West of Outfall	17.6	8.09	10.89	S	Moderate	Clear	Low	Flood	No	None
22/04	09:45	140m East of Outfall	18.2	8.12	11.2	S	Moderate	Clear	Low	Flood	No	None
22/01	10:04	Surf Club	17.9	8.14	11.86	S	Moderate	Clear	Low	Flood	No	None
	10:22	Control	18.1	8.17	11.83	S	Moderate	Clear	Low	Flood	No	None
	09:22	200 South West of Outfall	16.9	8.17	11.35	SW	Moderate	Clear	Low	Ebb	No	None
22/04	09:45	140m East of Outfall	17.2	8.11	9.81	SW	Moderate	Clear	Low	Ebb	No	None
23/01	10:04	Surf Club	17.3	8.09	10.68	SW	Moderate	Clear	Low	Ebb	No	None
	10:22	Control	18.3	8.15	11.95	SW	Moderate	Clear	Low	Flood	No	None

Table 19 - Discharge related Shoreline Monitoring.

	Shoreline	e Monitoring										
Date dd/mm	Time hh:mm	Site	Temp. C	Ph	DO mg/l	Wind Direction	Wind Strength	Weather	Tide Height	Tide Ebb / Flow	Rain in last 24 hrs	Discoloration
	09:08	200 South West of Outfall	14.9	8.07	8.99	SW	Light	Cloudy	High	Flood	Yes	None
14/02	09:28	140m East of Outfall	14.6	8.13	9.65	SW	Light	Cloudy	High	Flood	Yes	None
14/03	09:44	Surf Club	14.5	8.1	9.37	SW	Light	Cloudy	High	Flood	Yes	None
	10:01	Control	14.9	8.21	10.16	SW	Light	Cloudy	High	Flood	Yes	None
	09:44	200 South West of Outfall	16.8	8.17	10.5	NW	Strong	Cloudy	High	Flood	Yes	None
15/02	10:24	140m East of Outfall	15.9	8.12	10.69	NW	Strong	Cloudy	High	Flood	Yes	None
15/03	10:34	Surf Club	16.7	8.07	10.87	NW	Strong	Cloudy	High	Flood	Yes	None
	10:46	Control	17.2	8.19	11.18	NW	Strong	Cloudy	High	Flood	Yes	None
	08:53	200 South West of Outfall	17.1	8.18	10.09	NW	Moderate	Rain	Mid	Flood	Yes	None
16/02	08:33	140m East of Outfall	17.3	8.12	9.42	NW	Moderate	Rain	Mid	Flood	Yes	None
10/03	08:10	Surf Club	17.4	8.15	8.92	NW	Moderate	Rain	Mid	Flood	Yes	None
	07:53	Control	17.1	8.27	7.05	NW	Moderate	Rain	Mid	Flood	Yes	None
	15:19	200 South West of Outfall	18.2	8.19	9.99	SW	Strong	Clear	High	Ebb	Yes	None
19/02	15:37	140m East of Outfall	17.8	8.09	9.82	SW	Strong	Clear	Mid	Ebb	Yes	None
16/03	15:52	Surf Club	16.9	8.12	10.01	SW	Strong	Clear	Mid	Ebb	Yes	None
	16:09	Control	18.4	8.18	10.81	SW	Strong	Clear	Mid	Ebb	Yes	None
	09:46	200 South West of Outfall	17.6	8.07	9.54	SW	Light	Rain	Low	Flood	Yes	None
10/02	10:08	140m East of Outfall	17.3	8.15	9.88	SW	Light	Rain	Low	Flood	Yes	None
19/03	10:19	Surf Club	17.2	8.17	10.21	SW	Light	Rain	Low	Flood	Yes	None
	10:31	Control	16.9	8.11	10.48	SW	Light	Rain	Mid	Flood	Yes	None
	10:05	200 South West of Outfall	17.9	8.09	7.39	SW	Light	Overcast	Mid	Flood	Yes	None
20/02	10:27	140m East of Outfall	16.8	8.17	9.9	SW	Light	Overcast	Mid	Flood	Yes	None
20/03	10:43	Surf Club	17	8.2	10.34	SW	Light	Overcast	Mid	Flood	Yes	None
	11:01	Control	16.6	8.28	11.39	SW	Light	Overcast	Mid	Flood	Yes	None

Table 20 - Discharge related Shoreline Monitoring.

Date	Time	Total Ammonia Nitrogen	Dissolved Reactive Phosphorus	Enterococci	Nitrate Nitrogen	Nitrite Nitrogen	Salinity	Total Nitrogen	Total Phosphorus
dd/mm	hh:mm	g/m3	g/m3	cfu/100mL	g/m3	g/m3	ppt	g/m3	g/m3
Control			•			0	-	•	
19/01	06:55	0.35	0.010	<10	<0.01	<0.1	34	0.164	0.008
20/01	09:19	0.40	0.006	<10	<0.01	<0.1	34	0.155	<0.05
21/01	09:56	0.73	0.007	<10	<0.01	<0.1	34	0.186	0.014
21/01	16:24	0.40	0.009	<10	<0.01	<0.01	33	0.117	<0.05
22/01		0.38	0.008	<10	<0.01	<0.01	34	0.086	<0.05
23/01	10:22	0.35	0.042	<10	<0.1	<0.1	34	0.188	0.071
140m Ea	st of Outfa	all							
19/01	07:10	0.37	0.009	<10	<0.01	<0.1	34	0.184	<0.05
20/01	09:06	0.36	0.014	<10	<0.01	<0.1	34	0.180	<0.05
21/01	09:27	0.42	0.007	10	<0.01	<0.1	34	0.197	<0.05
21/01	17:23	0.36	0.007	<10	<0.01	<0.01	34	0.112	<0.05
22/01		0.38	0.007	<10	<0.01	<0.01	34	0.141	0.046
23/01	09:45	0.35	0.004	<10	<0.1	<0.1	33	0.219	0.074
200m So	uth West	of Outfall							
19/01	07:29	0.61	0.010	<10	<0.1	<0.1	33	0.531	0.017
20/01	08:53	0.55	0.014	140	<0.1	<0.1	34	0.568	0.020
21/01	09:04	0.74	0.018	10	<0.1	<0.1	33	0.584	0.009
21/01	17:43	0.41	0.015	<10	<0.01	<0.01	34	0.130	<0.05
22/01		1.09	0.036	<10	<0.01	<0.01	33	0.879	<0.05
23/01	09:22	0.61	0.039	<10	<0.01	<0.01	33	0.461	0.023
Titahi Ba	y Surf Clu	b							
19/01	06:38			240			33		
20/01	09:38			<10			33		
21/01	09:40			20			34		
21/01	17:18			130			34		
22/01				30			34		
23/01	10:04			<10			34		

Shoreline Monitoring Sampling Results

Table 21- Discharge related Shoreline Monitoring.

Date	Time	Total Ammonia Nitrogen	Dissolved Reactive Phosphorus	Enterococci	Nitrate Nitrogen	Nitrite Nitrogen	Salinity	Total Nitrogen	Total Phosphorus
dd/mm	hh:mm	g/m3	g/m3	cfu/100mL	g/m3	g/m3	ppt	g/m3	g/m3
Control									
14/03	10:01	<0.01	<0.002	10	<0.1	<0.1	36	0.211	<0.005
15/03	10:46	<0.01	<0.002	<10	<0.1	<0.1	36	0.191	0.011
16/03	08:33	<0.01	<0.002	<10	<0.1	<0.1	36	0.206	<0.025
18/03	16:09	<0.01	<0.002	10	<0.1	<0.1	35	0.165	<0.05
19/03	10:31	<0.01	<0.002	120	<0.1	<0.1	34	0.112	0.015
20/03	11:01	<0.01	0.006	<10	<0.1	<0.1	35	0.115	<0.05

Table 22 - Discharge related Shoreline Monitoring.

Date	Time	Total Ammonia Nitrogen	Dissolved Reactive Phosphorus	Enterococci	Nitrate Nitrogen	Nitrite Nitrogen	Salinity	Total Nitrogen	Total Phosphorus
dd/m m	hh:mm	g/m3	g/m3	cfu/100mL	g/m3	g/m3	ppt	g/m3	g/m3
140m East of Outfall									
14/03	09:28	0.04	<0.002	<10	<0.1	<0.1	35	0.231	<0.005
15/03	10:24	<0.01	<0.002	10	<0.1	<0.1	36	0.231	0.010
16/03	08:10	0.01	0.003	<10	<0.1	<0.1	35	0.271	<0.025
18/03	15:37	0.05	0.005	<10	<0.1	<0.1	35	0.446	<0.05
19/03	10:08	0.03	0.010	110	<0.1	<0.1	33	0.342	0.035
20/03	10:27	0.05	0.011	<10	<0.1	<0.1	35	0.156	<0.05
200m South West of Outfall									
14/03	09:09	0.01	0.008	<10	<0.1	<0.1	35	0.247	<0.025
15/03	09:44	0.16	0.016	10	<0.1	<0.1	35	0.506	0.020
16/03	07:53	0.02	<0.002	120	<0.1	<0.1	35	0.569	<0.025
18/03	15:19	0.20	0.018	20	<0.1	<0.1	35	0.634	<0.05
19/03	09:46	0.16	0.006	560	<0.1	<0.1	35	0.522	0.020
20/03	10:05	0.36	0.030	80	<0.1	<0.1	35	0.557	<0.05
Titahi Bay Surf Club									
14/03	09:44			110			35		
15/03	10:34			50			36		
16/03	08:50			320			35		
18/03	15:52			60			35		
19/03	10:19			>6000			14		
20/03	10:43			10			35		

Table 23- Discharge related Shoreline Monitoring.

Please note that the samples were analysed by the contract laboratory.

Please note that bathing beach guidelines were used to generate the colouring for the Enterococci samples. The following are the limits for both bacterial species:

Posterial Species	Amber Limit	Red Limit		
Bacterial Species	cfu/100mL	cfu/100mL		
Enterococci	140	280		

Table Shoreline Monitoring Guidelines

Ecological survey - Condition (28)

28. The consent holder shall commission an ecological survey of the receiving waters for the discharge. The survey shall involve the collection of information on the biota of the intertidal and shallow-subtidal habitats adjacent to the existing outfall at Rakutane Point, at Round point to the west of the existing outfall, and at a reference location 300m east of the outfall. The survey methods should be comparable with those used for the ecological survey included in Appendix F in the application. The results of the survey shall be incorporated into a report prepared by a suitably qualified and experienced coastal ecologist.

Not applicable - Noting that the consent became effective on 14 July 2023, the survey required under this condition is due between 15 July 2031 and 14 July 2032 and between 15 July 2037 and 14 July 2038. The ecological survey was not required during this reporting period.

Ecological survey - Condition (29)

29. A survey and report required under condition 28 shall be completed and submitted to the Manager:

a) Between the 8th and the 9th anniversary of the commencement of this consent, and

b) Between the 14th and 15th anniversary of the commencement of this consent.

Not applicable - Noting that the consent became effective on 14 July 2023, the survey required under this condition is due between 15 July 2031 and 14 July 2032 and between 15 July 2037 and 14 July 2038. The ecological survey was not required during this reporting period.

UV disinfection performance - Condition (35A)

35A. If:

a. Prior to certification of the enterococci trigger under condition 21B, monitoring undertaken in accordance with condition 8 identifies that the concentration of faecal coliforms in the treated wastewater has exceeded 2,000 cfu per 100 millilitres on 2 or more consecutive days; or
 b. Following certification of the enterococci trigger under condition 21B, monitoring undertaken in accordance with condition

 b. Following certification of the enterococci trigger under condition 21B, monitoring undertaken in accordance with condition 8 identifies that the enterococci concentration in the treated wastewater has exceeded the enterococci trigger value set in accordance with condition 21B on 2 or more consecutive days, then the consent holder shall:

i. Notify the Manager as soon as practicable after receipt of results showing that the faecal coliforms or enterococci trigger has been exceeded for 2 consecutive days; and

ii. Initiate an investigation that meets the following requirements.

The investigation shall:

c. Be undertaken by a suitably qualified and experienced professional.

d. Consider the results of the UV transmissivity monitoring undertaken in accordance with condition 8.

e. Assess the likely cause of the exceedance of the faecal coliforms or enterococci trigger value.

f. If considered necessary, recommend further investigations, improvements, operational actions or upgrades to reduce the risk of similar exceedances of the trigger value occurring in the future.

g. Include an implementation programme for the recommendations, if any, set out in accordance with (f).

Within 1 calendar month of the receipt of results showing that the faecal coliforms or enterococci trigger has been exceeded for 2 consecutive days, the consent holder shall inform the Manager of the outcomes of the investigation and which of the recommendations made in accordance with (f) and (g) above it proposes to implement.

On 10 March Veolia received results that showed the concentration of faecal coliforms in the treated waste water exceeded 2000 cfu per 100 millilitres on 5, 6 and 7 March. An investigation was undertaken and a report provided 11 April 2025 and, therefore, this condition is compliant.

Air Discharge Permit - WGN200229 [36727]

Record of Complaints - Condition 5

5. The consent holder shall keep a record of any complaints received. The complaints will be forwarded to the Manager within twenty-four hours of the complaint being received by the consent holder. The consent holder shall record:

a. The complainant's name (if provided).

b. The location of the odour incident.

- c. The time of the odour incident.
- d. The wind direction and speed.
- e. The plant operating conditions at the time of the complaint.

Details on odour complaints are published on the Wellington Water website.

https://www.wellingtonwater.co.nz/resources/topic/wastewater/wastewater-treatment-plants/porirua-wastewater-treatment-plant/.

Condition met - details were logged for two odour complaints received during the reporting period. One of these may relate to the previous period but was notified in this reporting period.

Incident Notifications - Condition 6

6. Any incident that may cause or has caused adverse effects on the environment at or beyond the site boundary shall be notified to the Manager within twenty-four hours. This includes any incidents that result in complaints. A written report detailing the reasons for the incident, measures to mitigate the incident and measures to prevent recurrence shall be forwarded to the Manager within seven working days.

Details on odour complaints are published on the Wellington Water website.

https://www.wellingtonwater.co.nz/resources/topic/wastewater/wastewater-treatment-plants/porirua-w astewater-treatment-plant/.

Condition met - details were logged for two odour complaints received during the reporting period. One of these may relate to the previous period but was notified in this reporting period. No adverse effects to the environment are likely to have been caused.

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