

Seaview Wastewater Treatment Plant

Quarterly Resource Consents Report

January - March 2025



This report has been prepared solely for the benefit of **Hutt City Council**.

No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

This disclaimer shall apply notwithstanding that the report may be made available to other persons for an application for permission or approval or to fulfil a legal requirement.

Control Sheet

Document Title:	Seaview Wastewater Treatment Plant Quarterly Resource Consents Report January - March 2025
Prepared by:	Wayne Murphy
Reviewed by:	Jordan Kelly Sylvia Chia Wellington Water
Authorised by:	Dave Neru

Document Control Register

Version	Status	Date	Details of Revision
0.1	Draft	28 April 2025	Draft
0.2	Review	30 April 2025	Review
0.3	Revision	30 April 2025	Post review edits
1.0	Final	30 April 2025	Final and publish

Executive Summary

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

Discharge Treated Wastewater to Coastal Marine Area - WGN050359 [24539]

The Seaview WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN050359 [24539]. In general, the consent allows the discharge of secondary treated and disinfected wastewater to the coastal marine area through an existing outfall at Bluff Point. The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition		Compliant / Non-Compliant / Not Applicable
Effluent Quality - Condition (9)	Carbonaceous Biochemical Oxygen Demand (cBOD ₅) - (9 a)	Compliant
	Suspended Solids - (9 b)	Compliant
	Faecal Coliforms - (9 c)	Non-compliant
Monitoring Reporting - Condition (10)		Compliant
Analysis for metals and other - Condition (11)		Compliant
Noticeable / Adverse Discharges - Condition (12)		Compliant
Water Samples - Condition (13)		Compliant
Mussel Samples - Condition (14)		Not Applicable
Quarterly Reporting Summary - Condition (17)		Compliant

Table 1:WGN050359 [24539] Resource Consent Condition Compliance

Outfall Pipeline Repairs - WGN120142 [31740]

When maintenance is required on the Seaview WWTP main outfall pipeline, resource consent WGN120142 [31740] governs the construction of temporary channels on the foreshore to direct treated wastewater discharged from the scour valves on the main outfall pipeline into the sea.

There are no reporting requirements for this resource consent.

Occasional Weather Induced Discharges to Waiwhetu Stream - WGN120142 [33406]

The Seaview WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN120142 [33406]. In general, the consent allows the temporary discharge of treated wastewater to the Waiwhetu Stream during and/or immediately after heavy rain events when flows exceed the capacity of the main outfall pipeline and the storm tank system is fully utilised. The following is a brief overview of the compliance with the consent conditions:

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
Reporting of Discharges - Conditions (7) and (10)	Not Applicable
Reporting of Discharges - Condition (9)	Not Applicable
Wastewater Sampling - Condition (11)	Not Applicable
Water Quality Monitoring - Condition (12)	Not Applicable
Water Quality Monitoring Parameters - Condition (14)	Not Applicable
Noticeable / Adverse Discharges - Condition (15)	Not Applicable
Complaints - Condition (16)	Not Applicable

Table 2 :WGN120142 [33406] Resource Consent Condition Compliance

Discharges to Coastal Marine Area and land arising from repairs to Pencarrow Head Pipeline - WGN120142 [33407]

The Seaview WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN120142 [33407]. In general, the consent allows the temporary discharge of treated wastewater onto the land where it may enter streams or the coastal marine area from the following:

- Planned repairs
- Unplanned repairs
- Leaks associated with temporary repairs, and
- Minor leaks

This is in relation to the main outfall pipeline from Seaview WWTP to Pencarrow Head.

There were no activities relating to this consent in the reporting period.

Discharges to Coastal Marine Area and land arising from repairs to Pencarrow Head Pipeline	Not Applicable
--	----------------

Discharges to Waiwhetu Stream arising from repairs to Pencarrow Head Pipeline - WGN120142 [33408]

The Seaview WWTP is governed by the resource consent under the Greater Wellington Regional Council consent file number WGN120142 [33408]. In general, the consent allows the temporary discharge of treated wastewater to the Waiwhetu Stream when the main outfall pipeline is being repaired.

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

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
11	Not Applicable
14	Not Applicable
15	Not Applicable
16	Not Applicable
18	Not Applicable
26	Not Applicable

Table 4: WGN120142 [33408] Resource Consent Condition Compliance

Discharge to Air from Outfall Vents - WGN930193 (01)

The discharge of contaminants to the air from the outfall venting structures and vents is governed by resource consent WGN930193 (01).

There are no reporting requirements for this resource consent.

Discharge to Air from Sewage Outfall - WGN930193 (02)

The discharge of contaminants to the air from the sewage outfall structure and the sewage effluent is governed by resource consent WGN930193 (02).

There are no reporting requirements for this resource consent.

Discharge to Air - WGN950162 (01)

The discharge of contaminants to the air from the operation of the Seaview WWTP is governed by resource consent WGN950162 (01).

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

Resource Consent Condition	Compliant / Non-Compliant / Not Applicable
Ventilation and Air Pollution Monitoring Parameters - Conditions (11) and (14)	Compliant
Air-borne Pathogen Monitoring - Condition (15)	Compliant
No Noxious, Dangerous Offensive or Objectionable Discharges - Conditions (6 & 7)	Non-compliant
Complaints - Condition (16)	Compliant
Opacity of Discharges - Condition (18)	Not Applicable
Testing of Emissions - Condition (22)	Not Applicable

Table 5: WGN980083 [33805] Resource Consent Condition Compliance

Occupying Foreshore and Seabed for Outfall - WGN930194

The resource consent WGN930194 governs the occupation of the foreshore and seabed of the coastal marine area for the purposes of continued use of the existing sewage pipeline and outfall structure.

There are no reporting requirements for this resource consent.

Table of Contents

Control Sheet	1
Document Control Register	1
Executive Summary	2
Discharge Treated Wastewater to Coastal Marine Area - WGN050359 [24539]	2
Outfall Pipeline Repairs - WGN120142 [31740]	2
Occasional Weather Induced Discharges to Waiwhetu Stream - WGN120142 [33406]	2
Discharges to Coastal Marine Area and land arising from repairs to Pencarrow Head Pipeline - WGN120142 [33407]	3
Discharges to Waiwhetu Stream arising from repairs to Pencarrow Head Pipeline - WGN120142 [33408]	3
Discharge to Air from Outfall Vents - WGN930193 (01)	4
Discharge to Air from Sewage Outfall - WGN930193 (02)	4
Discharge to Air - WGN950162 (01)	4
Occupying Foreshore and Seabed for Outfall - WGN930194	4
Table of Contents	5
Discharge Treated Wastewater to Coastal Marine Area - WGN050359 [24539]	6
Effluent Quality - Condition (9)	6
Section (a) - Carbonaceous Biochemical Oxygen Demand (cBOD5)	6
Section (b) - Suspended Solids	8
Section (c) - Faecal Coliforms	9
Monitoring Reporting - Condition (10)	11
Analysis for metals and other - Condition (11)	11
Water Samples - Condition (13)	13
Mussel Samples - Condition (14)	14
Quarterly Reporting Summary - Condition (17)	14
Occasional Weather Induced Discharges to Waiwhetu Stream - WGN120142 [33406]	15
Reporting of Discharges - Conditions (7) and (10)	15
Reporting of Discharges - Condition (9)	15
Wastewater Sampling - Condition (11)	15
Water Quality Monitoring - Condition (12)	16
Water Quality Monitoring Parameters - Condition (14)	17
Noticeable / Adverse Discharges - Condition (15)	18
Complaints - Condition (16)	18
Discharges to Coastal Marine Area and land arising from repairs to Pencarrow Head Pipeline WGN120142 [33407]	19
Discharges to Waiwhetu Stream arising from repairs to Pencarrow Head Pipeline - WGN120142 [33408]	19
Discharge to Air - WGN950162 (01)	20
Ventilation and Air Pollution Monitoring Parameters - Conditions (11) and (14)	20
Air-borne Pathogen Monitoring (Condition 15)	23
No Noxious, Dangerous Offensive or Objectionable Discharges - Conditions (6 & 7)	24
Complaints - Condition (16)	24
Opacity of Discharges - Condition (18)	24
Testing of Emissions - Condition (22)	24
APPENDIX I: Shoreline Monitoring and Sample Results	25

Discharge Treated Wastewater to Coastal Marine Area - WGN050359 [24539]

Effluent Quality - Condition (9)

The following effluent standards shall apply at all times:

(a) Carbonaceous Biochemical Oxygen Demand (cBOD5)

Compliance is based on daily 24 hour flow proportioned composite sampling, with a running geometric mean and eighty-percentile calculated each day using 90 consecutive daily test results. The geometric mean of 90 consecutive daily cBOD5 values shall not exceed 50 g/m³ and no more than 20% of 90 consecutive daily values shall exceed 85 g/m³.

(b) Suspended solids

Compliance is based on daily 24 hour flow proportioned composite sampling, with a running geometric mean and eighty-percentile calculated each day using 90 consecutive daily test results. The geometric mean of 90 consecutive daily suspended solids values shall not exceed 50 g/m³ and no more than 20% of 90 consecutive daily values shall exceed 85 g/m³.

(c) Faecal Coliforms

Compliance is based on daily grab samples to be taken between the hours of 1 Oam and 4pm with a running geometric mean and eighty percentile calculated each day using 90 consecutive daily test results.

The geometric mean of 90 consecutive daily faecal coliform values shall not exceed 1000 per 100 mL and no more than 20% of 90 consecutive daily values shall exceed 5000 per 100 mL.

Section (a) - Carbonaceous Biochemical Oxygen Demand (cBOD5)

Compliant for this part of the Condition. The following is a summary of the daily results, geometric mean, and eightieth percentile for carbonaceous biochemical oxygen demand.

Day	January 2025			February 2025			March 2025		
	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th 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	19	33	5	12	23	6	8	12
2	6	18	33	6	12	23	11	8	12
3	10	18	33	6	12	23	8	8	11
4	6	18	32	6	12	23	12	8	11
5	6	18	32	6	11	23	14	8	11
6	10	18	32	6	11	23	10	8	10
7	6	17	31	6	11	23	6	8	10
8	8	17	30	4	11	23	6	8	10
9	5	16	29	6	11	23	6	8	10
10	7	16	29	6	11	23	7	7	10
11	4	16	28	6	11	22	9	7	10
12	6	15	28	6	10	21	10	7	10

Day	January 2025			February 2025			March 2025		
	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th 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
13	8	15	28	6	10	20	7	7	10
14	6	15	28	6	10	20	6	7	9
15	6	15	28	6	10	20	6	7	9
16	7	15	28	6	10	20	6	7	9
17	10	15	28	9	10	20	6	7	8
18	3	14	28	19	10	20	8	7	8
19	5	14	28	8	10	20	9	7	8
20	7	14	27	6	10	20	7	7	8
21	12	14	27	5	9	20	6	7	8
22	5	13	25	4	9	20	6	7	8
23	8	13	24	6	9	18	6	7	8
24	6	13	23	7	9	18	12	7	8
25	6	13	23	8	9	17	9	7	8
26	6	12	23	7	9	17	6	7	8
27	6	12	23	10	9	16	11	7	8
28	6	12	23	6	8	14	14	7	8
29	5	12	23				20	7	8
30	7	12	23				19	7	9
31	3	12	23				7	7	9
Limits	N/A	50	85	N/A	50	85	N/A	50	85

Table 6: 5-Day Carbonaceous Biochemical Oxygen Demand Results, Geometric Mean, and 90th Percentile

Please note that analytical results highlighted in amber are above the 50g/m³ geometric mean limit. Analytical results highlighted in red are above the 85g/m³ percent compliance limit.

cBOD₅ values were compliant throughout the reporting period.

Section (b) - Suspended Solids

Compliant for this part of the condition. The following is a summary of the daily results, geometric mean, and eightieth percentile for the suspended solids.

Day	January 2025			February 2025			March 2025		
	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th 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	28	41	7	17	32	7	11	21
2	6	27	41	9	17	32	10	11	20
3	12	27	39	6	17	32	8	11	18
4	6	26	38	6	16	32	17	11	18
5	6	26	38	5	16	32	13	11	17
6	6	25	38	5	16	32	12	10	16
7	10	25	38	5	16	32	13	10	15
8	9	25	38	5	16	32	9	10	15
9	6	25	38	8	15	32	9	10	14
10	10	24	37	8	15	32	13	10	14
11	8	23	36	9	15	31	8	10	14
12	11	23	36	10	14	31	173	10	14
13	9	22	36	12	14	31	39	9	13
14	6	22	36	6	14	31	7	9	13
15	7	22	36	5	14	31	5	9	13
16	10	22	36	9	14	31	5	9	12
17	7	21	35	7	14	31	8	9	12
18	11	21	34	20	14	30	9	9	12
19	8	20	34	8	13	29	8	9	12
20	12	20	33	5	13	28	16	9	12
21	12	20	33	5	13	26	20	9	12
22	6	19	32	5	12	26	14	9	12
23	6	18	32	5	12	26	8	9	12
24	7	18	32	7	12	26	25	9	12
25	6	18	32	6	12	25	19	9	12
26	9	18	32	5	12	23	8	9	12
27	5	17	32	13	12	22	25	9	12
28	39	18	32	7	11	22	34	9	12

Day	January 2025			February 2025			March 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
29	7	18	32				48	9	12
30	5	17	32				46	9	12
31	6	17	32				11	9	12
Limits	N/A	50	85	N/A	50	85	N/A	50	85

Table 7: Suspended Solids Results, Geometric Mean, and 90th Percentile

Please note that analytical results highlighted in amber are above the 50g/m³ geometric mean limit. Analytical results highlighted in red are above the 85g/m³ percent compliance limit.

Suspended Solids values were compliant throughout the reporting period.

Section (c) - Faecal Coliforms

Non compliant for this part of the Condition. However this parameter became compliant partway through the period. The following is a summary of the daily results, geometric mean, and eightieth percentile for faecal coliforms.

Day	January 2025			February 2025			March 2025		
	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile
	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL
1	22	6827	57957	354	907	16,697	165	181	6525
2	14	6270	57957	1,449	870	15,643	10	167	4478
3	10	5775	57957	1,673	836	14,412	35	152	2175
4	10	5335	57957	324	814	14,412	179	145	1494
5	10	4923	57957	14	752	13,228	12961	145	1494
6	10	4523	57957	24	713	13,228	742	140	1270
7	24	4151	57957	35	690	13,228	353553	146	1270
8	10	3770	56398	70	657	13,228	106	131	960
9	20	3465	56398	40	632	13,228	24	123	772
10	39	3225	56398	14	589	13,228	110	113	679
11	53	3060	56398	104	575	13,228	294	107	435
12	10	2778	54917	17	534	10,828	3677	106	435
13	24	2634	54917	53	494	10,000	312	102	359
14	141	2481	54917	20	479	10,000	28	95	330
15	10	2252	46732	134	459	10,000	210	91	314
16	37	2082	43745	10	439	10,000	39	85	298
17	663	2129	43745	20	403	10,000	615	83	298

Day	January 2025			February 2025			March 2025		
	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile	Daily Results	Geometric Mean	90-Day 80th Percentile
	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL	cfu/100mL
18	167	2087	43745	92	388	10,000	938	83	298
19	28	2002	43745	77	380	10,000	12649	83	298
20	35	1902	43745	65	352	10,000	2592	82	298
21	1225	1860	43745	63	335	10,000	2956	80	298
22	214	1764	43745	10	309	10,000	165	80	298
23	4183	1713	40988	14	294	10,000	612	81	314
24	89	1594	38429	10	267	10,000	14	80	314
25	59	1476	28296	20	244	10,000	297	81	314
26	10	1340	21185	14	222	10,000	5657	86	330
27	10	1216	20000	40	209	10,000	316	89	330
28	14	1108	20000	92	191	10,000	566	90	396
29	17	1018	18795				122	90	396
30	24	955	18795				20	91	396
31	894	951	18795				49	90	396
Limits	N/A	1000	5000	N/A	1000	5000	N/A	1000	5000

Table 8: Faecal Coliform Results, Geometric Mean, and 90 day 80th Percentile

Please note that analytical results highlighted in amber are above the 1000cfu/100mL geometric mean limit. Analytical results highlighted in red are above the 5000cfu/100mL percent compliance limit.

Faecal Coliform Geometric Mean values were non-compliant until 29 January and thereafter were compliant throughout the reporting period.

Faecal Coliform 90 day 80th percentile values were non compliant until 1 March and thereafter were compliant throughout the reporting period.

Monitoring Reporting - Condition (10)

The permit holder shall report to the Manager, Environmental Regulation, Wellington Regional Council, immediately in the event that a running geometric mean and/or 80 percentile calculated daily from the monitoring programme exceeds the values stipulated in condition 9 for more than three consecutive days. Such a report 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.

Condition met. Compliance is based on daily 24 hour flow proportioned composite sampling, with a running geometric mean and eighty-percentile calculated each day using 90 consecutive daily test results. The geometric mean of 90 consecutive daily suspended solids values shall not exceed 50 g/m3 and no more than 20% of 90 consecutive daily values shall exceed 85 g/m3.

Carbonaceous Biochemical Oxygen Demand (cBOD₅) and Suspended Solids were compliant throughout the reporting period.

The Faecal coliforms limits were exceeded for part of the period but became fully compliant at the beginning of March.

Analysis for metals and other - Condition (11)

Based on 24 hour flow-proportioned composite samples collected and analysed once each month in accordance with conditions 6, 7 and 8 and Schedule 1 of this permit, all wastewater discharged through the outfall shall meet the following standards:

Analyte	Units	Standard:
		Over each 12-month period, from 1 October to 30 June, no more than 2 sample results shall exceed:
Dissolved Arsenic	mg/L	0.115
Dissolved Cadmium	mg/L	0.035
Dissolved Chromium	mg/L	0.220
Dissolved Copper	mg/L	0.065
Dissolved Nickel	mg/L	0.350
Dissolved Lead	mg/L	0.220
Dissolved Zinc	mg/L	0.750
Dissolved Mercury	mg/L	0.005
Cyanide	mg/L	0.200
Phenol	mg/L	0.500
Notes:	1.	Two exceedances out of 12 samples is permitted to meet a 95-percentile discharge compliance standard, based on a discharger's risk of no more than 10% (from 'New Zealand Municipal Wastewater Monitoring Guidelines' NZWERF/MfE 2002)
	2.	The treated wastewater standards above are based on the ANZECC (2000) marine water trigger levels for 'slightly to moderately disturbed ecosystems' multiplied by a factor of 50 to allow for reasonable mixing (the 50:1 dilution contour extends approximately 400 metres from the outfall).

Condition met.

Compound	Units	Limit	22/01/2025	25/02/2025	20/03/2025
Dissolved arsenic	g/m ³	0.115	0.001	0.002	0.002
Dissolved cadmium	g/m ³	0.035	<0.0002	<0.0002	<0.0002
Dissolved chromium	g/m ³	0.220	0.001	0.001	0.002
Dissolved copper	g/m ³	0.065	0.0027	0.0034	0.0015
Dissolved nickel	g/m ³	0.350	0.0014	0.0032	0.0012
Dissolved lead	g/m ³	0.220	<0.0005	<0.0005	<0.0005
Dissolved zinc	g/m ³	0.750	0.019	0.028	0.016
Dissolved mercury	g/m ³	0.005	<0.0005	<0.0005	<0.0005
Cyanide	g/m ³	0.200	0.010	0.019	0.008
Phenol	g/m ³	0.500	0.01	<0.01	<0.01
Oil and Grease	g/m ³	--	8	12	<4
Nitrate-N	g/m ³	--	0.66	1.78	2.14
Dissolved Reactive Phosphorus	g/m ³	--	3.25	2.82	2.52
pH	--	--	7.9	7.5	7.9
Conductivity	mS/m	--	117	123	94.3
Ammonia Nitrogen	g/m ³	--	29.1	35.0	17.1

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

As per schedule 1, the effluent is analysed for enterococci on a weekly basis. The following is a summary of this analysis

Day	January 2025	February 2025	March 2025
	cfu/100mL	cfu/100mL	cfu/100mL
2	100		
4		100	100
6		300	1000
7	100		
9	100		
11		100	700
13		100	300
14	100		
16	100		
18		100	300
20		100	1600
21	2500		
24	2100		
25		100	1000
27		100	300
29	100		
31	100		

Table 9: Effluent Enterococci Results

Noticeable / Adverse Discharges - Condition (12)

The discharge shall not result in any of the following effects beyond a 200 metre radius of the discharge point:

- (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; and/or
- (d) Any significant adverse effect on aquatic life.

Condition met - none of the effects listed above were observed at the discharge point.

Water Samples - Condition (13)

The permit holder shall collect representative coastal water samples from knee deep water at the following locations, once each month for six months through November to April inclusive each year, for the duration of this permit:

- Fitzroy Bay 400 m SE of outfall (R27:651.807)
- Fitzroy Bay 100 m SE of outfall (R27:650.808)
- Fitzroy Bay 100 m NW of outfall (R27:648.808)
- Fitzroy Bay 400 m NW of outfall (R27:647.810)
- Pencarrow Head at Lighthouse (R27:647.816)
- Inconstant Point (R27:650.825)
- Hinds Point (R27:655.839)

The water samples shall be analysed for faecal coliform and enterococci bacteria.

Condition met - Results for the coastal samples collected during the period are provided below.

Date →	26/01/2025		12/02/2025		31/03/25	
Site V	Enterococci	Faecal Coliforms	Enterococci	Faecal Coliforms	Enterococci	Faecal Coliforms
	cfu/100mL					
Fitzroy Bay 400m SE of Outfall	<10	<10	90	<10	<10	<10
Fitzroy Bay 100m SE of Outfall	280	230	20	40	<10	10
Fitzroy Bay 100m NW of Outfall	<10	<10	<10	<10	<10	<10
Fitzroy Bay 400m NW of Outfall	<10	<10	<10	<10	<10	<10
Pencarrow Head at Lighthouse	10	10	<10	<10	<10	<10
Inconstant Point	<10	<10	<10	<10	<10	<10
Hinds Point	<10	<10	<10	60	<10	60

Table 21: Shoreline Monitoring

Please note:

- That the enterococci and faecal coliforms in shoreline monitoring samples were analysed by a contract laboratory.
- That bathing beach guidelines were used to generate the colouring for the Enterococci samples. Because there are no bathing beach guidelines for faecal coliforms, fresh water guidelines were applied. The following are the limits for both bacterial species:

Bacterial Species	Amber Limit	Red Limit
	cfu/100mL	cfu/100mL
Enterococci	140	280
Faecal Coliforms	260	550

Table 18: Shoreline Monitoring Guidelines

Mussel Samples - Condition (14)

The permit holder shall collect three replicate composite samples of the green-lipped mussel (*Perna canaliculus*) from near shore waters at each of the following locations during February or March of every second year, for the duration of this permit:

- (a) Fitzroy Bay 100m NW of outfall (R27:648.808)
- (b) Fitzroy Bay 400m MW of outfall (R27:647.810)
- (c) Pencarrow Head at Lighthouse (R27:647.816)

The flesh of the mussel samples shall be analysed for arsenic and trace metal (cadmium, chromium, copper, mercury, lead, nickel and zinc) concentrations. The number and size (length) of the shellfish analysed in each sample shall be recorded and this record forwarded to the Wellington Regional Council together with the analytical results.

As per resource consent WGN050359 [24539], Condition 14, once every 2 years between February and March, 3 replicate composite samples of green-lipped mussels are to be collected from 3 locations near shore waters. **Condition = not applicable** - this monitoring activity stopped due to the absence of mussels in the sampling locations. Please note that the condition is on hold until further changes are made to Resource Consent and Mussel samples were not collected for this reporting period.

Quarterly Reporting Summary - Condition (17)

The permit holder shall make the results of all monitoring undertaken, as required by conditions of this permit, available to the Manager, Environmental Regulation, Wellington Regional Council on request, including provision of results in electronic format, and a monitoring report for each three-month period ending March, June, September and December shall be forwarded to the Manager, Environmental Regulation, Wellington Regional Council within 30 days after the end of each three month period. The quarterly report shall include reasons for any non-compliance and subsequent actions undertaken to remedy the non-compliance.

This condition is met by providing this report. All monitoring performed at the Seaview WWTP has been provided in the previous sections of this report under the designated resource consent conditions. The following is 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:

Monitoring Parameters	WGN050359 [24539] Condition	Monitoring Frequency	Limits	Compliance
Carbonaceous Biochemical Oxygen Demand	9a	Daily	Geometric Mean < 50g/m ³ 90-Day 80th Percentile < 85g/m ³	Compliant
Suspended Solids	9b	Daily	Geometric Mean < 530g/m ³ 90-Day 80th Percentile < 85g/m ³	Compliant
Faecal Coliforms	9c	Daily	Geometric Mean < 1000cfu/100mL 90-Day 80th Percentile < 5000cfu/100mL	Non-compliant
Dissolved arsenic	11	Monthly	<0.115g/m ³	Compliant
Dissolved cadmium		Monthly	<0.035g/m ³	Compliant
Dissolved chromium		Monthly	<0.220g/m ³	Compliant
Dissolved copper		Monthly	<0.065g/m ³	Compliant
Dissolved nickel		Monthly	<0.350g/m ³	Compliant
Dissolved lead		Monthly	<0.220g/m ³	Compliant
Dissolved zinc		Monthly	<0.750g/m ³	Compliant
Dissolved mercury		Monthly	<0.005g/m ³	Compliant
Cyanide		Monthly	<0.200g/m ³	Compliant
Phenol		Monthly	<0.500g/m ³	Compliant
Coastal Water Monitoring	13	Each month between November and April (Inclusively)	N/A	Compliant
Coastal Green-lipped Mussel Sampling	14	Each month between February and March of every second year	N/A	Not applicable

Table 19: Resource Consent Condition Compliance

Occasional Weather Induced Discharges to Waiwhetu Stream - WGN120142 [33406]

None of the conditions for this consent are applicable as there were no discharges during the reporting period.

Reporting of Discharges - Conditions (7) and (10)

Within two working days of the discharge stopping, the consent holder shall submit details of each discharge event in a suitable electronic format to Manager, Environmental Regulation, Wellington Regional Council at notifications@gw.govt.nz and Regional Public Health at healthprotection@huttvalleydwb.org.nz. Details shall include but not be limited to:

- Consent reference WGN120142 [31523]
- Cause of the discharge
- Location of the discharge
- Start date and time of the discharge
- End date and time of the discharge
- Maximum flow (L/s) of the discharge
- Mean flow (L/s) of the discharge
- Daily volume (m³) of the discharge
- Contact person for further information regarding the discharge
- Continuous flow records (m³/s) during the discharge period as measured by the consent holder-as required by condition 10
- Rainfall in the catchment during the discharge period (mm) (if available)

Note: Local rainfall data (Hutt at Birch Lane monitoring site) can be downloaded from the Greater Wellington website <http://graphs.gw.govt.nz/rainfall-2/>

The following is a summary of the treated effluent discharge events that occurred at the Seaview WWTP to the Waiwhetu Stream.

Date	Duration	Discharge to Waiwhetu Stream		Flow in Waiwhetu Stream		Total Volume of Discharge	Consented	Cause
		Average Flow	Peak Flow	Average Flow	Peak Flow			
dd/mm/yyyy	hh:mm	L/s	L/s	m ³ /s	m ³ /s	m ³	Y/N	
There were no discharges during the reporting period								

Table 20: Discharge Events

Reporting of Discharges - Condition (9)

The consent holder shall monitor the flow rate, duration and total volume of all overflows discharged from the treatment plant into the Waiwhetu Stream and shall report the results to Wellington Regional Council in accordance with condition 25 of this consent, or upon request.

The flow monitoring devices shall be capable of measuring wastewater flows of magnitudes up to and beyond peak instantaneous flow rates, and calibrated and maintained to ensure that the measurement error is no more than +/-10%.

Not applicable as there were no discharges during the reporting period.

Wastewater Sampling - Condition (11)

The consent holder shall take a grab sample of treated wastewater as it leaves the treatment plant prior to entering the overflow pipe each day that a discharge occurs for more than one hour. The samples shall be analysed for parameters specified in condition 14.

Not applicable as there were no discharges during the reporting period

Date	Time	Enterococci	E. Coli	Faecal Coliforms	cBOD ₅	Dissolved Reactive Phosphorus	Ammoniacal Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen
dd/mm/yyyy	hh:mm	cfu/100mL	cfu/100mL	cfu/100mL	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
There were no discharges during the reporting period									

Table 21: Discharge Monitoring

Date	Time	H ₂ O Temp.	pH	Salinity	Dissolved Oxygen	Wind Direction	Wind Strength	Tide	Sea Conditions
dd/mm/yyyy	hh:mm	°C	--	g/m ³	g/m ³	--	--	--	--
There were no discharges during the reporting period									

Table 22: Discharge Monitoring

Water Quality Monitoring - Condition (12)

Each day a discharge occurs and one day after the cease of a discharge the consent holder shall take representative grab samples of Waiwhetu Stream water at ~~two levels in the water column, namely 0.5 centimetres and 15 centimetres below the surface.~~ The samples shall be collected from the true left bank of the Waiwhetu Stream at locations specified in Table 1.1: Table 1.1 Water quality monitoring locations

Site	NZTM	
	Easting	Northing
Immediately upstream of the Port Road Bridge Adjacent to the Waiwhetu Pa site and downstream of the public walkway Immediately downstream of the Bell Road Bridge	1759345 1759539 1760431	5433136 5433352 5433523
<p>The consent holder shall record the date, time (NZ standard time), weather (in particular wind direction and strength) and tidal conditions (low/medium/high and ebb/flood tide) at the stream mouth when the samples are taken. Where practicable, the sampling should be undertaken at least three hours after any ebb tide starts.</p> <p>The samples shall be analysed for parameters specified in condition 14.</p> <p>Note: This condition does not apply to overflows with a duration of less than one hour.</p>		

Not applicable as there were no discharges during the reporting period

The following is a summary of the requirements listed in resource consent WGN120142 [33406] for discharges.

Upstream of Port Road Bridge

Date	Time	Enterococ ci	E. Coli	Faecal Coliforms	cBOD ₅	Dissolved Reactive Phosphorus	Ammoniac al Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Copper	Dissolved Zinc
d/m/y	hh:mm	cfu/100mL	cfu/100mL	cfu/100mL	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³
There were no discharges during the reporting period											

Table 23: Discharge Monitoring

Date	Time	H ₂ O Temp.	pH	Salinity	Dissolved Oxygen	Wind Direction	Wind Strength	Tide	Sea Conditions		
dd/mm/yyyy	hh:mm	°C	--	g/m ³	g/m ³	--	--	--	--		
There were no discharges during the reporting period											

Table 24: Discharge Monitoring

Waiwhetu Pa Site

Date	Time	Enterococci	E. Coli	Faecal Coliforms	cBOD ₅	Dissolved Reactive Phosphorus	Ammoniacal Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Copper	Dissolved Zinc
d/m/y	hh:mm	cfu/100mL	cfu/100mL	cfu/100mL	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³

There were no discharges during the reporting period

Table 25: Discharge Monitoring

Date	Time	H ₂ O Temp.	pH	Salinity	Dissolved Oxygen	Wind Direction	Wind Strength	Tide	Sea Conditions		
dd/mm/yyyy	hh:mm	°C	--	g/m ³	g/m ³	--	--	--	--		

There were no discharges during the reporting period

Table 26: Discharge Monitoring

Downstream of Bell Road Bridge

Date	Time	Enterococci	E. Coli	Faecal Coliforms	cBOD ₅	Dissolved Reactive Phosphorus	Ammoniacal Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Copper	Dissolved Zinc
d/m/y	hh:mm	cfu/100mL	cfu/100mL	cfu/100mL	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³	g/m ³

There were no discharges during the reporting period

Table 27: Discharge Monitoring

Date	Time	H ₂ O Temp.	pH	Salinity	Dissolved Oxygen	Wind Direction	Wind Strength	Tide	Sea Conditions		
dd/mm/yyyy	hh:mm	°C	--	g/m ³	g/m ³	--	--	--	--		

There were no discharges during the reporting period

Table 28: Discharge Monitoring

Water Quality Monitoring Parameters - Condition (14)

The samples collected in accordance with conditions 11 and 12 shall be analysed for:

- Faecal coliforms (cfu/100mL)
- Carbonaceous biochemical oxygen demand (cBODs) (g/m³)
- Escherichia coli (no./100mL)
- Enterococci (no./100mL)
- Dissolved reactive phosphorus (g/m³)
- Ammoniacal nitrogen (g/m³)
- Nitrate nitrogen (g/m³), and
- Nitrite nitrogen (g/m³)

In addition, on each sampling occasion at the three locations along the Waiwhetu Stream as described in condition 12 the consent holder shall ensure the following in-situ measurements are recorded:

- Water temperature
- pH
- Salinity, and
- Dissolved oxygen.

An assessment of the above results shall be provided in the annual report required by condition 25. Copies of the water quality monitoring results shall be provided in both electronic and hardcopy format to the Manager, Environmental Regulation, Wellington Regional Council upon request.

The analytical results listed as requirements in this condition are set out under Conditions 11 & 12 (above).

Noticeable / Adverse Discharges - Condition (15)

- a) The discharge shall not result in any of the following effects on the water of the Waiwhetu Stream beyond the reasonable mixing zone boundary defined as 1 00m downstream of the Waiwhetu Stream outfall (i.e. immediately upstream of Port Road Bridge) and 100m upstream the Waiwhetu Stream outfall (i.e. adjacent to Lot 2 DP 421395):
- 1) The production of any conspicuous oil or grease or grease films, scums or foams or floatable or suspended materials, or
 - 2) Any conspicuous change in colour or clarity
 - 3) Any emission of objectionable odour, or
 - 4) Any significant adverse effects on aquatic life
- b) During each sampling event required by condition 12, the consent holder shall take photographs of the point of discharge and immediate receiving waters around the point of discharge to show the presence of any of effects (1-4) listed in condition 15 (a) and any obvious undesirable biological growths or visible die-offs.

The consent holder shall forward to the Manager, Environmental Regulation, Wellington Regional Council a copy of the photographs in the annual report required by condition 25 of this consent or upon request.

Not applicable, however none of the effects listed above was observed in the receiving waters.

Complaints - Condition (16)

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

- Name and address of complainant (if provided)
- Identification of the nature of the complaint
- Date and time of the complaint and of the alleged event
- Weather conditions at the time of the alleged event, and
- Any measures taken to address the cause of the complaint

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

Notification can be sent to the Manager, Environmental Regulation, Wellington Regional Council at notifications@gw.govt.nz. Please include the consent reference WGN120142 [31523] and the name and phone number of a contact person responsible for the discharge. The consent holder shall forward to the Manager, Environmental Regulation, Wellington Regional Council a copy of the complaints record, in the annual report required by condition 25 of this consent.

Not applicable, however, there were no complaints in the reporting period relating to this Consent

Discharges to Coastal Marine Area and land arising from repairs to Pencarrow Head Pipeline WGN120142 [33407]

Not applicable in this reporting period.

Discharges to Waiwhetu Stream arising from repairs to Pencarrow Head Pipeline - WGN120142 [33408]

Not applicable in this reporting period.

Date	Duration	Discharge to Waiwhetu Stream		Flow in Waiwhetu Stream		Total Volume of Discharge	Consented	Cause
		Average Flow	Peak Flow	Average Flow	Peak Flow			
dd/mm/yyyy	hh:mm	L/s	L/s	m ³ /s	m ³ /s	m ³	Y/N	

Table 29: Discharge Events

Discharge to Air - WGN950162 (01)

Ventilation and Air Pollution Monitoring Parameters - Conditions (11) and (14)

Monitoring of the key parameters identified in condition 11 (f) above shall be carried out at an appropriate frequency for the type of air pollution control equipment adopted, if the monitoring frequency is not stated in condition 11 (f).

Continuous monitoring shall be used if it is considered appropriate for the type of control equipment adopted.

The results of the monitoring shall be forwarded to the Manager, Consents Management, Wellington Regional Council at three monthly intervals.

Condition met.

Jan 25 Day	Back Pressure	Biofilter 1		Biofilter 2		Biofilter 3		Biofilter 4		Biofilter 5		Biofilter 6	
		Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH
		Pa	%	--	%	--	%	--	%	--	%	--	%
1	1203												
2	1115												
3	1174												
4	1177												
5	1170												
6	755											45.37%	8.09
7	1118	53.14%	6.73	-		-		-		-		-	
8	1094	-		55.12%	7.88	-		-		-		-	
9	789	-		-		28.99%		-		-		-	
10	1063	-		-		-		54.83%		-		-	
11	1080	-		-		-		-		49.29%	8.09	-	
12	1137	-		-		-		-		-		58.30%	8.06
13	815	48.21%	7.93	-		-		-		-		-	
14	936	-		55.17%	8.48	-		-		-		-	
15	1080	-		-		57.11%	7.97	-		-		-	
16	1011	37.84%	6.80	-		-		-		-		-	
17	1093	-		39.65%	6.93	-		-		-		-	
18	1094	-		-		43.41%	7.29	-		-		-	
19	1109	-		-		-		63.15%	8.54	-		-	
20	1002	-		-		-		-		52.18%	8.02	-	
21	1150	-		-		-		-		-		51.15%	8.13
22	1160	57.01%	6.38	-		-		-		-		-	
23	970	-		46.33%	7.85	-		-		-		-	
24	1203	-		-		60.65%	7.55	-		-		-	
25	1220	-		-		-		51.88%		-		-	
26	1229	-		-		-		-		58.88%		-	
27	1221	-		-		-		-		-		51.56%	7.85
28	1313	57.59%	6.74	-		-		-		-		-	
29	1326	-		54.98%	6.92	-		-		-		-	
30	1249	-		-		57.43%	7.71	-		-		-	
31	1308	-		-		-		66.88%	7.09	-		-	

Table 30: Bio-filter Monitoring Parameters

Feb 25 Day	Back Pressure	Biofilter 1		Biofilter 2		Biofilter 3		Biofilter 4		Biofilter 5		Biofilter 6	
		Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH
		Pa	%	--	%	--	%	--	%	--	%	--	%
1	1317									55.4	7.2		
2	1266											53.7	6.9
3	1276	58.6	7.7										
4	1310	63.6	7.7										
5	1366					56.4							
6	1332							42.3	8.5				
7	1396									59.5	8.3		
8	1386											52.2	7.5
9	1393	52.2	7.1										
10	1291			49.4	7.5		7.5						
11	1380					50.8							
12	1397							54.6	8.3				
13	1349									50.7	8.1		
14	1243											50.0	8.5
15	1148	48.9	6.3										
16	1170												
17	1348			51.4	7.6		7.6						
18	1245							54.3	8.4				
19	1174									53.9	8.0		
20	1283									53.9	8.0		
21	1291											51.8	7.5
22	1246	52.0	7.9										
23	1205			55.8	8.0		8.0						
24	1089												
25	1344					59.2							
26	1298							52.7	7.5				
27	1281									42.0	7.6		
28	1349												

Table 31: Bio-filter Monitoring Parameters

Mar 25 Day	Back Pressure	Biofilter 1		Biofilter 2		Biofilter 3		Biofilter 4		Biofilter 5		Biofilter 6	
		Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH
		Pa	%	--	%	--	%	--	%	--	%	--	%
1	1425											59.8	7.8
2	1382	57.7	6.2										
3	1313			46.2	8.3		8.3						
4	1457					47.8							
5	1502							40.2	7.8				
6	1458									63.3	7.9		
7	1531											60.7	7.7
8	1563	51.6	7.7										
9	1567			50.9	8.7		8.7						
10	1521					46.7							
11	1607							49.9	8.2				
12	1650									58.6	7.1		
13	1597											51.6	7.4
14	1664	58.2	6.3										
15	1732			41.6	7.9		7.9						
16	1784					52.5							
17	1787							53.0	8.1				
18	1817									50.6	8.3		
19	1926											46.2	7.8
20	1741	58.0	6.8										
21	1856			57.7	7.0		7.0						
22	1865												
23	1881			49.2	7.9		7.9						
24	1833					50.2							
25	1934							51.1	8.0				
26	2032									54.8	8.1		
27	1883											47.3	8.3
28	2209	54.2	7.2										
29	2215			50.7	8.4		8.4						

Mar 25 Day	Back Pressure Pa	Biofilter 1		Biofilter 2		Biofilter 3		Biofilter 4		Biofilter 5		Biofilter 6	
		Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH	Moisture Content	pH
		%	--	%	--	%	--	%	--	%	--	%	--
30	2132					50.3							
31	1816												

Table 32: Bio-filter Monitoring Parameters

Please note that the analysis for moisture content and pH in biofilter were determined in-house.

Air-borne Pathogen Monitoring (Condition 15)

The consent holder shall carry out monitoring of air-borne pathogens to demonstrate compliance with condition 6.

Monthly sampling at agreed sites for the first three months after commissioning and then at three monthly intervals thereafter for the first two years of operation, with this frequency to be reviewed at the end of this period.

The location of the samples sites shall be mutually agreed between the consent holder and the Manager, Consents Management, Wellington Regional Council.

The testing shall be carried out by a standard method to the satisfaction of the Manager, consents Management, Wellington Regional Council.

On 6 June 2024 Greater Wellington Regional Council determined:

- The sites for sampling,
- The frequency shall be once per annum, during summer. If there's any presence of faecal coliforms or salmonella detected, then monthly sampling until the absence of these microorganisms is established for two consecutive months.

Condition met. Tests were undertaken by Source Testing New Zealand Ltd (STNZ) in February 2025. The table below is an excerpt from the Executive Summary of the report. The full report is available on request.

■ Table 1 Seaview Wastewater Treatment Plant Ambient Microbe Monitoring, 1 February 2024

Site	Total Count (CFU/m ³) ^a	Filter 1 Breakdown of Total Count					Filter 2		Filter 3		
		Total Bacteria (CFU/m ³) ^a	Total Acidomyces (CFU/m ³) ^a	Total Fungi ^b (CFU/m ³) ^a	Total Yeasts (CFU/m ³) ^a	Aspergillus Fumigatus ^c (CFU/m ³) ^a	Gram Negative (CFU/m ³) ^a	Enterococci (CFU/m ³) ^a	Salmonella Present/Absent	Total Coliforms Present/Absent	Faecal Coliforms Present/Absent
Site 1	385	59	<2	326	<2	<2	3	<3	Absent	Absent	Absent
Site 2	305	68	<4	233	4	<4	<4	<4	Absent	Absent	Absent
Site 3	765	247	<3	518	<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

No Noxious, Dangerous Offensive or Objectionable Discharges - Conditions (6 & 7)

On completion of commissioning, there shall be no discharges to air that are noxious, dangerous, offensive or objectionable at or beyond the boundary of the property. These discharges include odour and dust.

The consent holder shall adopt the best practicable option to treat all discharges to air so as to comply with condition 6

Condition = non compliant - on 25 March and 29 March GWRC officers deemed odour from the Seaview WWTP to be Offensive and Objectionable. On 4 April GWRC issued a Please Explain for its investigation into Odour on those dates. A response is by 16 May.

Complaints - Condition (16)

The consent holder shall keep a record of any complaints received. The complaints shall be forwarded to the Manager, Consents Management within twenty-four hours of being received by the consent holder.

The consent holder shall endeavour to record the complainants name, time of incident that caused the complaint, wind direction and speed, and plant operating conditions at the time of the complaint.

Any incident that could have caused or has caused adverse effects on the environment at or beyond the boundary of the site shall be notified to the Wellington Regional Council within twenty-four hour., This includes any incidents that result in complaints.

Condition met. There were multiple odour complaints during the period.

	January 2025	February 2025	March 2025
# of Complaints logged	10	6	15

A register of odour complaints is held and available to GWRC on request, however, not all details required under this condition are held as said information has not been provided in complaints notified via GWRC.

Opacity of Discharges - Condition (18)

The opacity of all discharges from combustion appliances and any sludge dryer (excluding steam) shall not exceed 20%, except for a period of ten minutes for starting up from cold.

All exhaust from the sludge dryer is captured, condensed, and then discharged. This condition is not applicable.

Testing of Emissions - Condition (22)

Emissions from any combustion appliances, excluding stand-by equipment shall be tested for the following parameters annually:

- (a) Oxides of nitrogen
- (b) Carbon monoxide
- (c) Sulphur dioxide

The testing shall be carried out by a standard method to the satisfaction of the Manager, Consents Management, Wellington Regional Council.

All exhaust from the sludge dryer is captured, condensed, and then discharged. This condition is not applicable.

APPENDIX I:
Waiwhetu Stream photos
(Not required for this report)

Resourcing the world

Veolia Australia and New Zealand
www.veolia.com/anz

