

Porirua Wastewater Treatment Plant

Coastal Discharge Permit consent conditions WGN200229 [36816]

Discharge permit to discharge treated wastewater to the coastal marine area from the operation of the Porirua Wastewater Treatment Plant.

INTERPRETATION

Wherever used in the conditions, the following terms shall have the prescribed meaning:

Discharges of partially treated wastewater means discharges that include wastewater which has bypassed the aeration basin and/or the clarifier parts of the treatment process, but does not include a discharge as a result of a sludge carryover or an overflow which bypasses the entire treatment process. The discharge of partially treated wastewater to the coastal marine area is not within the scope of this consent.

Independent Suitably Qualified and Experienced Professional means a suitably qualified and experienced professional that is not employed by the consent holder or an organisation contracted to operate the Porirua Wastewater Treatment Plant (WWTP).

Manager means the Manager, Environmental Regulation, Wellington Regional Council.

Minimise means reduce to the smallest amount reasonably practicable.

Normal Working Day means a day of the week that is not a weekend or public holiday.

Sludge carryover means a discharge of part of the sludge blanket from the clarifiers. A sludge carryover discharge to the coastal marine area is not within the scope of this consent.

General conditions

1A. The location, design, implementation and operation of the works shall be in general accordance with the consent application and its associated plans and documents lodged with the Wellington Regional Council on:

- 6 April 2020 (Application);
- Revised application dated April 2021;
- Further information received on 30 April 2021; and
- Consent holder's evidence presented at the hearing.

Where there may be contradiction or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of the consent, the conditions apply.

Note: Any change from the location, design, implementation and/or operation of the works may require a new resource consent, or a change of consent conditions pursuant to Section 127 of the Resource Management Act 1991.

1B. The consent holder shall ensure that a copy of this consent, and all documents and plans referred to in this consent, is kept on site at all times and presented to any Wellington Regional Council Compliance Officer upon request. The consent holder shall verbally brief all operators or contractors on the requirements of the conditions of this consent within one month of granting this consent, and then on induction for any new operators or contractors.

2. The discharge point shall be from the existing outfall at or about map reference NZTM: 1753097.5447922.
3. The average daily inflow volume into the wastewater treatment plant, measured over a 12-month period from 1 July to 30 June each year, shall not exceed 38,016 cubic metres per day, and the maximum daily inflow volume shall not exceed 129,600 cubic metres per day.
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.
5. Any discharges of partially treated wastewater that result from inflow to the wastewater treatment plant exceeding the plant's capacity, shall cease on or before the commencement date of this consent.
- 5A. The consent holder shall on an ongoing basis monitor and review the plant performance to maintain appropriate treated wastewater quality in accordance with conditions 12, 12A and 13.

Partnership with Ngāti Toa Rangatira

- 5B.
 - a. Within 1 calendar month of this consent commencing the consent holder shall invite Te Rūnanga o Toa Rangatira to nominate 2 representatives to join a Porirua Wastewater Treatment Plant Working Group (WWTPWG).
 - b. If this invitation is accepted then the consent holder shall establish the WWTPWG, appoint two representatives to the WWTPWG, and fulfil the obligations set out in conditions 5C to 5H.
 - c. If the invitation is not accepted within 1 calendar month then conditions 5C to 5H apply to the extent modified by conditions 5I and 5J.
 - d. If the invitation is not accepted, then it shall remain open for the duration of the consent and may be accepted at any time.
- 5C. The overall purpose of the WWTPWG shall be to seek the continuous improvement of the wastewater treatment plant discharge to the receiving environment, including with respect to the adverse effects of the discharge on values of significance to Ngāti Toa Rangatira. To fulfil this purpose, the WWTPWG shall:
 - a. Work in conjunction with the consent holder to prepare the monitoring plan required under conditions 5E and 5F, or as modified by condition 5J.
 - b. Review the quarterly and annual reports required under conditions 18 and 19 of this consent, including the adverse effects of the discharge on the cultural values of Ngāti Toa Rangatira.
 - c. Commission advice on minor capital works and operational changes, including changes to the Operational Management and Contingency Plan (OMCP), to address matters identified from the review of the quarterly and annual reports under clause (b) above.
 - d. Having taken account of advice received in accordance with clause (c) above, assess if any option would in the WWTPWG's view represent the Best Practicable Option (as defined under the RMA, but having particular regard to the effects on the cultural values of Ngāti Toa Rangatira) to address matters identified under clause (b) above, and, if such an option is identified, recommend that the consent holder adopt this option.
 - e. Consider if the monitoring required under this consent is appropriate and, if it concludes that the monitoring requirements should be amended, recommend that the consent holder seek a change to the relevant consent conditions under section 127 of the Resource Management Act.
 - f. Consider and make recommendations with respect to whether the consent holder should initiate a full Monitoring and Technology Review Report earlier than required by condition 33.
 - g. Work in conjunction with the consent holder on the completion of the assessment of methods or other options to mitigate the adverse effects of the discharge on values of significance to Ngāti Toa Rangatira required under condition 5G.

- h. Work in conjunction with the consent holder on the completion of the Monitoring and Technology Review required under conditions 31 to 35.
- 5D. In relation to the WWTPWG, the consent holder shall:
- a. Convene, host and record the minutes of the WWTPWG meetings, to be held no fewer than two times per year.
 - b. Provide minutes of the WWTPWG meetings to the Manager.
 - c. Provide the quarterly monitoring report required under condition 18 to the WWTPWG at the same time as it is provided to the Manager.
 - d. Provide the annual report required under condition 19 to the WWTPWG at the same time as it is provided to the Manager.
 - e. Support the WWTPWG by providing it with access to the technical advice necessary for it to fulfil the purpose set out in condition 5C.
 - f. Consider recommendations from the WWTPWG that are made in accordance with condition 5C and provide written explanation to the WWTPWG regarding whether it will or will not implement the recommendation. This written explanation shall also be provided to the Manager.
- 5E. Within 6 months of the commencement of this consent, the consent holder shall prepare a Monitoring Plan, in conjunction with the WWTPWG. The Monitoring Plan shall include monitoring objectives that align with, but not necessarily be limited to, the following:
- a. Provide timely feedback on plant performance.
 - b. Provide for the timely detection of spikes, trends or other changes in discharge and /or environment quality.
 - c. Inform changes to treatment processes if adverse spikes, trends or changes occur.
 - d. Demonstrate compliance with the conditions of consent.
 - e. Measure the type, scale and magnitude of discharge effects on receiving water quality, ecology and kai moana species specified in condition 5J(c).
 - f. Inform plans for improving wastewater systems and processes.
 - g. Seek to minimise the adverse effects of the discharge on values of significance to Ngāti Toa Rangatira.
- The Monitoring Plan shall be submitted to the Manager for certification that it complies with the requirements of Condition 5F. The Monitoring Plan shall be reviewed at least every 5 years in conjunction with the WWTPWG. All updated versions of the Monitoring Plan shall be submitted to the Manager for certification that they comply with the requirements of Condition 5F.
- 5F. a. The Monitoring Plan shall set out how the monitoring required under conditions 4, 5J(c), 6 to 11, 12C, 12D, 14 to 16, and 28 to 29, and to ensure that compliance with condition 13 of this consent will be delivered.
- b. At the commencement of this consent, the consent holder shall invite Te Rūnanga o Toa Rangatira to prepare a Kaitiaki Monitoring Programme which assesses the effects of the discharge, from a Mātauranga Māori perspective, on Te Moana o Raukawa and Te Awarua-o-Porirua Harbour (as shown in maps OTS-068-38 and OTS-068-39 attached to this consent). If Te Rūnanga o Toa Rangatira accepts this invitation, then the Kaitiaki Monitoring Programme shall be included in the Monitoring Plan.
- 5G. As soon as possible, but within 4 years of the commencement of this consent the consent holder, working with the WWTPWG, shall complete an assessment of options or other methods:
- a. To minimise the adverse effects of the discharge on values of significance to Ngāti Toa Rangatira.
 - b. To work towards removal of the human waste element (including human blood and tissue) from the treatment plant discharge to coastal waters.

The options assessed shall include, but not necessarily be limited to:

- c. Opportunities to restrict the volume of water contaminated by human waste, e.g. through mechanisms like inflow and infiltration programmes and water demand management.
- d. Opportunities for beneficial re-use and recovery of wastewater, elements of the wastewater, and/or by-products of the wastewater treatment process.
- e. Technical engineering, and non-technical treatment solutions, that meet cultural and spiritual standards for wastewater treatment and discharge.

The identification and assessment of options shall have particular regard to data collected as part of the Kaitiaki Monitoring Programme and the significance of any adverse effects identified through the Kaitiaki Monitoring Programme. If Te Rūnanga o Toa Rangatira has not yet accepted the invitation to prepare the Kaitiaki Monitoring Programme, then the identification and assessment of options shall have particular regard to the data collected under condition 5J (c)(i).

5H. Within 12 months of the completion of the assessment required under condition 5G, the consent holder shall submit a report to the Manager describing:

- a. The assessment undertaken in accordance with condition 5G.
- b. The methods that will be implemented by the consent holder to minimise the adverse effects of the discharge on values of significance to Ngāti Toa Rangatira.
- c. A defined programme of work to implement the methods identified in clause (b) above. The methods shall be implemented as soon as reasonably practicable within the term of the consent.
- d. Whether the representatives nominated by Te Rūnanga o Toa Rangatira on the WWTPPG agree with:
 - i. the description of the assessment completed in accordance with sub-clause (a)
 - ii. the mitigation methods that were considered
 - iii. the decision(s) the consent holder has made about which minimisation measures it will implement
 - iv. the proposed programme of work
- e. The reasons that the Te Rūnanga o Toa Rangatira member(s) on the WWTPPG disagree with any elements of the report, if there is any disagreement.

5I. If the invitation made in accordance with condition 5B has not been accepted within 1 month then the consent holder shall establish an alternate WWTPWG. The consent holder shall appoint two members to the alternate WWTPWG and nominate, to the satisfaction of the Manager, two other independent members. At least one of the independent nominees shall have expertise in Te Ao Māori and Mātauranga Māori, and ideally one of the independent nominees would have experience or expertise with respect to wastewater treatment or the environmental effects of wastewater.

5J. If the alternate WWTPWG is established in accordance with condition 5I then:

- a. The purpose and functions of the WWTPWG shall be as described in condition 5C, except as otherwise directed in the following clauses.
- b. The consent holder shall meet the obligations under condition 5D and in addition regularly invite Te Rūnanga o Toa Rangatira to provide feedback to the WWTPWG relative to each purpose or function listed in condition 5C. If any feedback is received from Te Rūnanga o Toa Rangatira, then this shall be recorded in the minutes of the WWTPWG along with an explanation of how the WWTPWG has responded to the feedback.
- c. 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 suitably qualified coastal ecologist to conduct a visual survey of the quantity and size 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.

- d. The consent holder shall complete an assessment of options or other methods as required under condition 5G and submit a report as required under condition 5H, except that before commencing the assessment under condition 5G the consent holder shall consult with Te Rūnanga o Toa Rangatira about how it wishes to be involved in the review. Having undertaken the consultation, the consent holder shall prepare a plan for the involvement of Te Rūnanga o Toa Rangatira in the review, which shall be to the satisfaction of the Manager.
- e. If after the alternate WWTPWG has been established, Te Rūnanga o Toa Rangatira subsequently accepts the invitation made in accordance with condition 5B, then the alternate WWTPWG shall be disestablished and the 'full' WWTPWG shall be established under condition 5B, and all other conditions apply to the WWTPWG with any necessary modifications in light of the time that has elapsed and the steps that have already been taken since the commencement of the consent.

Wastewater Quality

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 Rukutane Point outfall. That sampling point shall be used for the sampling required by conditions 7 to 10.
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.
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.
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 Chromium
 - i) Total Copper
 - j) Total Nickel
 - k) Total Lead
 - l) Total Zinc
 - m) Total Mercury
 - n) Phenol

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.

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.

10A. The requirement in condition 10 shall be reviewed by the consent holder after 30 June 2024. The review shall be undertaken by suitably qualified and experienced professional(s) and should determine whether:

- a. Any value has been gained from the monitoring of the viral indicator relative to that associated with the routine monitoring of enterococci;
- b. The body of data gathered since the commencement of the consent is sufficient to enable the public health risk associated with the discharge to be determined from bacteria indicator monitoring data; and
- c. The monitoring associated with the viral indicator should be continued, suspended, continued at an alternative frequency, or replaced by an alternative monitoring schedule.

A report on the review shall be provided to the Manager. Any recommended monitoring changes shall be included in an updated version of the Monitoring Plan which shall be submitted to the Manager for certification in accordance with conditions 5E and 5F.

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

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.

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

UV performance, monitoring and UV transmissivity

12B. All banks of UV lamps within each UV disinfection system shall be operated at greater than 98% power output for at least 95% of the time of operation of the relevant disinfection system each calendar month. Percentage power output to each UV system shall be calculated on the basis of the average over each discrete 15 minute period as measured at the Programmable Logic Control output.

Notes:

- 1. *The WWTP currently (at the commencement of this consent) operates with two UV disinfection systems, i.e the original TAK UV disinfection system and a newer Duron UV disinfection system.*
- 2. *For the purposes of this condition, the term 'time of operation' means the period of time that each system is required to be operated to disinfect the wastewater flow through the plant. Unless there is maintenance or repairs, the new Duron system will be the duty system and will operate continuously. The time of operation for the original TAK system will be substantially less, as this system will only operate during high wastewater flows or while the Duron system is undergoing maintenance or repair.*
- 3. *The requirement to operate the UV disinfection systems at 98% power output at least 95% of the time, recognises that for short periods there will be unavoidable instances during which maintenance, repairs and replacements are to be undertaken.*

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.

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.

12E Maintenance of the UV systems shall be carried out in such a manner that, during maintenance of either of the UV systems, all treated wastewater shall pass through the UV system not undergoing maintenance.

Receiving water

13. The discharge shall not cause any of the following effects in the receiving waters 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 from the discharge to water.
 - d. Any significant adverse effect on aquatic life.
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.

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.
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.

Note: Contact the Environmental 24 hour Hotline on 0800 496 734 and send details of the discharge to notifications@gw.govt.nz.

Reporting

18. The consent holder shall produce a quarterly monitoring report and shall forward the report to the Manager within one calendar month of the completion of the quarter. The format of the report shall be to the satisfaction of the Manager and shall include details of the monitoring and information required under the Monitoring Plan requirements of condition 5F(a) and the Kaitiaki Monitoring Programme.
19. The consent holder shall produce an annual report and shall forward the report to the Manager within three calendar months of the anniversary of the commencement of the consent. The format of the report shall be to the satisfaction of the Manager and shall include:
 - a. Details of the monitoring required under the Monitoring Plan requirements of condition 5F(a), and the Kaitiaki Monitoring Programme.

- aa. Details of any incidents that have been notified in accordance with condition 22A or 16.
- b. Statistical analysis of the trends in the monitoring data comparing to monitoring data from previous years.
- c. Analysis of any spikes or step changes apparent in the annual monitoring data, including commentary on how such spikes or step changes relate to operational matters, including incidents, malfunctions or operational improvements.
- d. Comparison of the annual monitoring data with the conditions of this consent and with operational matters, including incidents, malfunctions and operational improvements.
- e. Comparison of the annual monitoring data with relevant national, or regional water quality policies, standards or guidelines in effect at the time.
- f. A summary of any incidents of plant malfunction or inadequate function, including resulting from operator error, that result in the quality of discharged wastewater not complying with condition 12 and 12D.
- g. For all incidents identified in (f) reporting is to address whether the plant malfunction, or inadequate function, or operator error has been appropriately remedied to prevent future occurrences of such incidents and to set out the improvements to plant operation and procedures and/or equipment necessary and any other measures that are required to prevent future occurrences.
- h. A review of any equipment or means to ensure UV treatment plant operation can be continuously maintained during a power outage, without the need for manual connection / starting of a generator. If there are viable solutions, the report should include recommendations such as appropriate procedures, and/or equipment and timing for the improvements to be made.
- i. The reporting required in (f) to (h) is to be carried out by a chartered professional engineer experienced with operation of the Porirua WWTP or with similar plants.
- j. Minutes of all meetings of the WWTPWG and Community Liaison Group (CLG).
- k. A summary of the progress made by the permit holder with respect to:
 - i. The assessment of options or other methods under condition 5F.
 - ii. An ecological survey of the receiving waters under conditions 28 and 29.
 - iii. A monitoring and technology review under conditions 31 to 34.
- l. A summary of any reviews undertaken with respect to the OMCP.
- m. The complaints register maintained under condition 23.

If a Kaitiaki Monitoring Plan has been prepared, on each anniversary of the commencement of the consent the consent holder shall invite Te Rūnanga o Toa Rangatira to prepare an analysis of the trends in the data collected in accordance with the Kaitiaki Monitoring Plan. If this invitation is accepted and actioned, then the analysis of Te Rūnanga o Toa Rangatira shall be included in the annual report. A copy of the report shall also be forwarded to the members of the CLG.

Operations and Management

- 20. Within 3 calendar months of the commencement of this consent, the consent holder shall submit an Operational Management and Contingency Plan (OMCP) to the Manager for certification that it complies with the requirements of condition 21. The OMCP shall be updated as required, or at the request of the Manager, and reviewed every 5 years as a minimum. All updated versions of the OMCP shall be submitted to the Manager for certification that they comply with the requirements of conditions 21, 21A and 21B.
- 21. The objective of the OMCP is to provide a framework for the operation and management of the wastewater treatment plant to ensure compliance with the conditions of this consent. As a minimum, the OMCP shall include:
 - a. A brief description of the wastewater treatment plant and its treatment and discharge system.
 - b. A description of typical inspection and maintenance procedures.

- c. Procedures for recording:
 - i. any non-routine issues, incidents or malfunctions identified during inspections.
 - ii. the measures undertaken to rectify such non-routine issues, incidents or malfunctions.
 - d. A description of contingency plans in the event of plant malfunction. Contingency plans shall be specified for each stage of wastewater treatment and shall include detail of the procedures to be followed to mitigate, as far as possible, the reduction in treated wastewater quality that may otherwise result from the plant malfunction.
 - e. A description of the complaints procedures, including contact details for a nominated person(s) who will manage enquiries and complaints about the WWTP. The contact details shall be identified on the consent holder's website.
 - f. Procedures for notifying the Wellington Regional Council and Regional Public Health regarding any incidents or plant malfunction that may result in reduction in the treated wastewater quality.
 - g. A description of the information to be maintained on the consent webpage, including but not limited to the matters referred to in condition 27A.
- 21A. Within 6 calendar months of the commencement of the consent, the consent holder shall invite Te Rūnanga o Toa Rangatira to work with it on a review of the OMCP. The purpose of the review shall be to assess how Ngāti Toa Rangatira tikanga can be integrated into the operation of the treatment plant and discharge. The consent holder shall consider whether to amend the OMCP in accordance with any recommendations arising from the review. Should the consent holder choose not to adopt any recommendations from the review then a report explaining the reasons why shall be provided to the WWTPWG, Te Rūnanga o Toa Rangatira and the Manager within 3 calendar months of the completion of the review.
- 21B. Before 1 August 2024, the consent holder shall update the OMCP to include a 'trigger value' for the concentration of enterococci in the treated wastewater (as sampled in accordance with condition 8). The purpose of the 'trigger value' is to initiate a review of the performance of the UV disinfection system. By 1 August 2024 the consent holder must submit the updated OMCP to the Manager for certification that the trigger value has been satisfactorily determined taking account of:
- a. Historical data on indicator bacteria concentrations in the treated wastewater.
 - b. Data on indicator bacteria concentrations in the treated wastewater following the UV disinfection and hydraulic upgrades that are required to be completed by 30 June 2023.
 - c. How the performance of the UV disinfection system fluctuates due to normal variations in the biological process and normal aging of the treatment facilities and variation of UV transmissivity.
 - d. How the performance of the UV disinfection system can reasonably be expected to reduce over the consent duration as a result of the increase in inflow anticipated in the resource consent application.
22. The consent holder shall implement the OMCP once it has been certified by the Manager.

Incident notification requirements

- 22A. The consent holder shall notify the Manager as soon as practicable but within 24 hours of any non-routine issues or plant malfunction that adversely affects the discharge to the coastal marine area, any other unauthorised discharge, or any discharges of partially treated wastewater. The consent holder shall provide written details as soon as practicable of the reasons for the issue, measures taken to prevent its reoccurrence, the results of receiving water quality monitoring undertaken in accordance with condition 16, details of how compliance with condition 13 was assessed and the results of that assessment, and any other relevant matters.

Notes:

1. Contact the Environmental 24 hour Hotline on 0800 496 734 and send details of the incident notification to notifications@gw.govt.nz.
2. Any unauthorised discharges or incidents that occur that are not within the scope of the consent application may result in enforcement action by Greater Wellington Regional Council. Such incidents that are not within scope of the application include, but are not limited to, bypass discharges that occur after 30 June 2023, and plant malfunctions and/or sludge carryovers that affect the quantity and/or quality of treated wastewater to the coastal marine area.

Complaints

23. The consent holder shall maintain a register of any complaints it receives about the operation of the Wastewater Treatment Plant and discharge. The register shall record:
 - a. The date, time and duration of the alleged event/incident that has resulted in the complaint.
 - b. The location of the complainant when the complaint was detected by the complainant.
 - c. The possible cause of the complaint including any relevant event/incident and its duration.
 - d. Any remedial action undertaken by the consent holder in response to the complaint.

The complaints register shall be made available to the Manager upon request.

24. In the event of any non-routine issues or plant malfunction that adversely affects the discharge to the coastal marine area, any other unauthorised discharge, or any discharges of partially treated wastewater, the consent holder shall maintain a sign or signs on the shore in the vicinity of the outfall and if necessary at other locations to the satisfaction of the Manager. The sign shall be established as soon as practicable. Each time a new sign is required, the consent holder shall consult with Regional Public Health regarding the wording of the sign prior to being submitted for certification by the Manager. The sign shall:
 - a. Provide clear identification of the location and nature of the discharge.
 - b. Provide information on the potential risk to public health from bathing, surfing and the collection and consumption of shellfish in the vicinity of the discharge.
 - c. Provide a 24-hour contact phone number.
 - d. Be visible to the public visiting the area.

Note: At the time of granting this consent, there is an existing sign in place at the outfall which has been approved by Regional Public Health. However, if signage changes in the future the consent holder will need to obtain approval from the Greater Wellington Regional Council and consult with Regional Public Health.

Community Liaison Group

25. The consent holder shall maintain a Community Liaison Group (CLG). The CLG shall act as a forum for consultation and liaison with the community and be used as a vehicle to provide information regarding the Porirua WWTP. More specifically the CLG shall be used to inform its members on:
 - a. The performance of the Porirua WWTP relative to the conditions of this consent.
 - b. The results of wastewater and receiving water monitoring and the ecological survey required under the conditions of this consent.
 - c. Complaints received about the operation of the WWTP and of any incidents, unauthorised discharges, or any discharges of partially treated wastewater notified under condition 22A or 16.
 - d. Progress with respect to a monitoring and technology review undertaken in accordance with conditions 31 to 35.

- e. Improvements proposed to be made to the WWTP, that will influence the quality of the treated wastewater.
26. The consent holder shall invite persons to join the CLG from the following groups:
- a. Representatives of Te Rūnanga o Ngāti Toa Rangatira.
 - b. Representatives of Wellington Regional Council.
 - c. Representatives of Regional Public Health.
 - d. A representative of Te Awarua o Porirua Harbour and Catchments Community Trust.
 - e. A representative of the Titahi Bay Residents' Association.
 - f. A representative of the Titahi Bay Community Group.
 - g. A representative of the neighbouring landowners and residents.
- The consent holder may invite any other parties to attend the CLG.
- 26A. Within three months of the commencement of the consent, the consent holder shall review the current Risk Communication Strategy (RCS) to ensure that it sets out how it will communicate with the residents of Titahi Bay about wastewater discharges from the treatment plant, and in particular how it will communicate about health risks associated with bypasses, plant malfunctions and unconsented discharges. In reviewing the RCS, the consent holder shall seek the views of the CLG and Regional Public Health.
- The strategy shall:
- a. Describe the potential health risks due to a discharge from the wastewater treatment plant under different operating conditions or as a result of an incident as described in condition 22A.
 - b. Describe procedures for the formal notification to Te Rūnanga o Toa Rangatira, Greater Wellington Regional Council, Regional Public Health and Porirua City Council.
 - c. Describe procedures to provide information about the potential health risks to community groups, potentially affected and/or interested persons, and the general public.
- The strategy shall be reviewed on an 'as required' basis in response to feedback from the CLG, any changes to the operation of the WWTP, and the impacts on public health. A copy of the communication plan and any updates shall be provided to the Manager as soon as practicable following any updates.
27. The consent holder shall provide reasonable organisation and administrative support to the CLG and a meeting of the CLG shall be held at least once every calendar year. Minutes of any CLG meetings held shall be forwarded to the Manager.
- 27A. The consent holder shall maintain a webpage that provides the community with access to information and reports relevant to this consent. As a minimum the following information and reports shall be uploaded to this webpage:
- a. The Monitoring Plan required under condition 5E.
 - b. The Assessment of Options report required under condition 5H.
 - c. Quarterly and Annual reports required under conditions 18 and 19.
 - d. The OMCP required under condition 20.
 - e. Reports prepared under condition 22A.
 - f. Ecological survey reports prepared in accordance with condition 28 and 29.
 - g. Monitoring and technology review reports prepared in accordance with conditions 31 to 33.
 - h. The RCS prepared in accordance with condition 26A.
 - i. The most recent consent authority compliance monitoring report.
 - j. An up to date Complaints Register prepared in accordance with condition 23.

Ecological survey

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 Rukutane Point, at Round Point to the west of the existing outfall, and at a reference location 300m east of the existing outfall. The survey methods should be comparable with those used for the ecological survey included as 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.
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 the 15th anniversary of the commencement of this consent.

Monitoring and technology review

- 30A. The consent holder shall each year re-run its WWTP process model using latest information, including the most recent population projections. The outputs from the model shall be provided to the WWTPWG and the Manager prior to each anniversary of the commencement of the consent.
- 30B. If the annual process model re-run predicts that the concentration of total ammonia nitrogen in the treated wastewater will exceed the threshold in condition 33 (b) within 5 years, then within 3 years the consent holder shall complete a project to design and commit funding for a WWTP upgrade or improvement intended to maintain the concentration of total ammonia nitrogen within the threshold in condition 33 (b).

Notes:

1. *For the purpose of this condition, 'design' means designed to a level of detail that would enable construction or implementation without the need for further design to be undertaken.*
 2. *The option designed under condition 30B will be considered as part of the Monitoring and Technology Review process under condition 33 (b), if such a review is triggered by the concentration of total ammonia nitrogen in wastewater samples.*
31. At the times determined by condition 33, the consent holder shall undertake a review of the treatment processes and discharge infrastructure at the Porirua WWTP and of the monitoring required under this consent. This review shall address:
 - a. Ongoing compliance with the requirements of this consent particularly in relation to any reported non-compliance with consent conditions.
 - b. Compliance of the discharge of wastewater with any relevant national, or regional water quality policies, standards or guidelines in effect at the time.
 - c. The results of the monitoring undertaken in accordance with this consent including the adequacy and scope of such monitoring.
 - d. A summary of any improvements made to the Porirua WWTP and, as relevant to the implementation of this consent, to the wastewater network since the granting of this consent.
 - e. A summary of the actual or potential effects of the discharge from the WWTP to the coastal marine area, including effects on the values of significance to Ngāti Toa Rangatira, and a comparison with the level of effect anticipated in the resource consent application.
 - f. A review of whether adverse effects within the zone of reasonable mixing and the extent of the zone of reasonable mixing are minimised in accordance with the policies of the regional plan and in relation to:
 - i. The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material.

- ii. Any conspicuous change in colour or visual clarity.
 - g. An outline of technological options or other methods which may be available to reduce adverse effects identified in accordance with clause (e) and (f), having particular regard to the conclusions of the assessment and report required under conditions 5G and 5H. With respect to managing the effects of total ammonia nitrogen, the options identified shall include any option designed in accordance with condition 30B.
 - h. An assessment of whether any option or method identified in accordance with clause (g), or combination of options and methods identified in accordance with clause (g), represent the Best Practicable Option (BPO) (as defined under the Resource Management Act) for preventing and minimising the effects of the discharges.
32. The results of the review undertaken in accordance with condition 31 shall be incorporated into a report prepared by an independent suitably qualified and experienced professional in wastewater treatment and disposal. The report shall clearly state the critical recommendations arising from the review and the timeline that the wastewater specialist considers should be followed for the implementation of the critical recommendations. The report shall have particular regard to the overall purpose of the WWTPWG expressed by condition 5C.
33. The monitoring and technology review and report required under conditions 31 and 32 shall be completed and submitted to the Manager for certification that it complies with the requirements of conditions 31 and 32:
- a. Within 12 calendar months of the ecological survey reports, required under condition 29, being submitted to the Manager; and
 - b. Within 9 calendar months of the concentration of total ammonia nitrogen exceeding 6 g/m³ in more than 5 of 26 consecutive wastewater samples required to be collected and analysed under condition 9A.
- However, a monitoring and technology review and report is not required to be undertaken under 33 (b) if a review and report under condition 33 (b):
- c. Is already underway; or
 - d. Has been completed within the previous 24 calendar months and the critical recommendations of that previous report are still being implemented in accordance with the timeline detailed under condition 32; or
 - e. Has been completed within the previous 24 calendar months and the critical recommendations have been implemented in accordance with the timeline detailed under condition 32, however the Manager agrees that the critical recommendations of that previous report are not yet fully effective.
- 33A. The consent holder shall implement all critical recommendations in the monitoring and technology review report in accordance with the timeline included in that report, unless it can demonstrate, to the satisfaction of the Manager that the critical recommendations are unnecessary, that their intent could be achieved through a different method, or that an alternative timeline is reasonably required for their implementation.
34. To inform the review undertaken under condition 31 the consent holder shall undertake:
- a. An assessment of the Emerging Organic Contaminants in the inflow to, and discharge from, the WWTP, including a review of recent published research literature to update the threshold effect concentrations.
 - b. A desktop assessment of the risks posed by microplastics.
 - c. A Direct Toxicity Assessment to measure the aggregate effect to organisms from all contaminants contained in the treated wastewater, including the Emerging Organic Contaminants assessed in (a) above.

The assessments in (a) and (b) shall be undertaken by suitably qualified experts and completed so that the results are comparable with results of similar testing included in the application documents. The assessments under 34 (a) and (b) do not need to be undertaken for a review under condition 33 (b).

35. Notwithstanding the scope of the review set out in condition 31, if the monitoring and technology review is undertaken in response to the concentration of total ammonia nitrogen in the treated wastewater, then it shall be limited to the consideration of the adverse effects of the total ammonia nitrogen and the technological options or other methods which may be available to reduce those adverse effects.

UV disinfection performance

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 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.

Review

36. Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to sections 128 and 129 of the Resource Management Act 1991, in the six calendar months following:

- a. The fifth, tenth, and fifteenth anniversary of the commencement of this consent; or
- b. The receipt of a monitoring and technology review report completed under conditions 31 to 35; or
- c. The receipt of a report submitted in accordance with condition 5H; or
- d. Being informed of investigation outcomes under condition 35A.

A review may be undertaken for any of the following reasons:

- i. To review the adequacy of, and if necessary, amend the monitoring requirements outlined in this consent.

- ii. To review the effectiveness of the conditions in avoiding, remedying or mitigating any adverse effects of the consent holder's activities and, if considered appropriate by Wellington Regional Council, deal with such effects by way of further or amended conditions.
- iii. After a monitoring and technology review report has been submitted to the Wellington Regional Council in accordance with condition 33, to review the Best Practicable Options assessment contained in that report and respond to the consent holder's decision to adopt or not adopt the BPO and the consent holder's implementation plan.
- iv. To align the conditions and enable consistency with any relevant operative regional plans, National Environmental Standards, regulations or Acts of Parliament.
- v. After a report has been submitted to the Wellington Regional Council in accordance with Condition 5H, to review the permit holder's decision with respect to the measures that will be adopted to minimise the adverse effects of the discharge on values of significance to Ngāti Toa Rangatira and the programme of work to implement the mitigation measures.
- vi. After the consent holder has informed the Manager of the outcomes of an investigation under condition 35A, to review the consent holder's decision with respect to what if any investigation recommendations it proposes to implement.
- vii. To review the approach and effectiveness of CLG and community information reporting conditions.
- viii. To review monitoring and reporting dates, or date ranges, to better achieve the purposes of the consent (including as expressed in condition 5C) or to align with amendments to the Monitoring Plan certified via condition 5E.

The review of conditions shall allow for the deletion or amendment of conditions of this consent; and the addition of such new conditions as necessary to avoid, remedy or mitigate any significant adverse effects on the environment.

Nothing in this condition shall prevent the Council from, at any time, renumbering consent conditions to improve clarity and consistency.

Duration

37. The duration of this consent shall be 18 years from commencement.