

Compliance monitoring assessment

Consent No:	WGN200229	Date: 12 December 2024	Monitoring officer: Melissa Warner		
Location	Porirua Wastewater Treatment Plant (PWWTP)				
Activity:	To discharge contaminants to air (odour), and to discharge treated wastewater to the coastal marine area from the operation of the PWWTP				
Reporting Period	12 July 2023 to 30	June 2024			

Your compliance rating

This compliance report covers from 12 July 2023 – 30 June 2024, noting consent was granted on 12 July 2023. Amanda O'Brien (Senior Compliance Monitoring and Enforcement Officer) inspected the site on 20 July 2023; Amanda O'Brien and I inspected the site on 20 September 2024. During this reporting period, there were significant non-compliances including unconsented discharges due to power cuts, mechanical faults in the UV disinfection system and sludge carry over events.

The Consent Holder and Plant Operators facilitate monthly compliance meetings with GW, where on-going compliance issues and progress is discussed. Thank you for facilitating these meetings and keeping GW up to date with the operations of the Wastewater Treatment Plant.

		FULL COMPLIANCE
		All conditions met – well done! No further action required
[36727] Air discharge		LOW RISK NON-COMPLIANCE
		Most conditions met. Some action may be required
MODERATE NON-COMPLIANCE		MODERATE NON-COMPLIANCE
		Some condition(s) not met. Action required (see comments below)
[36816] Coastal		SIGNIFICANT NON-COMPLIANCE
discharge		Many condition(s) not met. Immediate action required (see comments below)

Overall compliance summary



Overall poor management of site and consents. There are repeated and/or multiple breaches of consent conditions. This is resulting in actual or potential environmental effects that are beyond what was considered when the consents were issued. This is considered unacceptable and the consent holder needs to give immediate attention to meeting their consent requirements.

WGN200229 [36816] Discharge treated wastewater to the coastal marine area

General conditions

The discharge of partially treated wastewater or sludge carryovers to the coastal marine area are not within the scope of this consent. Unconsented discharges that occurred during this reporting period include:

- Ongoing continuous bypass leak on 01 August 2023 there was a discharge of 10 m³ of undisinfected wastewater due to maintenance and repair of the penstock causing the leak.
 - Unfortunately, the repair did not succeed and WWL are looking into how to completely eliminate it.
 - It is estimated that the percentage of total flow that goes into the undisinfected streams were 0.39% on the UV bypass penstock leak and 0.15% on the old UV system leak.
- Undisinfected wastewater discharge on 26 September 2023, 09 November 2023, 08 December 2023, 16 June 2024 and 17 June 2024 in relation to power outages, and no backup power supply to the UV system.
 - Infringement notices were issued on 26 January 2024 to PCC, WWL and Veolia for the 26 September 2023 discharge.
 - Formal warnings were issued on 07 March 2024 to PCC, WWL and Veolia for 09 November and 08 December 2023 discharges.
 - Formal warnings and an advisory notice were issued on 07 October 2024 to PCC, WWL and Veolia for the 16 June and 17 June 2024 discharges. The advisory notice includes the requirement to install and make operational a backup power supply to the UV treatment systems by 31/01/2025.
- Unconsented discharge on 02 October 2023 in relation to a mechanical failure of a submersible pump used to clean screenings. A formal warning was issued on 08 March 2024 to PCC, WWL and Veolia.
- Sludge carryover events and discolouration at the outfall from 13 events across 04 March to 01 May 2024 in relation to poor solids handling and increased concentrations of Mixed Liquor Suspended Solids (MLSS).
 - o Infringement notices were issued on 03 July 2024 and 06 August 2024 to PCC, WWL and Veolia for 04 March 2024 and 06 April 2024 discharge events (a total of 6 infringements).
 - Abatement Notices A1103, A1104 and A1105 were issued on 22 July 2024 to PCC, WWL and Veolia to cease the unauthorised discharge of contaminant, namely wastewater containing sludge carried over from one or more clarifiers.
- Undisinfected wastewater discharge on 05 June 2024 in relation to a mechanical fault in the UV system. An advisory notice was issued on 07 October 2024 to PCC, WWL and Veolia that included the requirement to provide a summary report of the Duron UV penstock performance data and an action plan to ensure that the Duron system will be the duty system and will operate continuously.

Conditions 3 states that the average daily inflow volume shall not exceed 38,016 cubic metres per day, and the maximum daily inflow volume shall not exceed 129,600 cubic metres per day. This condition is compliant.

- It is noted that the annual report states the 12-month average daily inflow limit was exceeded on several occasions during the 2023-24 compliance year, however this is incorrect.
- Correspondence with WWL confirmed that the average daily inflow volume did not exceed 38,016 cubic metres per day, rather that there were a few peak flows, which remained below the maximum daily inflow volume of 129,600 cubic metres per day.

Condition 4 states that the consent holder shall continuously monitor and record the daily volume of the inflow to and effluent from the wastewater treatment plant and supply records in the quarterly and annual reports. This condition is non-compliant.

- An electrical issue caused the effluent control metre to go offline, resulting in no effluent readings from December 2023 to April 2024. Effluent flow was calculated during this period.
- Readings from the effluent flow meter were being used from May 2024, following repair of the flow metre on 12 April 2024.

Condition 5 states that 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. This condition is compliant.

Partnership with Ngāti Toa Rangatira

Condition 5B states that by 12 August 2024 the consent holder shall invite Te Rūnanga o Toa Rangatira to nominate two representatives to join a Porirua Wastewater Treatment Plant Working Group (WWTPWG) and if accepted then establish the WWTPWG, appoint two representatives and fulfil the obligations set. This condition is compliant.

• Te Rūnanga o Toa Rangatira decided independently to nominate just one individual for the first meeting, and they have been appointed. WWL indicated that Te Rūnanga o Toa Rangatira reserve the right to nominate another representative in the future and they intend to do so.

Condition 5C sets out eight requirements for the WWTPWG with the overall purpose to seek continuous improvement. Two of the requirements relevant to this reporting period are:

- a. That the WWTPWG shall, with the consent holder, prepare the monitoring plan required under conditions 5E (Monitoring Objectives) and 5F (Kaitiaki Monitoring Programme) and;
- b. Review the quarterly and annual reports including the adverse effects of the discharge on the cultural values of Ngāti Toa Rangatira.

The first meeting of the WWTPWG was on 14 June 2024 but did not review the quarterly report, the focus of the first meeting was instead to:

• Discuss the purpose and scope of the WWTPWG

- Discuss past and future challenges
- Discuss the Terms of References that were drafted in 2018 as part of the consent application process
- Run through an overview of the new consents
- Discuss solids handling at the plant.

The second meeting of the WWTPWG was held in November and the appropriate quarterly reports were reviewed.

Condition 5D states the consent holder shall convene, host and record the minutes of the WWTPWG meetings, to be held no fewer than two times per year. Minutes and written explanations considering recommendations from the WWTPWG shall be provided to the Manager (GW). The WWTPWG met on 14 June 2024 and 04 November 2024, minutes have been provided for both. This condition is compliant.

Condition 5E states that by 21 January 2024 the consent holder shall prepare a Monitoring Plan, in conjunction with the WWTPWG. This condition it compliant.

 A draft monitoring plan was received on 12 January 2024 and feedback was passed on to WWL, WWL returned a revised plan on 23 April 2024. As of 12 December 2024, it has not yet been certified by GW – it is noted that no requirements from the Kaitiaki Monitoring Programme have been included in the draft plan as it has yet to be developed.

Condition 5F states that 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. This condition is compliant.

- On 17 July 2023, Paul Gardiner (Head of RMA, Consents and Environment at Wellington Water) formally invited Te Rūnanga o Toa Rangatira to nominate two representatives to join the WWTPWG, and to prepare a Kaitiaki Monitoring Programme.
- Through letter response on 01 August 2023, Jennie Smeaton (Acting Pou Toa Matarau) accepted by confirming that they will undertake recruitment for the appointment of two Ngāti Toa representatives to sit on the Working Group and are excited to play a key role in the implementation of the Ngāti Toa Kaitiaki Monitoring Programme.
- The Kaitiaki Monitoring Programme has not yet been developed, the current monitoring plan is set
 to be updated with the details of the programme once it has been received. At the WWTPWG
 meeting held on 04 November 2024, Ngati Toa provided an update that a case study is underway
 regarding the WWTP and cultural values in partnership with Victoria University.

Condition 5G and **Condition 5H** relate to completion of an assessment of options due in 2027 and **Condition 5I** and **Condition 5J** are not relevant as the invitation to join the WWTPWG was accepted, and an alternative working group was not required.

Wastewater Quality

Condition 7 states the consent holder shall obtain a daily 24-hour flow-proportioned composite sample wastewater (after treatment but prior to it entering the Rukutane Point outfall) and analysed it for total suspended solids (TSS) and biochemical oxygen demand (BOD). The annual report shows this analysis has been undertaken. This condition is compliant.

Condition 8 states that the consent holder shall obtain a daily grab sample of the wastewater and analyse for UV transmissivity, faecal coliforms and enterococci. This condition is non-compliant.

- Daily UV transmissivity data was only analysed sporadically until 08 August 2024 and daily enterococci data was not available until 23 August 2023, this was due to a delay in matching the sampling requirements for the laboratory with the new parameters of the resource consent.
- Daily faecal coliform data was analysed in accordance with the consent and reported on in the annual report.

Condition 9 states that once a month the 24-hour flow-proportioned composite sample of the wastewater shall be analysed for a range of metals, nutrients, and other compounds. The annual report shows this analysis has been undertaken. This condition is compliant.

Condition 9A states that once a week a sample should be analysed for Total Ammonia Nitrogen. This condition is technically non-compliant.

- Weekly testing was not performed during July 2023 as arrangements with the external laboratory were still being undertaken.
- Weekly testing began in August 2024 and results were mostly consistent, staying under 5 mg/L until May 2024, when there was a sudden but steady increase in Total Ammonia Nitrogen concentrations up to 25 mg/L.

Condition 10 states that analysis of a suitable viral indicator, such as F-RNA bacteriophage shall be undertaken for samples of the influent to the wastewater treatment plant once a month and wastewater (after treatment but prior to it entering the Rukutane Point outfall) once a week. This condition is noncompliant.

- A miscommunication between Veolia and the external laboratory meant that weekly effluent viral
 indicator testing was delayed until September 2023, and monthly influent viral indicator testing
 was not performed during the July-September quarter.
- A Formal Warning was issued on 05 December 2023. Since October 2023, sampling has been undertaken in compliance with this condition.

Condition 12 and **Condition 12A** states that the quality of the wastewater shall not exceed set limits. No parameters exceeded the consented limits for the 2023/24 compliance period. Of note, wastewater concentrations of copper, nickel, and zinc are marginally higher than the Australia and New Zealand Guidelines for Freshwater and Marine Water Quality (2018) in several samples.

Parameter	Limits	Compliance
Suspended solids	30 g/m³ (geometric mean)	Compliant, 90 th percentile steadily
	75 g/m³ (10% of 90 consecutive daily	increased from April-June 2024 before
	values)	decreasing again.
Biochemical oxygen	30 g/m³ (geometric mean)	Compliant, geometric mean and 90 th
demand	75 g/m³ (10% of 90 consecutive daily	percentile have been trending
	values)	upwards since April 2024.
Total Arsenic	0.023 g/m ³	Compliant
Total Cadmium	0.055 g/m ³	Compliant
Total Chromium	0.044 g/m ³	Compliant
Total Copper	0.013 g/m ³	Compliant
Total Nickel	0.07 g/m ³	Compliant
Total Lead	0.044 g/m ³	Compliant
Total Zinc	0.08 g/m ³	Compliant
Total Mercury	0.001 g/m ³	Compliant
Phenol	2.7 g/m ³	Compliant

UV performance, monitoring, and UV transmissivity

Condition 12B states 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.

- Due to power outages and mechanical issues with the UV disinfection systems, this condition may be non-compliant, however insufficient information has been provided.
- **Action:** Please provide a summary of information regarding compliance with UV disinfection power output in accordance with condition 12B for the 2023/24 compliance period by **31 January 2025** and include in annual reports going forward.

Condition 12C states that the consent holder shall maintain a UV transmissivity monitoring probe in the Duron UV system and record the hourly average UVT values. This condition is technically non-compliant.

A UVT probe was installed in the Duron UV duty unit on 30 June 2023, however due to the temporary
use of the TAK UV unit during the compliance year, records of the hourly average UVT were not
maintained.

Condition 12D states that if the hourly average UV transmissivity recorded in accordance with 12C reduces below 45% then the consent holder shall notify GW and undertake an investigation. This condition is non-compliant.

- Notification and reporting were received for UVT drops in October 2023.
- Quarterly reports showed numerous UVT drops between October 2023 and March 2024. No notifications or investigation reports were received.
- Between March and June 2024 where the UVT dropped below 45%, most were notified to GW as soon as practicable and investigations were undertaken in accordance with consent

requirements, however, given the volume of reporting required, this was not always in line with consent timeframes.

Condition 12E states that 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. This condition is compliant.

- Notified on 26 October 2024 maintenance activity on the Duron UV unit requiring the unit to be totally shut off for 3 to 4 days and wastewater was directed to the TAK unit.
- Notified on 06 June 2024 Veolia switched to using the TAK UV system overnight from 06 June 2024 to reduce the risk of non-compliant discharges. It is noted this was not undertaken as a maintenance requirement.

Receiving water

Condition 13 states that the discharge shall not cause any of the listed effects in the receiving waters beyond a 200-metre radius of the discharge point. This condition is environmentally non-compliant.

- 12 incidents were reported where UVT dropped below 45% between 04 March and 29 April 2024, indicating poor water quality and possible sludge carryover events. On 06 April and 07 April 2024 community photos show discolouration was not contained within the 200-metre radius, and on 12 April 2024 Veolia photos show discolouration beyond the 200-metre radius. Many of the other events occurring during this period were unconfirmed if they were contained within the 200-metre radius.
- Infringement notices were issued on 03 July 2024 and 06 August 2024 to PCC, WWL and Veolia for 04 March 2024 and 06 April 2024 discharge events (a total of 6 infringements).
- Abatement Notices A11103, A11104 and A1105 were issued on 22 July 2024 to PCC, WWL and Veolia to cease the unauthorised discharge of contaminant, namely wastewater containing sludge carried over from one or more clarifiers.

Condition 14 states that the consent holder shall collect representative receiving water samples once each calendar month at the listed locations, record site name, date, time, weather, wind, tidal conditions, pH, salinity, dissolved oxygen and water temperature. This condition is non-compliant.

- July 2023 shoreline sampling was performed in accordance with the previous resource consent (WGN980083[33805]), which had different sampling locations, therefore July 2023 sample locations were different to the rest of the compliance year.
- Samples were not collected from the control site during February and March 2024 as there was no access to the site due to a road closure.
- A memo was approved on 28 August 2024 confirming the control sampling location at Whitirea Park at approximately NZTM 2000: E1755625.48, N5449607.96.

Condition 15 states the samples shall be analysed for enterococci and nutrients (site Titahi Bay Beach generally at Toms Road excluded from nutrients analysis). This condition is compliant.

• Enterococci levels exceeded the national guidelines recommendation of 280 cfu/100ml at the 200 metres southwest of outfall sampling location during the months of March (300 cfu/100ml) and April (320 cfu/100ml) 2024. Enterococci levels returned to normal in May 2024 with a reading of 10 cfu/100ml.

In the event of an incident notified under condition 22A (incident notification requirements) and / or a discharge of partially treated wastewater, **Condition 16** states that 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 approximately 48 hours after the discharge commenced, if it is safe to do so.
- c. Analyse the samples in accordance with condition 15 (enterococci and nutrients).
- d. Assess compliance with condition 13 (not cause any of the listed effects in the receiving waters beyond a 200-metre radius of the discharge point).

Incidents notified under condition 22A:

- 13 incidents were notified under condition 22A during the 2023/24 reporting period, with majority of these being notified as soon as practicable, sampled in accordance with condition 15, and assessed for compliance against condition 13.
- It is noted that during possible sludge carry over events on 01 and 03 April 2024, the consent holder failed to notify GW.
- It is noted that during possible sludge carry over events on 01, 03, 04 and 05 April 2024, the consent holder failed to initiate sampling with 24 hours.
- UV bypass on 1 August 2023 notification received as soon as practicable, however sampling required under condition 15 could not be completed and was instead sampled in accordance with condition 14.

Reporting

Condition 18 requires quarterly monitoring reports which includes details of the monitoring on information from consent and also under the Monitoring Plan and the Kaitiaki Monitoring Programme (not yet received). This condition is compliant.

- All quarterly reports were submitted on time, following GW approving a 5-day extension for October-December 2023 and January-March 2024 quarterly reports. April-June 2024 quarterly report was combined with the 2023/24 annual report following GW's approval.
- All information required by condition 5F was included in all quarterly reports for the 2023/24 compliance year, with the exception of the Kaitiaki Monitoring Programme as this is yet to be produced.

Condition 19 requires an annual report to be submitted by 12 October 2024 which includes 14 conditions to be included. This condition is compliant.

- The Porirua WWTP 2023/24 annual report was submitted on 11 October 2024.
- All information required by condition 19 was included in the 2023/24 annual report, with the exception of the Kaitiaki Monitoring Programme as this is yet to be produced.

Operations and Management

Condition 20 states that by 12 October 2023 the consent holder shall submit an Operational Management and Contingency Plan (OMCP) and **Condition 21** states seven requirements that shall be included. This condition is compliant.

• The OMCP was received on 11 October 2023 and has undergone a review by technical experts, the review found that changes were required in order to satisfy condition 21.

Condition 21A states that by 12 January 2024, the consent holder shall invite Te Rūnanga o Toa Rangatira to work with it on a review of the OMCP.

Through the letter response dated 01 August 2023, Jennie Smeaton (Acting Pou Toa Matarau) confirmed that Te Rūnanga o Toa Rangatira are excited to play a key role in the Porirua WWTP consents and management plans and have undertaken the recruitment process for the appointment of two Ngāti Toa representatives to sit on the WWTPWG.

Condition 21B states that before 01 August 2024, the consent holder shall update the OMCP to include a 'trigger value' for the concentration of enterococci in the treated wastewater. This condition is non-compliant.

- Technical experts have expressed that they need to continue the testing program for an unspecified amount time, and that as of 01 August 2024 they are unable to recommend a trigger value, investigations are ongoing.
- **Action:** Please provide an updated timeline on when a trigger value may be able to be established by **31 January 2025**.

Incident notification requirements

Condition 22A states that 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 condition further states that 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. This condition is technically non-compliant.

- It is noted that during possible sludge carry over events on 01 and 03 April 2024, the consent holder failed to notify GW.
- As outlined under *condition 16*, most incidents were sampled under condition 15; and assessed for compliance with condition 13.
- It is noted that during possible sludge carry over events on 01, 03, 04 and 05 April 2024 and the UV bypass starting on 01 August 2023, the consent holder failed to initiate the correct sampling.

Complaints

Condition 23 requires the consent holder to maintain a register of any complaints it receives about the operation of the Wastewater Treatment Plant and discharge. A register of complaints is maintained on the Porirua WWTP webpage, with all complaints expected to be uploaded within 5 working days. This condition is compliant.

Condition 24 states that 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.

WWL have supplied confirmation of appropriate signage on the shore in the vicinity of the outfall for each discharge/incident notification. This condition is compliant.

Community Liaison Group

Condition 25 states the consent holder shall maintain a Community Liaison Group (CLG), with **Condition 26** stating specific groups that shall be invited (but doesn't exclude other parties). A CLG has been maintained for the duration of the consent, with all groups listed under condition 26 receiving an invitation. This condition is compliant.

Condition 26A requires the consent holder to review the current Risk Communication Strategy (RCS) by 12 October 2023. In reviewing the RCS, the consent holder shall seek the views of the CLG and Regional Public Health. The condition further lists what the strategy shall include and that it is to be reviewed as and when required in response to feedback from the CLG. This condition is compliant.

- A reviewed RCS was submitted on 11 October 2023, it was noted that that the review was also sent to the Porirua WWTPWG, including members from the Te Rûnanga o Toa Rangatira, for their review and feedback.
- Feedback from GW regarding what further information should be included in the RCS was submitted to WWL on 21 November 2024.

Condition 27 states the CLG shall be held at least once every calendar year and minutes of any CLG meetings held shall be forwarded to GW. CLG meeting was held on 13 December 2023 and minutes were provided to GW, the next CLG is scheduled for 12 December 2024. This condition is compliant.

Condition 27A requires the consent holder to maintain a webpage that provides the community with access to information and reports relevant to this consent. The condition lists 10 reports or pieces of

information at a minimum that are required to be available. All reports and pieces of information required to be uploaded are currently up to date on the webpage. This condition is compliant.

Ecological survey

Conditions 28 and **Condition 29** relate to commission an ecological survey of the receiving waters for the discharge, however, are not required to be completed during this reporting period.

Monitoring and technology review

Condition 30A stated the consent holder shall each year re-run its WWTP process model. The outputs from the model shall be provided to the WWTPWG and GW prior to each anniversary (12 July) of the consent. A memorandum with the outputs from the process model re-run was supplied to the WWTPWG and GW on 04 July 2024. This condition is compliant.

Condition 30B states that if the annual process model re-run predicts that the concentration of total ammonia nitrogen in the treated wastewater will exceed 6 g/m³ (in more than 5/26 consecutive samples) within 5 years the consent holder shall complete a project to design and commit funding for a WWTP upgrade or improvement intended (within 3 years) to maintain the concentration of total ammonia nitrogen below 6 g/m³.

- The model re-run was undertaken based on information from the 2023-24 operational period and the output showed that during the next 5-year period, the Porirua WWTP will remain within the total ammonia concentration threshold of 6g/m³.
- As the process model re-run found the results are expected to be within the threshold, condition 30B is not applicable for this reporting period. It is noted that after the re-run was undertaken there was a steep increase in ammonia nitrogen observed during sampling.

Condition 33 states when a monitoring and technology review is required to be completed, linked to the completion of the ecological survey report, and within 9 months where ammoniacal-nitrogen exceeds 6g/m³ in more than 5 of the 26 consecutive wastewater samples.

• Samples taken in accordance with **Condition 9A**, show this limit was exceeded in 5 consecutive samples in June 2024, therefore a monitoring and technology review and report, and a review of the treatment processes and discharge infrastructure are required by February 2025 (in accordance with **Conditions 31-35**).

UV disinfection performance

Certification of the enterococci trigger has not been completed, therefore, **Condition 35A(a)** applies during this reporting period.

Condition 35A states that if the concentration of faecal coliforms in the treated wastewater exceeds 2,000 cfu per 100 millilitres on 2 or more consecutive days then the consent holder shall notify GW, initiate an investigation and within 1 calendar month inform the investigation outcome and which of the recommendation it proposes to implement. This condition is compliant.

This condition was trigged once during the reporting period on 14-15 February 2024 – the investigation outcome concludes that the exceedances were likely attributed to error in sampling (new staff) and timing of the sample collection (stagnant water). The recommendations proposed to be implemented include:

- Engage a contractor to run a full diagnostic as soon as possible to ensure the Duron UV system operates as intended.
- Host training for all operational staff, develop/revisit standard operating procedures where required.
- Perform additional monitoring of the UV intensity, potentially install a UV intensity meter.

WGN200229 [36727]: discharge contaminants to air (odour) from the operation of the PWWTP

General Conditions

Condition 3 states that after 31 May 2025, or an alternative date agreed there shall be no noxious, dangerous, offensive or objectionable discharges of odour to the extent that it causes an adverse effect at or beyond the boundary of the Porirua WWTP site. WWL requested an alternative timeframe from 31 July 2025 to 31 October 2025, which was granted.

Condition 5 states the consent holder shall keep a record of any complaints received. The complaints will be forwarded to GW within twenty-four hours of the complaint being received and record details of the odour including plant operating conditions. This condition is technically non complaint.

- WWL identified 12 odour complaints registered during the 2023-24 compliance year. GW were only
 provided 10 of those complaints within 24 hours and 2 were not received by GW until annual
 reporting.
- **Action**: Review the record keeping and notification process and provide confirmation of this review and updated actions by **31 January 2025**

Condition 6 states that any incident that <u>may cause</u> or <u>has caused</u> adverse effects on the environment at or beyond the site boundary shall be notified to the Manager within twenty-four hours. A written report detailing the reasons for the incident, measures to mitigate the incident and measures to prevent recurrence shall be forwarded to the Manager within seven working days.

WWL supplied the email notification within 24 hours for maintenance activities including:

- 12 February to 01 March 2024 undertaking maintenance in the aeration basin diffusers which may cause odour. This notification was received 3 days prior to maintenance occurring. No written reports were received detailing incidents.
- Action: Review how close out reporting will be undertaken for maintenance activities that <u>may</u>
 <u>cause</u> odour and incidents that <u>do cause</u> odour and provide confirmation of this review and
 updated actions by 31 January 2025

Condition 7 requires the consent holder to prepare an Odour Management Plan (OMP) and submit it for certification by 12 October 2023 and **Condition 7A** states the objective ten requirements the OMP shall include. The OMP was received within the timeframe, therefore condition 7 is complaint.

Feedback from a technical review commissioned by GW was provided to WWL on 09 November 2023 and it was agreed that updates to the reporting could occur concurrently with the Operations Management and Contingency Plan (OMCP) and Risk Communication Strategy (RCS). Review comments from these reports were received on 05 December 2024 and 22 November 2024.

Interim Odour Control Measures

Condition 8A states that by 12 October 2023 the consent holder shall install interim odour controls including:

- a. installation of monitors that continuously measure Hydrogen Sulphide (H2S) in the discharge from the inlet tunnel vent and milli screen building stack,
- b. installation of a new weather station that shall, at a minimum, measure wind speed and direction at a height of 5 to 10 m and shall be connected to the WWTP control system and
- c. reconfigure the operation of the inlet tunnel vent fan so that between 05:00 hours and 23:00 hours it automatically turns off when the weather station measures northerly winds, between 315° to 45°, that are less than the wind speed trigger included in the OMP.

Confirmation of interim odour control were in place was received on 11 October 2023. This condition is compliant.

Condition 8B states that by 12 January 2024 the consent holder shall commission an independent suitably qualified and experienced professional to undertake an odour survey and prepare a report on their findings and provide the report to GW along with confirmation of next steps that will be undertaken. This condition is compliant.

- An initial survey was completed on 06 October 2023 by Air Quality Consulting NZ Limited (AQCNZ), and it was concluded that the odour associated with PWWTP detected along Pikarere Street during the time of the survey was not of an intensity, frequency, or duration likely to cause odour nuisance effects.
- AQCNZ acknowledges that this survey was performed in the winter months, which provides more favourable conditions for dispersing odour associated with wastewater.

Condition 8C states that if it is concluded that the odour from the WWTP <u>is not</u> noxious, dangerous, offensive or objectionable to the extent that it causes an adverse effect at or beyond the boundary of the Porirua WWTP site, the consent holder shall repeat the survey within 12 calendar months following the initial survey and again between 12 and 24 calendar months following the initial survey. This condition is compliant.

An additional survey was completed on 29 January 2024 by AQCNZ, and it was concluded that the
odour associated with PWWTP detected along Pikarere Street during the time of the survey was not
of an intensity, frequency, or duration likely to cause odour nuisance effects. Therefore, there did
not appear to be any reason to change the operation of the odour control measures.

Conditions 8D – Condition 8I relate to actions to undertake if the odour survey concludes that odour from PWWTP <u>is</u> identified as noxious, dangerous, offensive or objectionable to the extent that it causes an adverse effect at or beyond the boundary. As the survey did not find this, these conditions are not applicable for this reporting period.

Condition 8J states that the interim odour control measures shall be operated until the Best Practicable Option (BPO) is operationalised in accordance with condition 8L. At the time that the Best Practicable Option is operationalised the interim odour control measures may cease unless they form part of the BPO. This condition is a technically non-compliant.

• In response to a complaint received on 05 November 2024, WWL undertook immediate action by requesting Veolia to temporarily revert to the original setup of the inlet vent set up while a review of the data of the H₂S monitors was undertaken.

- Following an investigation, the odour was identified from the milliscreen room due to high concentration of H₂S from the milliscreen discharge stack. The interim odour control measures do not remove/treat odour and are designed to prevent the H₂S from the tunnel being blown to Pikarere farm during Northerlies. WWL are unable to shut off the milliscreen building air discharge due to H&S risk.
- Interim odour controls were reinstated to meet consent condition requirements on 14 November 2023

Condition 8JA states that if monitoring of H_2S within buildings at the WWTP identify levels that exceed Workplace Exposure Standards and Biological Exposure Indices, then the consent holder may adjust the wind speed trigger for the inlet tunnel vent fan control or discontinue this control measure altogether and implement other options along with communicating this change to the Odour Community Liaison Group (OCLG). No exceedances have been reported in this reporting period.

Best Practicable Option (BPO) Review

Condition 8K states that the consent holder shall commission an investigation of the BPO to mitigate the odour effects associated with the WWTP and **Condition 8L** states the BPO report shall be submitted by 31 October 2023. The report shall set out a programme for the installation and operationalisation of the BPO by 31 July 2025, or an agreed alternative date to the satisfaction of the Manager. These conditions are compliant.

- WWL engaged with the OCLG on 26 October 2023 presenting the BPO. The presentation was well received. The BPO report was issued on 30 October 2023 confirming a single odour control unit based on a biological trickling filter (BTF) technology in the existing car park.
- WWL requested an alternative timeframe from 31 July 2025 to 31 October 2025, which was
 granted. Consideration was given at this time to the good odour survey results, that the interim
 odour measures were in place on time, and the timeframe reasonably required to design and install
 the BPO that is already on a fast-track proposal, and the OCLG response to the plan to implement
 it by that date was positive.

Conditions 8M – Condition 8O relates to odour surveys once the Best Practicable Option becomes operational, these conditions are not applicable for this reporting period.

Odour Community Liaison Group

Condition 9 states the consent holder shall establish and maintain an Odour Community Liaison Group (OCLG) and **condition 10** states which groups must be invited (not excluding other parties). This condition is compliant.

Condition 11 states that the consent holder shall hold a meeting of the OCLG at least once every calendar year. Minutes of any OCLG meetings held shall be forwarded to GW. The OCLG was held on 26 October 2023. This condition is compliant.

Communications Plan

Condition 12 states that the consent holder shall maintain a communications plan, which sets out how it will liaise with the residents of the Pikarere Farm subdivision area. It is understood this communication plan is not formally in place, however, email correspondence shows responsive communication with residents of the Pikarere Farm including visiting the site in response to notification of odour.

- It is noted that the Management Plan includes a dedicated phone number (hotline) for nearby residents to contact the consent holder during plant operating hours, and updates on the WWTP are posted on the dedicated webpage.
- Further liaison with Pikarere Farm residents specifically will be undertaken at the annual CLG
 meetings, updates regarding the WWTP that will potentially affect nearby residents will be done via
 email to the interested parties list, which some of the residents of Pikarere Farm are already a
 member of.

Condition 12A states that the consent holder shall maintain a webpage that provides the community with access to information and relevant reports. Since the commencement of the resource consent, the key information has been maintained on the website. This condition is compliant.

- Titahi Bay Residents Association have expressed that sometimes there is a delay in uploading important information onto the website (mostly in relation to WGN200229 [36816]).
- WWL agree that they could improve on getting information uploaded to the webpage in a timely manner, any complaints/notifications are expected to be uploaded within 5 working days, all other information is expected to be uploaded quarterly.

Please note that the Greater Wellington Regional Council (GW) has a responsibility to enforce the Resource Management Act 1991 (RMA). Accordingly, you should take all necessary steps to ensure you comply with your obligations under the RMA, including all conditions of your consent.

Your consent incurs variable compliance monitoring charges at your consent anniversary. These charges are likely to increase to reflect any additional time spent monitoring your consent to due to non-compliance. In the case of Porirua WWTP, these charges will be issued quarterly.



GW compliance rating system

FULL COMPLIANCE - All conditions met - well done! No further action required

All conditions assessed are met including supplying information and/or records

LOW RISK NON-COMPLIANCE - Most conditions met. Some action may be required

- Minor breach of effects based conditions or works outside scope of consent with low risk of adverse environmental effects
- Breach of conditions which is technical in nature (eg, failure to submit monitoring report or records)

MODERATE NON-COMPLIANCE - Some condition(s) not met. Action required

- Repeated failure to supply monitoring report or records.
- Breach of conditions where there are some environmental consequences and/or moderate risk of adverse environmental effects

SIGNIFICANT NON-COMPLIANCE - Many condition(s) not met. Immediate action required

 Breach of conditions where there are significant environmental consequences and/or high risk of adverse environmental effects

VERY GOOD ★★★★	Overall excellent management of site and consents. The consent holder is proactive in meeting their consent requirements. If issues have arisen concerning consent conditions, the consent holder responds with promptness and effectiveness.
GOOD 🖈 🖈 🖈	Overall good management of site and consents. The consent holder is generally on top of meeting their consent requirements. Whilst there are some minor breaches of consent conditions, these have no ongoing environmental effects.
FAIR	Overall the management of site and consents is considered to be fair. There are occasional breaches of consent conditions and/or lapses in providing information to GW.
POOR 🙀 🗙 🗙	Overall the management of site and consents is considered to be poor. There are consistent and ongoing breaches of consent conditions. The consent holder is not getting on top of their consent requirements.

Consent monitoring charges

Each consent receives a consent monitoring charge from GW.

This charge is made up of three parts:

- A customer service charge that covers the administrative cost of your consent(s);
- A compliance monitoring charge that covers all actual and reasonable time associated with assessing compliance with your consent(s) including the time spent visiting and assessing your site, information and reports you submit, file notes, travel time and reporting to you on compliance with your consent(s); and
- A State of the Environment (SoE) charge that covers a proportion of the cost of GW monitoring the environment that relates to your activity.

For further information on consent monitoring charges, please see our Resource Management Charging Policy.