

Compliance monitoring assessment Otaki Wastewater Treatment Plant 2024-2025

Consent No: WGN160002 Date: 19/11/2022 Monitoring officer: Joshua Knowles

[33564 & 33565]

Activity: To discharge treated wastewater to land and contaminants to air from the operation of the

Ōtaki Wastewater Treatment Plant.

Your Compliance Rating

This report assesses compliance for the period 1 July 2024 to 30 June 2025.

[33564] - Discharge permit to discharge treated wastewater to land.	MINOR NON-COMPLIANCE Most conditions met but several non- compliances. Action are required to
[33565] - Discharge permit to discharge contaminants to air from the treatment and disposal of wastewater.	ensure these issues are solved.

Overall compliance summary for Ōtaki WWTP:

GOOD



Overall good management of site and consents. The consent holder is generally efficient in meeting their consent requirements. There were some minor breaches of consent conditions and technical non-compliance, however the consent holder is operating within the scope of environmental effects and administrative requirements considered when their consents were issued. Many of the issues raised in this compliance report including the breaches of the maximum discharge rate have been or are in the process of being resolved.

Maximum Discharge Rate

Condition 9 of the consent limits the discharge of effluent to the Land Discharge & Treatment Area (LDTA) to 2,820 m³/day.

On 17 September 2025, I received a phone call from Tess Drewitt, Compliance Consultant for Water & Wastewater Infrastructure, Kāpiti Coast District Council (KCDC). Tess advised me:

- That a calibration issue with the flow meter and recording programme at the Ōtaki Wastewater Treatment Plant has come to their attention.
- This misreading has resulted in the data that KCDC are capturing under-reporting how much treated
 effluent is being discharged to the LDTA, and subsequently resulted in exceedances of the daily
 maximum volume allowed to discharge under condition 09 of WGN160002.
- The calibration issue has now been fixed.
- A full investigation report will be provided to Greater Wellington Regional Council

Subsequently an investigation report was provided to Greater Wellington by Kāpiti Coast District Council on 24 September 2025. The investigation report identified that the 2820 m³/day discharge limit (set in condition 9 of WGN160002) was potentially breached up to 10 times in 2024/25, totalling 6,640m³ treated effluent discharged above the daily consented limit. This represents 1.1% of the annual volume discharged to the LDTA in 2024/25 of 582,570 m³.

The operation of the Ōtaki WWTP was non-compliant with condition 9 of WGN160002 for the 2024/25 compliance period. Please see the attached formal warning letter sent with this compliance report for this non-compliance.

Flow meter verification conditions

On 17 October 2025 I received a further email from Kāpiti Coast District Council which clarified that "The [water meter and recording] issue did not relate to what the meter was recording, rather it related to how the computer was reading this information". Based on this I consider that this water meter reporting issue did not result in breaches of either:

- Condition 12 which requires the consent holder to maintain flow meters on the inlet to the wastewater treatment plant and at the outlet to the LDTA. The meters shall be suitable for wastewater monitoring and be accurate to within +/- 5%; and
- Condition 13 The consent holder shall verify the accuracy of the measuring devices/systems required under condition 12 within six months of issue of the consent (by 20 April 2017) and a minimum of every five years thereafter...

Therefore, the operation of the Ōtaki WWTP was compliant with conditions 12 and 13 of WGN160002 throughout the compliance period.

Maintaining Wet Weather Storage Capacity

Condition 11 requires the consent holder to ensure that at least 5,000 m³ of wet weather storage is available at all times. This condition also requires you to provide an assessment in the annual report comparing the actual inflow volumes to the wastewater treatment against the inflow volumes predicted in the resource consent application.

Figure 2 of the 2024/25 Annual Report shows that the wet weather capacity was maintained at 5000m³ through the compliance period (with the exception of some occurrences immediately after heavy rainfall).

The operation of the WWTP is **compliant** with condition 11 of the consent for the 2024/25 period.

Effluent Quality

All effluent quality monitoring required by **Conditions 15** and **16** has been completed and are **compliant.**

Condition 17 states that treated effluent must meet relevant standards: for Soluble Carbonaceous five-day Biochemical Oxygen Demand (ScBOD₅), Total Suspended Solids (TSS), Faecal coliforms, Ammoniacal Nitrogen (NH₄-N), and Dissolved Reactive Phosphorus (DRP). For each contaminant there is a standard that cannot be exceeded by more than 8 out of 12 consecutive samples and standard that cannot be exceeded by more than 2 out of 12 consecutive samples.

Condition 17(d) requires the concentration of NH₄-N in pond effluent not to exceed 23 g/m³ for more than 8 out of 12 consecutive samples (Limit 1) or 30 g/m³ in more than 2 out of 12 consecutive samples (Limit 2).

During the 2024/25 compliance period NH₄-N exceeded 23 g/m³ on 8 occasions. While this is the consented maximum number of exceedances, compliance is calculated based on the preceding 12 months. This means that samples from 2023/24 must also be analysed. Based on this the annual report identifies 4/12 Level 2 exceedances in the 12-month period from August 2023-July 2024. This is a **non-compliance** with Condition 17(d).

While the WWTP met all other standards outlined in **Condition 17** the exceedances of NH₄-N means that it is **non-compliant** with **Condition 17** of the consent.

The report also goes on to explain that the WWTP undertook several works, such as de-sludging the aeration lagoon and replacing the inlet screen, which may have contributed to increased NH₄-N levels over the 2023-2024 period. These upgrades seem to have improved the compliance status of the NH₄-N at the Ōtaki WWTP.

The consent holder is also preparing to upgrade the aerators in 2025/26, which may require further isolation of the aeration lagoon.

Groundwater Quality

Condition 18 requires the consent holder, on a monthly basis, to monitor ground water levels and quality at bores 1-7 and water quality in the spring (at NZTM E1779714, N5486078) for:

- BOD5 (g/m3)
- Chloride (g/m3)
- E. coli (MPN/100ml)
- Ammonia Nitrogen (g/m3)
- Nitrate Nitrogen (g/m3)

- Nitrite Nitrogen (g/m3)
- Dissolved reactive phosphorus (g/m3)
- Total phosphorus (g/m3)
- Temperature (°C)
- Hq •
- Conductivity (μs/cm at 25oC)

The data has been collected for the seven bores plus the spring for each of the above parameters. All monitoring was undertaken as required and therefore the operation of the Ōtaki WWTP is **compliant** with **Condition 18** of the consent.

Condition 19 states that the water quality samples from bores 4 and 5 should not exceed 100 MPN/100ml of *E. coli* or 11.3 g/m³ for Soluble Inorganic Nitrogen. The 2023-2024 Annual Report shows that levels were not exceeded at either location during this monitoring period, so KCDC is **compliant** with this condition of the consent.

Condition 21 requires the consent holder to monitor water quality data from bores 4, 5 and the surface spring for contaminant trigger levels of:

- Total Nitrogen (11.3 g/m3)
- Dissolved Reactive Phosphorus (0.1 g/m3)
- E. coli (100 MPN/100ml)

The 2024-2025 Annual Report shows that levels of Dissolved Reactive Phosphorus (DRP), levels exceed the trigger limit (0.1 g/m³) at both bore 4 and 5 during the 2024/25 compliance period. This is consistent with the results from previous compliance monitoring periods. I also note that the E. Coli trigger limit is exceeded in the December 2024 and January 2025 monitoring rounds. Given this exceedance did not occur over 3 consecutive monitoring rounds an investigation is not required for E. Coli at the spring.

To address the DRP exceedances the consent holder has completed works to line the aeration lagoon. Further proposed upgrades include:

- upgrading the discharge laterals to a sprinkler system to improve spread; and
- improving the soil condition on the LDTA.

Condition 21 requires the consent holder to submit a report to the GWRC within 40 working days should the results from water quality monitoring exceed the contaminant trigger levels on three consecutive monitoring rounds.

GWRC received a report written by Stantec New Zealand Limited assessing the DRP exceedances on 17 November 2023. The report claims that the exceedances of DRP is due to the LDTA being saturated with DRP and thus the ability for the site to uptake DRP is reduced. The consent holder is continuing to work with Stantec and GWRC to further investigate the exceedances of DRP and implement solutions for the issue.

Although *E. Coli* trigger levels were reached during the monitoring period and Dissolved Reactive Phosphorus levels continue to be a problem, the annual report shows that the monitoring and reporting required by

Condition 21 has been completed (albeit not in this compliance period) thus the WWTP is **compliant** with this condition.

Performance and Maintenance of the Distribution System

Condition 24 relates to the maintenance and performance of the effluent distribution system. During the investigation into the exceedances of DRP it was identified that the LDTA was not operating at full efficiency. **Condition 24** states that the consent holder needs to ensure that:

"effluent is applied to no less than 75% of the nominated discharge area, with variability between areas over a rolling 12-month period not exceeding 25%".

The 2024-2025 Annual Report states that the current system is discharging to only approximately 30% coverage of the nominated discharge area. This is **non-compliant** with **condition 24** of the consent.

The annual report states that the planned upgrade will bring the coverage up to nearly 85 -90%.

Community Liaison Group, Complaints, and Incidents

Condition 40 requires KCDC to set up a community liaison group (CLG) and hold a meeting annually. KCDC hosted a CLG in November 2024. This is **compliant** with **condition 40**.

Incident Notifications

Condition 42 states that the consent holder needs to notify GWRC of any NH_4 -H exceedances within 24 hours of the incident or provide an incident report within 7 days. The Annual Report sets out that there were no incidents to report in 2024/25. Based on this, the operation of the \bar{O} taki **WWTP** is **compliant** with **condition 42** of the consent.

Capital works and upgrades:

Since the last compliance report was issued by Greater Wellington. The consent holder has commenced the following projects at the Ōtaki WWTP:

- Concrete lining of the aeration lagoon completed. These works will prevent soakage into groundwater and contamination from the lagoon, including DRP.
- Installed a new weather monitoring station. The purpose of the weather monitoring station is to collect
 data on wind direction and speed to help prevent inadvertent operation of the outer cells to avoid any
 exposure of spray drift due in high wind conditions.
- Completing additional perimeter planting of the LDTA.
- Procuring services for the aerator upgrades in the aeration lagoon.
- Preparing for additional testing of the new sprinkler discharge system to further assess potential spray drift effects from the discharge.
- Investigating options for improving the soil on the LDTA, including additives and planting.

Further to this, the 2024/25 Annual Report sets out that the following works will be implemented in the 2025/26 compliance period:

- Upgrading the aerators in the aeration lagoon.
- Final testing of the proposed sprinkler system to confirm potential spray drift effects and mitigation strategies to support the resource consent application. If granted, the Council will upgrade the discharge laterals in 2025/26 as per the resource consent and confident of achieving the discharge spread to near 100% of the LDTA cell area.

Complete investigations on LDTA improvements in liaison with NHoO and undertake capital works to improve the LDTA, subject to resource consent with GWRC.

Conclusion:

Dissolved Reactive Phosphorus levels were exceeded during this compliance period. Exceedances of DRP have been a regular occurrence since 2016.

The exceedance of NH₄-H was only at the beginning of this compliance period and has since been addressed.

Please note that the Greater Wellington Regional Council (GWRC) 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.

If you have any questions about compliance monitoring of your consent, or this compliance assessment report, please contact me on 021 1919275 to discuss.

Sincerely,

Joshua Knowles

Senior Resource Advisor Environmental Regulation

GWRC 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

MINOR 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 GWRC.	
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 GWRC.

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 GWRC monitoring the environment that relates to your activity.

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