

Compliance monitoring assessment

Consent No:	WGN080003 [26182] [26183] [31505] [35047] WGN960094 [1471]	Date:01 December 2023	Monitoring officer: Joshua Knowles
Activity:	To discharge treated and milli-screened wastewater to the coast from the Moa Point Wastewater Treatment Plant during various weather conditions, and associated discharges to air and infrastructure in the coastal marine area.		
Consents:	<p>Discharge and overflow consents associated with the operation of the Moa Point Wastewater Treatment Plant.</p> <p>WGN080003 [31505] Discharge permit allows the continuous discharge of treated effluent from Moa Point WWTP via the 1.8km submarine outfall pipeline.</p> <p>WGN080003 [35047] Discharge permit allows the discharge of mixed disinfected secondary treated and milli-screened wastewater to the coastal marine area during and/or immediately after heavy rainfall where inflow to the WWTP exceeds 3000 litres per second.</p> <p>WGN080003 [26182] The Moa Point WWTP has a 1.87k subsea main outfall pipeline that discharges the treated wastewater from the Moa Point WWTP to the Wellington South Coast. This pipeline is consented as a structure within the coastal marine area.</p> <p>WGN080003 [26183] Discharge permit permits the emissions to air from the Moa Point WWTP.</p> <p>WGN960094 [1471] Discharge to air from the operation of a wastewater pumping station.</p>		

Your compliance rating

This compliance report covers the period from 1 July 2022 through to 30 June 2023. Your compliance rating is below.

[26182]		FULL COMPLIANCE All conditions met – well done! No further action required
[26183], [1471]		LOW RISK NON-COMPLIANCE Most conditions met. Some action may be required
[31505], [35047],		SIGNIFICANT NON-COMPLIANCE Many condition(s) not met. Immediate action required (see comments below)

Overall compliance summary for Moa Point WWTP:

<p>POOR</p> <p>★☆☆☆</p>	<p>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.</p>
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Comments

Summary of Non-compliances

The major ongoing issues at the Moa Point Wastewater Treatment Plant are:

- Non-compliant effluent quality, all three effluent quality parameters (faecal coliforms, total suspended solids and BOD₅) set in condition 10 of WGN080003 [31505] were non-compliant in this reporting period. A please explain letter was issued on 12 October 2023 in respect to this matter, and a response was received from WWL on 3 November 2023.
- There were 19 non-compliant bypass discharges, during this reporting period.
 - o 17 of these non-compliant bypasses were the result of Clarifier 1 being offline for repair between February 2022 and 21 April 2023. Having Clarifier 1 offline meant that the inflow volume before a bypass discharge occurs has been reduced from 3000 l/s to 2200 l/s. Resulting in non-compliant effluent discharges when inflows exceed 2200l/s.
 - o 1 non-compliant bypass (5 February 2023) was the result of a UV failure caused by smoke damage from a fire at the wastewater treatment plant.
 - o 1 non-compliant bypass was the result of reduced capacity of the inlet pumpstation. Only 8 out of 10 pumps were operating. This resulted in a short outfall discharge.

A 'to do' abatement notice was issued on 20 October 2023 and amended on 21 November 2023 to direct the phase 1 inlet pump station works to be completed by 01 December 2023.

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

At the time of issuing this compliance report Veolia, Wellington Water and Wellington City Council have II been issued with two infringement notices for non-compliant effluent quality at various times between 23 September 2022 to 11 November 2023.

WGN080003 [31505] continuous discharge of treated effluent to the CMA

Condition 5 of this consent requires a community group liaison (CLG) meeting annually, a CLG meeting was held on 22 March 2023, and meeting minutes were provided. This is compliant with condition 5.

The flow rate and volume monitoring data required by **Condition 6** of this consent was provided with the WWL Annual Resource Consent Report and quarterly reports. The annual report sets out that there was a discrepancy between inflow and outflow data during this period, and says that this has now been resolved.

Required Action: please outline the duration of time during which the inflow and outflow discrepancy was occurring.

Condition 9 requires daily samples of suspended solids, 5-day carbonaceous biochemical oxygen demand (cBOD5) and faecal coliforms. These results were provided in the quarterly reports and are compliant with **condition 12**.

Condition 10 of this consent sets limits on the concentration of Suspended Solids, BOD₅, and Faecal coliforms present in the treated effluent that is discharged out of the long outfall pipeline. This condition sets limits for each of these contaminants based on:

- the geometric mean of 90 consecutive daily samples; and
- a limit that no more than 10% of 90 consecutive sample results shall exceed (90th percentile limit).

The condition has been recorded as **significantly non-compliant** during this compliance period. Over the course of this compliance period, the following durations of non-compliance with these limits were recorded:

Effluent cBOD₅:

The Effluent 90-day rolling cBOD5 Geometric Mean was non-compliant with the compliance limit of 20 g/m³ from 29th October 2022 to 17th January 2023.

The Effluent 90-day rolling cBOD5 90th percentile was non-compliant with the compliance limit of 45 g/m³ from 28th September 2022 to 16th February 2023.

Effluent Total Suspended Solids (TSS):

The Effluent 90-day rolling TSS Geometric Mean was non-compliant with the compliance limit of 30g/m³ from 16th October 2022 to 21st February 2023.

The Effluent 90-day rolling TSS 90th percentile was non-compliant with the compliance limit of 68 g/m³ from 21st September to 27th February 2023.

Effluent Faecal Coliform:

The Effluent 90-day rolling Faecal Coliform Geometric Mean was non-compliant with the compliance limit of 200 cfu/100 mL from:

- 29th November 2022 to 20th December 2022
- 3rd June 2023 to 21st June 2023

The Effluent 90-day rolling Faecal Coliform Percentile Limit was non-compliant with the compliance limit of 950 cfu/100 mL from:

- 23rd September 2022 to 26th January 2023
- 19th April to 25th April 2023
- 10th May to 30 June 2023

Conclusion

You have received a rating of significant non-compliance for these effluent quality results, which exceed the limits stated in **condition 10**.

At the time of issuing this compliance report Veolia, Wellington Water and Wellington City Council have all been issued with two infringement notices for non-compliant effluent quality at various times between 23 September 2022 to 11 November 2023.

Condition 11 of this consent requires the consent holder to obtain a sample of the treated wastewater discharged from the treatment plant to the outfall and analyse that sample for Total arsenic Total cadmium Total chromium Total copper Total lead Total mercury Total nickel Total zinc Phenol Cyanide as CN, pH Ammoniacal Nitrogen Oil and Grease. The Annual Resource Consent Report provided by WWL provides the results of these samples and demonstrates that the results are all within the consent parameters in condition 11, therefore, this is compliant.

Condition 13 requires the consent holder to notify the manager of any effluent quality limit exceedances. GW were notified of the above non-compliances of conditions 10 and 11. WWL, Veolia and Greater Wellington Regional Council have regular monthly review meetings to discuss the compliance concerns at Moa Point WWTP.

Condition 14 states that the discharge shall not result in certain effects beyond 100-metre radius of the discharge point. The quarterly reports state that these effects were not reported.

Condition 18 requires the permit holder to keep a record of any complaints that are received. The quarterly reports state that no complaints were received.

Condition 19 requires quarterly monitoring reports to be submitted to the manager, environmental regulation. These were provided.

Condition 20 requires an annual report, this was provided. The content of this report is much more thorough than in previous annual reports, and is considered compliant with the requirements of this condition.

Wet weather overflows WGN080003 [35047]

Condition 2 requires that this permit is only exercised when the wastewater inflow exceeds 3000 litres per second (l/s).

- There were 19 non-compliant bypass discharges, during this reporting period where a bypass occurred, and the 3000 l/s threshold was not met.

- 17 of these non-compliant bypasses were the result of a clarifier being offline for repair between February 2022 and 21 April 2023. Having Clarifier 1 offline meant that the inflow volume before a bypass discharge occurs has been reduced from 3000 l/s to 2200 l/s. Resulting in non-compliant effluent discharges when inflows exceed 2200l/s.
- 1 non-compliant bypass (5 February 2023) was the result of a UV failure caused by smoke damage from a fire at the wastewater treatment plant.
- 1 non-compliant bypass was the result of reduced capacity of the inlet pumpstation. Only 8 out of 10 pumps were operating. This resulted in a short outfall discharge.

This is significantly non-compliant with WGN080003 [35047].

Condition 6 requires that interested parties are notified of a bypass event as soon as practicable and at least within 12 hours of the discharge.

GWRC received notifications for all of the identified discharges. Please continue to ensure interested parties are notified as soon as practicable going forward.

Condition 7 requires signage after a discharge event at Dorrie Leslie Park, Tarakena Bay and Lyall Bay. The quarterly reports stated that signs were opened.

Condition 8 requires the permit holder to monitor and record the flow rate, total volume and duration of any bypass discharge from the Moa Point Wastewater Treatment Plant to the long outfall, and calculate and record a dilution ratio. This has been provided in the annual report and the monitoring is compliant with condition 8.

Condition 9 requires the consent holder to keep an incident log, this has not been requested by GWRC.

Condition 10 of this consent requires the consent holder to carry out shoreline monitoring following each bypass. The sampling has been provided in Appendix II of the annual report.

Condition 13 of this consent requires the consent holder to submit a report detailing what steps have been taken in the reporting year and what steps are proposed to be undertaken in the future to reduce infiltration and stormwater ingress into the Wellington City sewerage network. The Inflow and Infiltration report was submitted as appendix III of the WWL Annual Resource Consent Report, this is compliant with condition 13.

Condition 16 requires the permit holder to provide suitable wastewater sampling locations for monitoring the quality of bypass flows and secondary treated wastewater. Results were provided in quarterly reports.

Condition 18 requires that a record of complaints received is kept. No complaints were reported.

Condition 19 requires that an annual analysis and assessment report is provided to summarise compliance with the conditions of this permit [35047]. Pages 30 – 31 of the Annual Report provided by WWL addresses the requirements of this condition.

Outfall Pipeline WGN080003 [26182]

The Moa Point WWTP has a 1.87 km subsea main outfall pipeline that discharges the treated wastewater from the Moa Point WWTP to the Wellington South Coast. This pipeline is consented as a structure within the coastal marine area.

Condition 3 of WGN080003 [26182] requires the consent holder to undertake an annual physical assessment of the condition of the outfall pipeline. The assessment was carried out in March 2023. This assessment report can be found in Appendix iii: Outfall Pipeline Inspection Report of the WWL Annual Resource Consent Report. This is compliant.

This report concludes that loss of pipeline corrosion protection from existing sacrificial anode CP system is likely within next 2 to 4 years.

Required action: By 22 December 2023 please provide an update of the work being done to address this and ensure that the pipeline remains fit for purpose.

Discharge to air WGN080003 [26183]

Discharge permit WGN080003 [26183] permits the emissions to air from the Moa Point WWTP.

Condition 2 requires that a maximum volume of deodorised air discharged shall not exceed 25,000 litres per second, 90,000 cubic metres per hour or 2,160,000 cubic metres per day. No evidence to show compliance with this condition was provided, this is technically non-compliant.

Required Action: for future annual reports please demonstrate if compliance with this condition has been achieved.

Condition 7 of this consent requires the consent holder monitor air quality in the vicinity of the plant to confirm the absence of faecal coliforms and salmonella originating from the plant at least once every 6 months. The ambient Microbe Monitoring was performed at the Moa Point WWTP in August 2022 and February 2023. This testing confirmed the absence of faecal coliforms and salmonella. This is compliant with condition 7.

Condition 8 of this consent requires Hydrogen Sulphide (H₂S) and reduced Sulphur compounds shall be monitored in the deodorized gas discharge. The results of this monitoring were provided in the WWL Annual Resource Consent Report. Therefore, the consent holder is compliant with this condition. These results show that for the April 2023 sample, the plant failed to comply with the Total Reduced Sulphur (TRS) requirement for air discharge quality set in condition 9 of this consent.

The WWL annual report sets out that the TRS failure in April 2023 was due to the chemical scrubber system requiring maintenance. After the issue had been resolved, results were consistent with previous observations.

Condition 13 requires the permit holder to keep a permanent record of any complaints received alleging adverse effects from the permit holders' operations. This was provided as Appendix VIII. 9 complaints were received by the permit holder in this compliance period. This condition is compliant.

Condition 14 requires an annual monitoring report including an assessment against:

- a) A summary of all monitoring undertaken in accordance with the conditions of this permit and a critical analysis of the information in terms of compliance and adverse environmental effects
- b) A comparison of data with previously collected data in order to identify any emerging trends
- c) Comments on compliance with the conditions of this permit
- d) Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this permit
- e) Any measures that have been undertaken, to improve the environmental performance of the wastewater treatment and disposal system
- f) A copy of any complaints recorded (in accordance with condition 13 of this permit) during the year
- g) Outcomes from the implementation of the Odour Management Plan
- h) Any other issues considered important by the permit holder.

This assessment was provided in the annual report.

Discharge to air from the operation of a wastewater pumping station WGN960094 [1471]

Condition 8 requires that the pumping station and chemical scrubber are operated in accordance with the manual provided for condition 7. This was confirmed in the WWL Annual Report.

Condition 11 of this consent requires that the pumping station stack shall be tested monthly for hydrogen sulphide (H₂S) and total reduced sulphur compounds (TRS). The concentrations shall not exceed 0.01 ppm and 0.05 ppm respectively. This has been provided in the quarterly reports, and is compliant.

GWRC has not requested records of pH and Oxidation Reduction potential.

Condition 12 requires that prior to any maintenance work being carried out, the operator shall notify GWRC. Notifications were provided to GWRC, complying with condition 12.

Condition 14 requires that any incident that could have caused or has caused adverse effects on the environment at or beyond the boundary, shall be notified to GWRC within 24 hours.

No assessment of this was provided. Please provide this assessment going forward.

Summary

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.

GWRC compliance rating system

	<p>FULL COMPLIANCE – All conditions met – well done! No further action required</p> <ul style="list-style-type: none"> All conditions assessed are met including supplying information and/or records
	<p>LOW RISK NON-COMPLIANCE – Most conditions met. Some action may be required</p> <ul style="list-style-type: none"> 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)
	<p>MODERATE NON-COMPLIANCE – Some condition(s) not met. Action required</p> <ul style="list-style-type: none"> 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
	<p>SIGNIFICANT NON-COMPLIANCE – Many condition(s) not met. Immediate action required</p> <ul style="list-style-type: none"> Breach of conditions where there are significant environmental consequences and/or high risk of adverse environmental effects

<p>VERY GOOD</p> <p>★★★★★</p>	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.
<p>GOOD</p> <p>★★★★☆</p>	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.
<p>FAIR</p> <p>★★★☆☆</p>	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.
<p>POOR</p> <p>★☆☆☆☆</p>	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*.