

Compliance monitoring assessment


Consent No:	WGN080003 [26182] [26183] [31505] [35047] WGN960094 [1471]	Date: 01 March 2023	Monitoring officer: Joseph Edmonds
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 2021 through to 30 June 2022. 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 set in condition 10 of WGN080003 [31505] were non-compliant in this reporting period. This continued non-compliance is currently under investigation.
- On 18 January 2022, a slew bearing on clarifier 3 failed, resulting in a reduced capacity at the plant. The volume before a bypass discharge occurs has been reduced from 3000 l/s to 2200 l/s. Consequently, there were 4 non-compliant bypass discharges out of the long outfall pipe and 2 non-compliant discharges out of the short outfall, during this reporting period.

Further investigation into this non-compliance, future planned non-compliance and ongoing asset maintenance issues is being conducted by GWRC.

There are various conditions that are technically non-compliant, this is often because the appropriate evidence or assessment has not been received in the annual or quarterly reports. In future, please ensure this information is included.

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.

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

The rate of discharge of treated wastewater entering the submarine outfall pipeline was non-compliant with the 260,000 m³ limit set under **condition 2** on 06 December 2021. This was caused by an extreme wet weather event in the catchment, resulting in 270 060 m³ daily total volume discharged.

Condition 5 of this consent requires a community group liaison (CLG) meeting annually, a CLG meeting was held on 9th September 2021, 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.

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).

Over the course of this compliance period, the following durations of non-compliance with these limits were recorded:

BOD5:

BOD5 90 Day running 90th percentile was **non-compliant** with the compliance limit of 45g/m³ from:

- 01 July 2021 until 03 September 2021, between 8 – 9 September, 13 – 17 September and 20 September until 27 February 2022.
- In summary, the BOD5 was non-compliant between 01 July 2021 and 27 February 2022 apart from 9 days of compliance.

The BOD5 Geometric Mean was **non-compliant** with the compliance limit of 20g/m³ from:

- 12 November 2021 until 02 February 2022.

Suspended Solids:

Suspended Solids 90th Percentile was **non-compliant** with the compliance limit of 68g/m³ between:

- 01 July 2021 – 09 March 2022.

The suspended Solids Geometric Mean was **non-compliant** with the compliance limit of 30g/m³ from

- 01 July 2021 – 23 August 2021 and from 24 October 2021 – 26 February 2022.

Faecal coliforms

The Faecal Coliforms 90th percentile results were **non-compliant** with the compliance limit of 950 cfu from:

- 08 August 2021 – 17 August 2021 and from 08 September 2021 – 28 April 2022.

The Faecal Coliforms Geometric Mean results were **non-compliant** with the compliance limit of 200 cfu from:

- 13 November 2021 until 05 April 2022.

Conclusion

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

A Please explain letter was sent to WWL on 03 March 2022, requesting an explanation in relation to the discharge of non-compliant effluent quality. A response was received from Stantec on behalf of WWL on 08 April 2022, this response was considered in GWRC's investigations. For completeness, on 28 September 2022 infringement notices and a formal warning for the discharge of non-compliant effluent quality were issued to WCC, WWL and Veolia (Notice Numbers: I871 – I876).

The continued non-compliance with effluent quality results is currently under investigation.

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 additional contaminants. 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. The annual report did not demonstrate this was provided; therefore, I consider this to be technically non-compliant.

Condition 13 also requires the likely reason for exceedances and measures taken by the consent holder to remedy the situation. An explanation was provided in the July – September 2021 quarterly report.

In future, please provide evidence of notification to the manager.

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. No detail on how this was assessed was provided.

In future, please explain how this conclusion was reached.

Condition 15 requires that in the event of a treatment failure that would result in a deterioration of effluent quality and that may cause a breach in condition 14, the permit holder should advise the manager, of environmental regulation as soon as possible.

I consider that the clarifier failure meets this definition. Regional Council was told about this failure. In future, please provide a summary of these events and notifications to the manager.

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, however, the reasons for non-compliance and actions that were undertaken to remedy non-compliance were not adequate. This is a requirement of condition 19c and is therefore non-compliant. Condition 19 b requires an assessment of compliance with condition 14, I do not consider the assessments provided in the quarterly reports to be adequate.

Condition 20 requires an annual report, this was provided. The content of this report is light on detail and doesn't meet the following requirements:

- Condition 20 a – I do not consider an adequate critique of compliance and adverse environmental effects has been provided. The assessment of conditions is often light on detail.
- Condition 20 d) – the reasons for non-compliance and difficulties in reaching compliance is not clear enough.
- Condition 20 e) – the measures taken to improve environmental performance are not clear enough.

Overall, this is non-compliant.

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). On 18 January 2022, a slew bearing on clarifier 3 broke, resulting in this clarifier being shut down and not accepting any of the flow. The result is that only 2 of the 3 clarifiers have been operational from 18 January until at least 18 January 2023. Consequently, the inflow limit before screened wastewater is discharged out of the main outfall pipe was reduced by WWL to 2200 (l/s), this is non-compliant with **condition 2**.

- There were 4 bypass discharges in this annual reporting period, there were also two non-compliant discharges out of the short outfall.

This is significantly non-compliant with WGN080003 [35047] and is still under investigation.

Condition 5 requires that should a bypass occur, the permit holder shall notify the Manager, Environmental Regulation, the pollution control team, and the medical officer of health as soon as practicable and at least within 12 hours of the discharge occurring. The notification shall occur immediately when the plant is staffed.

Please ensure these notifications are sent as soon as practicable going forward.

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.

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 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 vi 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 17 is no longer enforceable because 7 bypass events and 5 years since the granting of the consent have passed.

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].

I do not consider this assessment to cover the requirements, particularly:

- Condition 19 a) I do not consider that an adequate critique of compliance with conditions and adverse effects was provided. This summary should clearly relate to the monitoring undertaken for this permit [35047] and must relate to compliance with conditions and adverse environmental effects.
- Condition 19 b) the analysis of the annual average monitoring parameters is inadequate.
- Condition 19 c) requires comments on compliance with the conditions of this permit, this has not been provided.
- Condition 19 d) requires reasons for non-compliance and difficulties in achieving compliance. It is not adequate to list the 6 events, please provide the reasons and difficulties.
- Condition 19 e) requires measures undertaken to improve environmental performance. The report stated that WWL and Veolia were fast-tracking repairs of clarifier 3. Is this the only measure that was undertaken? This measure has been unsuccessful as the clarifier has been broken for over a year.

The reporting conducted under condition 19 is technically non-compliant. Please ensure that this assessment is much more comprehensive going forward.

Outfall Pipeline WGN080003 [26182]

The Moa Point WWTP has a 1.87km 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. This assessment report can be found in Appendix iii: Outfall Pipeline Inspection Report of the WWL Annual Resource Consent Report. This is compliant.

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.

Condition 5 requires that prior to any maintenance work being carried out on the Moa Point Wastewater Treatment Plant and associated control equipment, the operator shall notify the Manager, Environmental Regulation, Wellington Regional Council. The Moa Point Community Liaison Group (CLG), Residents of Moa Point Road and Kekerenga Street (that request to be notified) shall be notified of the maintenance work that is to be carried out prior to work commencing.

Notifications of works at the inlet pump station were received. It is not clear whether other maintenance work which required notification was carried out.

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 on 23 August 2021 and 21 February 2022. 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 other 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 and confirmed that the Hydrogen Sulphide (H₂S) and other reduced Sulphur compounds were within the compliance limits set by **condition 9** of this resource consent.

In accordance with **condition 10** of this resource consent a smoke test was performed on the WWTP on 03 November 2022.

Condition 12 requires that any incident that may result in adverse effects on the environment beyond the boundary shall be notified to GWRC as soon as practicable, but within 24 hours.

An assessment of any incidents that met the definition of condition 12 was not provided. I consider that the breakage of clarifier 3 meets this definition. Therefore, this is technically non-compliant.

Condition 13 requires the permit holder to keep a permanent record of any complaints received alleging adverse effects from the permit holders' operations.

1 complaint was received by the permit holder on 11 February 2022.

Condition 14 requires an annual monitoring report including an assessment against certain criteria. This 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. Confirmation of this was not provided in the 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 0.01ppm and 0.05ppm respectively. This has been provided in the quarterly reports.

The October – December 2021 quarterly report noted an issue with the H₂S analyser, Veolia is trying to determine what is causing the faults. The January – March 2022 report noted an instrumentation error, it is not clear whether this has now been fixed.

Please provide an update on the current operation of the H₂S monitoring system.

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 13 requires the consent holder to keep a record of any complaints they receive, these shall be forwarded to the Manager, Environmental Regulation within 24 hours.

Appendix v of the annual report contains the complaints received. This is an odour complaint and should have been clearly referenced in the quarterly and annual reports. Please make sure you do this going forward.

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.

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>	<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>
<p>GOOD</p> <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>
<p>FAIR</p> <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>
<p>POOR</p> <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.</p>

Consent monitoring charges

<p>Each consent receives a consent monitoring charge from GWRC.</p> <p>This charge is made up of three parts:</p> <ul style="list-style-type: none"> A <i>customer service charge</i> that covers the administrative cost of your consent(s); A <i>compliance monitoring charge</i> 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 <i>State of the Environment (SoE) charge</i> that covers a proportion of the cost of GWRC monitoring the environment that relates to your activity. <p>For further information on consent monitoring charges, please see our <i>Resource Management Charging Policy</i>.</p>
