


## Compliance monitoring assessment

Consent No:	WGN060283	Date: 15 February 2024	Monitoring officer: Joshua Knowles
Location:	Western Wastewater Treatment Plant, South Karori Road, Karori, Wellington		
Period:	01 July 2022 to 30 June 2023		
Consents:	<p><b>WGN020236 [22098]</b> Coastal permit to occupy the coastal marine area in respect of the Western WWTP's sewerage outfall structure.</p> <p><b>WGN060283 [25227]</b> Coastal permit to occasionally discharge milli-screened (partially treated) effluent to the Wellington South Coast coastal marine area (Cook Strait in the vicinity of the Karori Stream Mouth) via an existing outfall during significant weather events.</p> <p><b>WGN060283 [25230]</b> Discharge permit to discharge contaminants to air from the operation of the Western WWTP.</p> <p><b>WGN060283 [35255]</b> Coastal permit to continuously discharge disinfected secondary (fully treated) effluent to the Wellington South Coast coastal marine area (Cook Strait in the vicinity of the Karori Stream Mouth) via an existing outfall.</p> <p><b>WGN060283 [35674]</b> Discharge permit to occasionally discharge secondary treated and disinfected wastewater from the Western Wastewater Treatment Plant to Karori Stream during events when the stormwater tank is full and the flow to the plant exceeds 190 L/s.</p> <p><b>WGN160340 [34178]</b> Land use consent to undertake works in the bed of the Karori Stream to enable the maintenance of the Western Wellington Wastewater Treatment Plant Main Outfall Pipe including;</p> <ul style="list-style-type: none"> <li>• Clearance of slip or flood debris;</li> <li>• Repairing scoured sections of stream bed and banks which affect the pipeline stability;</li> <li>• Replacement of existing parts of the pipeline and associated structures.</li> <li>• Repairs to fords and river crossings; and</li> <li>• Disturbance and redistribution of bed material, including deposition of redistribution material on the bed of the stream to create access and works areas for machinery to safely access the pipeline.</li> </ul> <p>Including any deposition, disturbance or discharge of sediment from bed or bank of the stream to the Karori Stream during maintenance activities.</p> <p><b>WGN160340 [34179]</b> Water permit to temporarily and permanently divert the flow of the Karori Stream to enable the maintenance of the Western Wellington Wastewater Treatment Plant Main Outfall Pipe including;</p> <ul style="list-style-type: none"> <li>• The diversion of water during maintenance activities; and</li> </ul> <p>The diversion of water to prevent the scour of the bed and banks of the stream where is threatens the stability of the pipeline.</p> <p><b>WGN060283 [35675]</b> Discharge permit to occasionally discharge milli-screened and settled wastewater from the Western Wastewater Treatment Plant to Karori Stream during events when the stormwater tank is full and the flow to the plant exceeds 390 L/s.</p>		

## Your compliance rating

[22098] [25230] [34178] [34179] [35675] [35674]		<b>FULL COMPLIANCE</b> All conditions met – well done! No further action required
		<b>MODERATE NON-COMPLIANCE</b> Some condition(s) not met. Action required (see comments below)
[35255] [25227]		<b>SIGNIFICANT NON-COMPLIANCE</b> Many condition(s) not met. Immediate action required (see comments below)

*Overall compliance summary for Western Wastewater Treatment Plant and outfall pipeline:*

<b>FAIR</b> 	Overall fair management of site and consents. The consent holder struggled to meet aspects of their consent requirements. There were more than occasional breaches of consent conditions that manage environmental effects and/or issues with meeting administrative related consent conditions.
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## Comments

I have summarised my overall compliance assessment for the Western Wastewater Treatment Plant and outfall pipeline over the 2022-2023 compliance year below:

### **Operational discharge of treated wastewater to coastal waters [35255]:**

#### **Continuous discharge effluent volume:**

**Condition 2** of this consent requires that the rate of discharge shall not exceed 200 litres per second (L/s) or 17,280 cubic metres per day (m<sup>3</sup>/day). The data provided in the annual report shows that the volume of effluent discharged from the Western WWTP did not exceed the limits set in condition 2 of this report. This condition is compliant.

**Condition 3** of this consent requires the discharge point shall be from the existing outfall, at or about NZMS 260: R27; 504.836.

In February 2022, the Western Wastewater Treatment Plant Outfall Pipeline collapsed following several heavy rainfall events. GWRC was updated on this breakage and the remedial works undertaken. Due to the breakage of the outfall pipeline the wastewater from this plant has been discharging to the Karori Stream rather than to the designated discharge point between the following dates within this compliance period:

- 1 July – 6 July 2022.
- August 2022 (uncertain of exact date) – 30 June 2023 (and ongoing).

Significant work has been done to repair this broken pipeline including the over pumping and initial fix which was in place between 6 July and the second major slip in August 2023.

It is noted that there have been difficulties with putting in place a permanent solution to this problem. Please continue to work on a permanent solution as a priority.

This is a major non-compliance and breach of s15(1)(a) of the RMA which states that *“No person may discharge any contaminant or water into water unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent”*.

**Condition 5** requires a community liaison group (CLG) to be held annually. A CLG meeting was held on 14 December 2022, this is compliant with the requirement of condition 5.

**Condition 6** of this consent requires the consent holder to continuously monitor and record the flow rate and volume of treated wastewater entering the outfall pipeline and the flow rate and volume of the wastewater discharged to the South Coast.

Appendix I of the Quarterly reports contain the treatment plant effluent flow rate, however, due to the breakage at the main outfall pipeline, the flow of wastewater has not been reaching the designated discharge point on the South Coast, therefore the flow rate at the south coast has not been recorded or submitted. This is a technical non-compliance.

**Conditions 10** sets effluent quality limits on the geometric mean and the 80th percentile for BOD, Faecal Coliforms, and Suspended Solids within the discharged effluent.

For the 2022-2023 compliance period the effluent quality was fully compliant with the parameters set in condition 10.

For the 2022-2023 compliance period abatement notices A992, A993, and A994 are being complied with. This compliance is an important mitigation of the unauthorised discharge of the treated wastewater to the Karori Stream.

**Condition 16** requires the consent holder to collect representative coastal water samples from knee-deep water at four locations close to the outlet, once each month for five months from November to March inclusive (the bathing season) each year. The WWL Annual report provides the results of this monitoring. Therefore, this condition was complied with.

Given the treated wastewater was not being discharged to the coastal discharge point at the times these samples were taken, the results are of limited value. As part of the works to fix of the pipeline, a sampling regime has been put in place to take water quality samples in the Karori Stream upstream, downstream and at the discharge location throughout the duration of the unauthorised discharge of treated wastewater to the Karori Stream. The results of this sampling is shared periodically with GWRC.

**Condition 23** requires an annual report to be submitted on the condition of the main outfall pipeline. On 01 August 2023, the Western WWTP Annual Outfall pipeline report was provided by WWL to GWRC. The submission of this report meets the requirements of condition 23.

The annual report outlined the repairs which we carried out between 1<sup>st</sup> July 2022 to 30<sup>th</sup> June 2023. During the reporting period 8 of the 13 leaks found in the previous outfall pipe report were repaired, found not to be leaking or ruled out through natural runoff. The planned works scheduled for between 1 July 2023 to 30 June 2024 were also communicated. Therefore, this condition was complied with.

**Condition 25** requires the consent holder to collect representative water samples from the Karori Stream at four locations, once every fortnight for the duration of this permit. The results of these samples were provided in Appendix V of the annual report. Therefore, this condition was complied with.

### **Overflow discharge permit WGN060283 [25227] - milli-screened (partially treated) effluent to the CMA.**

**Condition 2** states the discharge of milli-screened (partially treated) effluent shall only be exercised when the sewage inflow to the treatment plant exceeds 190 litres per second (L/s), and the 1000 m<sup>3</sup> storage tank is full. The Annual Report provided by the consent holder sets out that there were 9 bypass events in the relevant compliance period and that the requirements for this condition were met.

However, these discharges have gone to the Karori Stream rather than to the designated coastal outfall. The bypasses were not consented under this consent and contravene s15(1)(a) of the RMA which states that “*No person may discharge any contaminant or water into water unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent*”.

**Condition 5** requires that any bypasses under this consent are recorded and sent to GWRC. The records of bypasses were provided to GWRC in Table 8 of the annual report, therefore, this condition was compliant.

**Condition 6** requires the consent holder to provide rainfall data from Karori Reservoir rain-gauge for each of the 7 days preceding each overflow event. The consent holder provided this data as Figure 9 - 17 of the annual report, therefore, this condition was complied with.

**Condition 7** requires the consent holder to carry out the effluent quality and receiving environment sampling. This was provided in Table 9 of the Annual Report, therefore, this condition was complied with.

**Condition 8** requires comprehensive sampling when a discharge lasts for more than 10 hours. Six bypasses were for longer than 10 hours, and therefore, triggered the requirements under this condition.

Health and safety reasons were cited for not collecting these results, the consent conditions state that samples shall only be collected if safe vehicular access is available and weather conditions allow for safe access to sample locations. Therefore, I consider this to be compliant with resource consent WGN060283 [25227].

**Condition 12** requires an annual Inflow and Infiltration report. This was provided in Appendix IV of the WWL Annual Report, therefore, this condition was complied with.

## **Overflow discharge permit WGN060283 [35674] – Secondary Treated and Disinfected Wastewater to the Karori Stream**

**Condition 2** of WGN060283 [35674] allows for the discharge of fully treated effluent to the Karori Stream when the sewage inflow to the treatment plant exceeds 190 litres per second (L/s), and the 1000 m<sup>3</sup> storage tank is full. There were nine discharges under this consent in the reporting period. These events had an inflow rate to the Western WWTP of greater than 190L/s and the 1000 m<sup>3</sup> storage tank was full. This condition was complied with.

**Condition 6** of WGN060283 [35674] requires the consent holder to monitor the time, flow rate, duration and total volume of each of these bypass discharges into the coastal marine area and report the results to GWRC within 10 working days of the event occurring. This was summarised in the Annual Report, the notifications were provided within 10 working days. This condition was complied with.

**Condition 7** requires data on the amount of rainfall recorded from Karori Reservoir rain-gauge for each of the 7 days preceding each overflow. This was provided in the WWL Annual Report. This condition was complied with.

**Condition 8** requires effluent quality and receiving environment sampling for events that last longer than 2 hours, this was provided in the Annual Report and analytical data sheets were provided in Appendix IV of the quarterly reports. This condition was complied with.

**Condition 9** requires two representative samples from the Karori Stream (one upstream and one downstream of the discharge) if an overflow discharge has occurred for more than 24 hours. Five events within this reporting year exceeded the 24-hour limit. A summary of these results is provided in Table 12 of the Annual Report. This condition was complied with.

**Condition 15** requires an annual Inflow and Infiltration report. This was provided in Appendix IV of the Annual Report, therefore, this condition was complied with. I note that no inflow surveys were undertaken in 2022 – 2023 Western WWTP Catchment.

## **Overflow discharge permit WGN060283 [35675]**

**Condition 2** of WGN060283 [35675] allows for the discharge milli-screened and settled wastewater from the Western Wastewater Treatment Plant to discharge into the Karori Stream when the sewage inflow to the treatment plant exceeds 390 litres per second (L/s), and the 1000 m<sup>3</sup> storage tank is full. There were five discharges during this monitoring period, all of which had an inflow greater than 390 L/s and the 1000 m<sup>3</sup> tank was full, therefore, this is compliant with condition 2.

**Condition 5** requires the consent holder to monitor and record the time flow rate, duration and total volume of each of these bypass discharges into the Karori Stream, and report the results to GWRC within 10 working days of the event occurring.

Table 13 of the Annual Report and discharge notifications detail these five events, however, the average bypass flowrate and the total volume of the bypass were not provided in this table. WWL confirmed that there is no flow meter to record the milliscreened and settled discharges as the discharge comes from a surcharging manhole. This is an on-going non-compliance that has been raised in previous compliance reports. I consider this to be a technical non-compliance with condition 5 of WGN060283 [35675].

**Required Action:** Please advise by 01 March 2024 if this non-compliance can be corrected going forwards.

**Condition 6** requires the amount of rainfall recorded from the Karori Reservoir rain-gauge for each of the 7 days preceding each overflow. This was provided in the Annual Report.

**Condition 7** requires effluent sampling of the milli-screened effluent prior to its entry into the Karori Stream. This was provided in Table 14 of the Annual Report.

### **Coastal occupation permit for outfall structure [22098]**

**Condition 2** requires an annual walkover inspection of the outfall structure. The walkover inspection was conducted on 17 November 2021. The Western WWTP Annual Outfall Pipeline Report outlined the repairs which were carried out between 01 July 2022 and 30 June 2023, including 8 of the 13 leaks identified in the previous outfall pipeline report. Therefore, this condition was complied with.

### **Discharge to air permit [25230]**

**Condition 3** requires ambient microbe monitoring biannually. Monitoring was performed at the Western WWTP October 2023 and May 2023. Monitoring confirmed the absence of Salmonella and Faecal Coliforms in the vicinity of the plant. The sampling frequency and results are compliant.

**Condition 4** requires annual biofilter monitoring and a report. The biofilter media was replaced in December 2022. However, the cells were identified as being insufficiently filled, and require a top up to ensure effective odour management.

**Required action** – By 01 March 2024 please advise a date that the media top-up will be completed.

The submission of the report and suggested actions are compliant with condition 4.

**Condition 10** requires a log of complaints received to be kept. The annual report states that no complaints were received during the 2022/2023 reporting period. GWRC has not received any odour notifications during this compliance period.

### **WGN160340 [34178] and [34179]**

WGN160340 [34178] and [34179], and subsequent changes in WGN060283 [35255], permits both land use consent to undertake works in the Karori Stream bed and water use consent to divert the flow of water temporarily and permanently. All maintenance works on the outfall pipeline are done in accordance with the associated Management and Monitoring Plan.

WWL provided the Outfall Pipeline Maintenance Report 1 July 2022 to June 30 2023. This report details the inspections and works that were carried out under WGN160340 [34178] & [34179] during this compliance period.

## **Conclusion**

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.





The major compliance issue at the Western WWTP during this compliance period is the breakage of the main outfall pipeline which is causing all wastewater discharged under the continuous discharge consent [35255] and overflow discharge consent [25227] to discharge to the Karori Stream rather than the consented discharge point into the CMA.

I appreciate the on-going work to address and repair breakage please continue to address this as a priority.

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><b>FULL COMPLIANCE – All conditions met – well done! No further action required</b></p> <ul style="list-style-type: none"> <li>All conditions assessed are met including supplying information and/or records</li> </ul>
	<p><b>LOW RISK NON-COMPLIANCE – Most conditions met. Some action may be required</b></p> <ul style="list-style-type: none"> <li>Minor breach of effects based conditions or works outside scope of consent with low risk of adverse environmental effects</li> <li>Breach of conditions which is technical in nature (eg, failure to submit monitoring report or records)</li> </ul>
	<p><b>MODERATE NON-COMPLIANCE – Some condition(s) not met. Action required</b></p> <ul style="list-style-type: none"> <li>Repeated failure to supply monitoring report or records.</li> <li>Breach of conditions where there are some environmental consequences and/or moderate risk of adverse environmental effects</li> </ul>
	<p><b>SIGNIFICANT NON-COMPLIANCE – Many condition(s) not met. Immediate action required</b></p> <ul style="list-style-type: none"> <li>Breach of conditions where there are significant environmental consequences and/or high risk of adverse environmental effects</li> </ul>

<p><b>VERY GOOD</b></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><b>GOOD</b></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><b>FAIR</b></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><b>POOR</b></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

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*.