

### Regional Wastewater Services MEETING MINUTES

Date:	12 December 2024
Subject:	Customer Liaison Group meeting – Porirua Wastewater Treatment Plant (WWTP)
Time:	18:00 – 19:30
Location:	Te Rauparaha Arena, Meeting Room 2
Attendees:	Facilitator – Andrew Freeman GWRC – Amanda O'Brien, Mel Warner, Toby Barach Veolia - Alex Phelan, Nico Robins, Wayne Murphy. WWL - Jeremy McKibbin, Blair Johnson, Joemar Cacnio, Craig Shuttleworth (Mins), Asli Crawford, Linda Lim Regional Public Health – Mike Fisher Community members and Councillors – Mike Duncan, Maree Wright, Kathleen Filo, Paula Birnie, Michelle Warshawsky, Dave Philipson, Emily Peterson, Brian Warburton, Angela Davies, Jim Mikoz +1 Holly Parekowhai +1, Sarah Miller, Glyn Hunt, Graeme Ebbett
Apologies:	Sheil Priest (WWL)

#### Welcome & Introduction by WWL

Andrew opened with a Karakia welcoming everyone to the meeting advising Health and Safety instructions, reminding attendees of the importance of respect and the spirit of engagement.

Brief introductions were made and acknowledgement and thanks passed on to the various stakeholders for their attendance.

Titahi Bay Residents Association provided Wellington Water with a document with a series of questions and statements relating to the resource consent and requested that these be included with the minutes. Wellington Water has lodged this document as an Official Information Request and will respond directly through the correct LGOIMA process. The copy of the document handed over and the official response will be available on the website when the response is provided within the required timeframe.

#### Wellington Water WWTP Compliance and Performance Update

Joemar (Senior Wastewater Operations and Asset Adviser) began with a PowerPoint presentation detailing the wastewater treatment process of the Porirua WWTP and the compliance performance. The several discharge events that had occurred during the previous reporting period (2023/24) were acknowledged and the community was reassured that the impacts of the discharges to the receiving environment would be minor.

The presentation also detailed the operational challenges the treatment plant faces as well as information on plant performance for the current financial year (July 24 – December 24).

The presentation continued advising the attendees of the plant's "Poor" performance rating in relation to the resource consents for the financial year ending 30 June 2024.

#### Project Updates

Project updates were provided on further slides in the presentation. The following was covered:

- UV Power supply Work progressing well with completion expected by January 2025
- Solids handling Upgrade, under design stage. Target Completion Date: 2028
- Odour Treatment, contract awarded. Target completion date June 2026

#### GWRC commentary

Andrew thanked Joemar for the opening segment and invited Melissa Warner (GRWC) to provide some comments from GWRC's perspective.

Mel explained to the attendees how GRWC had come to the decision to grant the plant's compliance rating as 'Poor'.

Details and reasonings for the non-compliance notices issued in the 23/24 financial year were provided e.g, Abatement and Infringement Notices.

### Questions and Feedback

Andrew invited members of the community to come forward with any questions they may have about the presentation or the plant itself. The following matters were raised and discussed:

- Members of the community would like to have the CLG as soon as the plant's annual report is available and earlier than
  December. WWL will take this onboard and will schedule the next CLG in October or November noting that GWRC's
  compliance report may not be available during the meeting. Members of the community indicated that the GWRC
  Compliance Report was not crucial to the timing of the meeting. Members of the community queried how the
  presentation on the plant's compliance mainly focuses on effluent quality, wastewater volume, discharges, and odour.
  WWL clarified that the presentation only focuses on the plant's performance on a high level with operational issues
  discussed afterwards. Moving forward WWL will ask for feedback on the community on the consent conditions they
  would like the presentation to focus on.
- It was clarified that the plant's annual consent report which is due within three months of the anniversary of the consent was granted as per the resource consent. This would mean that the annual report will be available latest by October every year.
- The community would like to see more data in terms of the plant performance. This will be investigated by WWL for presentation at the next CLG meeting.
- The community was assured that sampling is being carried out as per the resource consent provided that it is safe to do so. Members of the community queried about high pre-UV faecal coliform on 9<sup>th</sup> July. WWL clarified that pre-UV faecal coliforms are expected to be higher than what the consent allows since this is measured before disinfection happens in the UV system. The consent condition only applies to post-UV levels.
- Members of the community queried about the opening of signs during discharge events and resourcing in opening them. WWL have limited resources and not able to assign dedicated staff to open the signs. Signs are opened by Veolia immediately after treatment plant discharges and the public are notified online. Best practice is to follow LAWA advice, no swimming for 3 days after heavy rainfall.
- WWL clarified that sampling for effluent ammonia testing is taken from the treatment plant prior to the outfall pipe and then sent for analysis by Eurofins.
- WWL clarified that there are autosamplers to collect 24-hour composite samples for influent and effluent which complies with the consent.
- WWL confirmed that since end of July 2024, the Duron UV system is the duty channel, and the TAK UV system acts as a standby unit.
- Questions raised about the consent of pump stations are not the purpose of the CLG, or part of the agenda of the meeting and therefore have not been included in the minutes.
- GWRC explained the differences between the types of non-compliances issued and advised that the public can access their definition on GWRC's website. GWRC will include this as part of the next CLG meeting presentation.
- Paula provided some background on an application being developed for a pilot in Wellington that will enable the public to contribute to regional public health updates in real time. She will email details to WWL when ready.
- WWL confirmed there is no current funding in the long-term plan to build a sludge drying facility similar to the sludge minimisation project by Wellington City.

### **Closing Remarks & Actions**

Toby (GWRC) thanked the community for their input and acknowledged WWL progress made in recent years to enable to plant to become more stable for effluent quality.

Blair thanked all for attending and assured the community that Wellington Water does, and will continue, to work tirelessly to try and achieve the best possible outcomes for both the community and the receiving environment.

#### **ACTIONS**

- 1. Aim to organise the CLG earlier next year, prior to December. (Wellington Water)
- 2. Gather feedback from the community prior to the meeting on key areas that they would like to focus more and WWL will tailor the meeting based on the feedback received.
- 3. Next year's presentation to have a brief summary on what the GWRC notices mean during their segment (Wellington Water)

#### Closing Karakia

Andrew closed the meeting with a Karakia.

Attachments: Wellington Water Presentation

#### MEETING CLOSED 19:40pm

## Porirua Wastewater Treatment Plant Community Liaison Group Meeting – 12 December 2024 Wellington Water Our water, our future.





Items	Who	Indicative Timeframe
Opening Karakia	Andrew Freeman	6:00 – 6:05 pm
Meeting Opening and H&S Announcement	Andrew Freeman	6:05 – 6:10 pm
Wellington Water WWTP Compliance and Performance Update	Joemar Cacnio	6:10-6:30 pm
Project Updates	Joemar Cacnio/ Asli Crawford	6:30 - 6:40 pm
Commentary from GWRC	GWRC Representative	6:40 – 6:50 pm
Questions and Feedback	All	6:50 – 7:20 pm
Closing Remarks	Blair Johnson	7: 20 – 7:25 pm
Closing Karakia	Andrew Freeman	7:25 – 7:30 pm

## PORIRUA WASTEWATER TREATMENT PLANT OVERVIEW

**Bypass screen** 

Sludge gravity thickener

Aeration Basin

Clarifier 1

UV Treatment Building

Clarifier 2

Centrifuges

Milliscreens

Waste Activated Sludge (WAS) Pump Station

Return Activated Sludge (RAS) Pump Station

Clarifier 3

# Plant performance: Jul 2023 - Jun 2024 Wellington Water

### Within consent limits

- Average daily flow
- Concentration of metals and other compounds in the discharged wastewater

### Compliant

- Effluent Biochemical Oxygen Demand (BOD) and Total Suspended solids (TSS)
- Effluent Faecal Coliform (except for February 2024)

Effluent ammonia concentration levels exceeded compliance targets under investigation

### **Discharges**

Several discharges to the environment due to power interruptions, mechanical failures in the UV system and high levels of sludge in the treatment plant.

### **Odour complaints**

None were assessed to be offensive and objectionable by Greater Wellington Regional Council

# Plant Performance: Jul – Oct 2024



### Within consent limits

- Average daily flow
- Concentration of Metals and other compounds in the discharged wastewater

### Compliant

- Effluent Biochemical Oxygen Demand (BOD) and Total Suspended solids
- Effluent Faecal Coliform (except for July 2024)

Effluent ammonia concentration levels exceeded compliance targets under investigation

## Odour complaints

None received.

# **Receiving Environment Monitoring Results: Jul 2023 - Jun 2024**





## Receiving Environment Monitoring Wellington Sites

The East of Outfall monitoring results suggest that the impact from the WWTP discharge is minor.



		-	-	200 me	eters genera	lly West of	Outfall				
Parameter	Total Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Reactive Phosphorus	Total Nitrogen	Total Phosphorus	Enterococci	рН	Salinity	Dissolved Oxygen	Temp.
	g/m3	g/m3	g/m3	g/m3	g/m3	g/m3	cfu/100ml	-	g/m3	g/m3	С
Median	0.09	0.1	0.1	0.042	0.582	0.079	10	8.2	37	10.58	15.9
95th Percentile	0.506	0.1	0.1	0.195	0.848	0.227	232	8.306	38	12.38	17.665
	Control Site										
Parameter	Total Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Reactive Phosphorus	Total Nitrogen	Total Phosphorus	Enterococci	рН	Salinity	Dissolved Oxygen	Temp.

	INITIOgen			i nospitorus							
	g/m3	g/m3	g/m3	g/m3	g/m3	g/m3	cfu/100ml	-	g/m3	g/m3	С
Median	0.01	0.1	0.1	0.007	0.269	0.05	10	8.16	37	10.87	15.2
95th											
Percentile	0.176	0.1	0.1	0.036	0.579	0.1	292	8.406	38	13.322	17.96

## Receiving Environment Monitoring Wellington Sites

The West of Outfall monitoring results suggest that the impact from the WWTP discharge is minor.



	140 meters generally East of Outfall												
Parameter	Total Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Reactive Phosphorus	Total Nitrogen	Total Phosphorus	Enterococci	рН	Salinity	Dissolved Oxygen	Temp.		
	g/m3	g/m3	g/m3	g/m3	g/m3	g/m3	cfu/100mL	-	g/m3	g/m3	С		
Median	0.08	0.1	0.1	0.012	0.34	0.05	10	8.17	38	10.73	15		
95th													
Percentile	0.166	0.1	0.1	0.0996	0.773	0.153	386	8.266	38.6	12.232	17.38		

	Control Site												
Parameter	Total Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Reactive Phosphorus	Total Nitrogen	Total Phosphorus	Enterococci	рН	Salinity	Dissolved Oxygen	Temp.		
	g/m3	g/m3	g/m3	g/m3	g/m3	g/m3	cfu/100ml	-	g/m3	g/m3	С		
Median	0.01	0.1	0.1	0.007	0.269	0.05	10	8.16	37	10.87	15.2		
95th													
Percentile	0.176	0.1	0.1	0.036	0.579	0.1	292	8.406	38	13.322	17.96		

## Receiving Environment Monitoring Wellington Sites

The Titahi Bay at Toms Road monitoring results suggest that the impact from the WWTP discharge is minor. Please note that the consent does not require monitoring nutrient levels from this site.



					Titahi Bayat	Toms Road					
Parameter	Total Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Reactive Phosphorus	Total Nitrogen	Total Phosphorus	Enterococci	рН	Salinity	Dissolved Oxygen	Temp.
	g/m3	g/m3	g/m3	g/m3	g/m3	g/m3	cfu/100mL	-	g/m3	g/m3	С
Median	N/A	N/A	N/A	N/A	N/A	N/A	10	8.19	38	10.73	15.4
95th Percentile	N/A	N/A	N/A	N/A	N/A	N/A	412	8.27	38	11.782	17.74
					Contro	ol Site					
Parameter	Total Ammonia Nitrogen	Nitrate Nitrogen	Nitrite Nitrogen	Dissolved Reactive Phosphorus	Total Nitrogen	Total Phosphorus	Enterococci	рН	Salinity	Dissolved Oxygen	Temp.
	g/m3	g/m3	g/m3	g/m3	g/m3	g/m3	cfu/100mL	-	g/m3	g/m3	С
Median	0.01	0.1	0.1	0.007	0.269	0.05	10	8.16	37	10.87	15.
95th Percentile	0.176	0.1	0.1	0.036	0.579	0.1	292	8.406	38	13.322	17.90

# **Operational Challenges**



- Mechanical issues with the UV system
- Lack of back-up power supply for the UV system
- Limited solids handling capacity in the treatment plant
- High levels of ammoniacal nitrogen in treated wastewater

# **Project Updates**

## **UV Power Supply**

Work underway, due for completion end January 2025.



Photo of the new backup power supply for the plant's UV system







**Solids handling Upgrade** 

Under Design Stage. Target Completion Date: 2028

## **Odour Treatment**

### Contract Awarded. Target Completion Date: June 2026



# **Commentary from GWRC**

# **Questions and Feedback**





# **Keep in touch!**





Email <u>customer.notifications@wellingtonwater.co.nz</u> to go on the interested parties list for regular updates



www.wellington water.co.nz

www.facebook.com/wellingtonwater

# Thank you!