

Friday 5 May 2023

OIA IRO-394

Name: [REDACTED]

Email: [REDACTED]@xtra.co.nz

Kia ora [REDACTED]

Official information request regarding Porirua Wastewater Treatment Plant.

Thank you for your official information request dated Tuesday 4 April 2023.

We have considered your request in accordance with the Local Government Official Information and Meetings Act 1987 and determined that we are able to grant your request in full.

The answers to your questions can be found in the appendix to this letter.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Ngā mihi,

[REDACTED]

Senior Communications and Engagement Advisor

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Our water, our future.

Appendix

Question 1: In the period since the 5th milliscreen (ie: step-milliscreen) for the Porirua Wastewater Treatment Plant has been installed and operating, what percentage of inflow to the plant has been secondary treated?

Answer...

One hundred percent of inflow has been secondary treated.

Question 2: In the period since the 5th milliscreen (ie: step-milliscreen), for the Porirua Wastewater Treatment Plant has been operating, what percentage of outflow to the plant has been secondary treated?

Answer...

One hundred percent of outflow from the plant has been secondary treated.

Question 3: How many overflows and partial discharges have occurred in the period since the step milliscreen has been operating?

Answer...

Since the step milliscreen was commissioned in late August 2022, there have been six discharges. One on 27 October 2022 due to a power spike in the Porirua area. The other five are covered in our response to Questions Four and Five below.

Question 4: How many UV malfunctions have occurred in the period since the new UV has been operating?

Answer...

There have been six malfunctions since the new UV unit commenced operation.

Question 5: Please provide the reasons for the UV malfunctions.

Answer...

17 November 2022

A fault in the level transmitter caused it to transmit false readings and meant that the bypass valve opened intermittently for very short periods of time that totalled 43 minutes. This resulted in 142 m³ of undisinfected effluent being discharged.

15 March 2023

A fault with the DURON UV rear penstock, which controls the flow going through the UV system, caused the level in the pre-UV channel to rise slightly; opening the bypass penstock up to 13% open. Water in the pre-UV channel rose to a critical level and since flow to the treatment plant was less than 700 L/s, it opened the bypass channel instead of signalling the TAK Unit channel to run. The rear penstock ensures that sufficient water remains in the UV chamber to ensure the lamps are submerged to avoid overheating. The fault resulted in effluent bypassing the UV system and undisinfected effluent was mixed with fully treated effluent and discharged to Rukutane point. Duration totalled 6 minutes resulting in 16 m³ of undisinfected effluent being discharged.

21 March 2023

During a wet weather event, the TAK channel was switched to duty channel while the DURON channel acted as an assist unit. High flow trigger was reached, however, due to mechanical failure of the inlet penstock, the DURON unit did not start. The failure caused the water level in the pre-UV channel to rise. The fault resulted in effluent bypassing the UV system and undisinfected effluent was mixed with fully treated effluent and discharged at Rukutane Point. Duration totalled 3 hours 10 mins resulting in 48 m³ of undisinfected effluent being discharged.

28 March 2023

During a wet weather event, and while the two UV units were in operation, the rear penstock of the DURON channel failed. The penstock could not modulate flow properly and the water level in the DURON channel dropped, causing the lamps to turn off. Although the UV lamps were off, the wastewater stream continued to flow into the DURON channel. This resulted in a discharge of mixed undisinfected effluent and disinfected effluent from the TAK unit to Rukutane Point. Duration totalled 1 hour 24 mins, resulting in 3265 m³ of undisinfected effluent being discharged.

19 April 2023 & 20 April 2023

A mechanical failure with the new DURON caused the unit to fault. There was a discharge of fully treated wastewater mixed with partially treated undisinfected wastewater on 19 April 2023. Duration totalled 10 hours and 33 minutes, resulting in 28,603 m³ of undisinfected effluent being discharged.

Question 6: Please provide a copy of the Operational Management Plan (OMP).

“In July 2019, WWL handed over the operation of the Porirua Treatment Plant, without an Operational Management Plan (OMP). In October 2021, [an independent review](#) noted the OMP was still not in place, and despite recommendations, it took a further 18 months. Five

years for the OMP to be in place and highlights a significant lack of responsibility and accountability from the operators and managers of the Plant”.

Answer...

Veolia created a draft Operations and Maintenance manual. The series of documents within the below Dropbox folder, which comprise the Operations Management Plan, are living documents and require regular updates to include changes in plant operations. Please find those documents here:

<https://www.dropbox.com/scl/fo/qppnmigg1vszky6mfzx1m/h?dl=0&rlkey=lr9pe60ad9zlyo43oc9zbfxb1>

Question 7: Despite recommendations made in the \$100,000 Independent Review, please explain why reporting of below incidents continue to provide little information on the cause, duration, and faecal/enterococci monitoring/sampling of these bypass discharges.

Answer...

Wellington Water provides information on these discharges to Greater Wellington Regional Council as required by the resource consent. The data is included in the plant’s quarterly reports which are uploaded to our website. You can find those here...

<https://www.wellingtonwater.co.nz/resources/topic/wastewater/wastewater-treatment-plants/porirua-wastewater-treatment-plant/>

Question 8: What was the cause of the partial bypass discharge on 29 March 2023?

Answer...

There was no bypass discharge on the 29 March 2023. There was a bypass discharge on the 28 March 2023 which is explained as part of our answer to Question Five.