

Tuesday, 12 July 2022.

OIA IRO-229

Email: [REDACTED]@otago.ac.nz

Kia ora [REDACTED]

**Official information request for investigation into fluoride in drinking water.**

I write regarding your official information request dated Monday, 28<sup>th</sup> March 2022.  
You requested from us:

1. Fluoridation status: list of the years the water supply has been fluoridated. If no fluoridation has ever occurred at that water supply, indicate no fluoridation and ignore requests 2-5.
2. Interruptions to fluoridation: Identification of any time periods where fluoridation was interrupted for substantial time periods (eg, >3 months) for either technical issues (mechanic problems) or political decisions (cessation of water fluoridation). Please provide a date range
3. Fluoridation chemicals: List of the fluoridation chemicals used at each site (e.g. sodium fluoride powder/crystals, sodium silicofluoride/fluosilicate, hydroflufosilicic/fluosilicic acid), the supplier of these chemicals, and example copy of the material safety data sheet for the product. Any records held with respect to any supplied fluoridation chemicals to have exceeded specific impurity limits, as set out in the Water New Zealand Good Practice Guide for supply of fluoride for use in water treatment.
4. Fluoride dosing system: Type of feeder used (e.g. gravimetric dry feeder or volumetric dry feeder into a solution box or dissolver, or solution feeder). Type and number of fluoride analysers or metering system used in dosing system.
5. Quantifiable fluoride results: Any quantifiable testing result for fluoride for your water supply. We are only interested in those water supplies that are fluoridated. Preferably data could be provided in a spreadsheet with the MoH compliance codes. We are seeking data as far back as records permit. If your council no longer stores this information, could you please provide permission to us to contact your commercial testing laboratory supplier for any achieved results held by them.

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 /wellingtonwater  @wgtwaternz & @wgtwateroutage  @wellington\_water

[www.wellingtonwater.co.nz](http://www.wellingtonwater.co.nz)

**Our water, our future.**

Please see our response to the above question in **Appendix A** of this letter – with reference made to correspondence included in our email response to you.

For further reference, the independent inquiry into the cessation of fluoride is available on our website, and you can find that report here:

<https://www.wellingtonwater.co.nz/your-water/drinking-water/fluoride-inquiry>

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](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Ngā mihi



**Group Manager, Network Management Group**  
**Wellington Water Ltd**

## Appendix A

**Question 1: Fluoridation status: list of the years the water supply has been fluoridated. If no fluoridation has ever occurred at that water supply, indicate no fluoridation and ignore requests 2-5.**

### Answer...

*The only two places within the wellington metropolitan area that have not been fluoridate, consistently, is Petone and Korokoro.*

*Water in Wellington has been fluoridated since the 1960's and since the inception of Wellington Water in 2014, water has always been fluoridated.*

**Question 2: Interruptions to fluoridation: Identification of any time periods where fluoridation was interrupted for substantial time periods (eg, >3 months) for either technical issues (mechanic problems) or political decisions (cessation of water fluoridation). Please provide a date range**

### Answer...

*Please see attached in our email response to you the [Daily Average Fluoride](#) data of fluoride for each plant as well as compliance data. See [Appendix B](#) of this letter for an explanation of this data.*

**Question 3: Fluoridation chemicals: List of the fluoridation chemicals used at each site (e.g. sodium fluoride powder/crystals, sodium silicofluoride/fluosilicate, hydroflufosilicic/fluosilicic acid), the supplier of these chemicals, and example copy of the material safety data sheet for the product. Any records held with respect to any supplied fluoridation chemicals to have exceeded specific impurity limits, as set out in the Water New Zealand Good Practice Guide for supply of fluoride for use in water treatment.**

### Answer...

*Wellington Water provided an answer to this question on Thursday, 28 April 2022.*

**Question 4: Fluoride dosing system: Type of feeder used (e.g. gravimetric dry feeder or volumetric dry feeder into a solution box or dissolver, or solution feeder). Type and number of fluoride analysers or metering system used in dosing system.**

### Answer...

*Wellington Water provided an answer to this question on Thursday, 28 April 2022.*

***Question 5: Quantifiable fluoride results: Any quantifiable testing result for fluoride for your water supply. We are only interested in those water supplies that are fluoridated. Preferably data could be provided in a spreadsheet with the MoH compliance codes. We are seeking data as far back as records permit. If your council no longer stores this information, could you please provide permission to us to contact your commercial testing laboratory supplier for any achieved results held by them.***

*Please see attached in our email response to you the **Daily Average Fluoride** data of fluoride for each plant as well as compliance data dating back to 2007. See **Appendix B** of this letter for an explanation of this data.*

## Appendix B

### **Fluoride Analyser data**

This data set comprises readings from our fluoride analysers that continuously monitor water in the pipeline downstream of the dosing points at each water treatment plant before it enters the network. The data is broken into six financial years (the historical extent of these data), each displayed on a different tab. The left-most column on each tab gives the date that the data points apply to. The other columns give the average reading for the given day by water treatment plant. Note that there are two analysers each at Gear Island, Te Mārua and Wainuiomata treatment plants. The readings from the analysers tell us whether or not the fluoride concentration in the water is within the optimal range of 0.7 – 1.1 mg/L. The analysers are also used to detect dosage levels above the maximum acceptable limit so that we can act to prevent water with high fluoride concentrations entering the network.

### **Compliance data**

To demonstrate to our regulators and other stakeholders that the water we produce at our treatment plants satisfy drinking water standards, we regularly collect samples of fluoridated treated water for analysis at an independent and certified laboratory. Fluoride results from this sampling and analysis program from 2007 onwards are provided in separate files, one for each of the four treatment plants. The fluoride concentration corresponding to the date in the leftmost column is given in the fourth column from the left. Note that the data includes lab results from after the dates that the Te Mārua and Gear Island dosing facilities were shut down. The fluoride detected in the water from Te Mārua is the background fluoride naturally present in the source water. The recent fluoride levels in the Gear Island data reflect the mix of fluoridated and unfluoridated water coming from Waterloo and Wainuiomata treatment plants that would normally receive additional fluoride from the Gear Island dosing facility.