

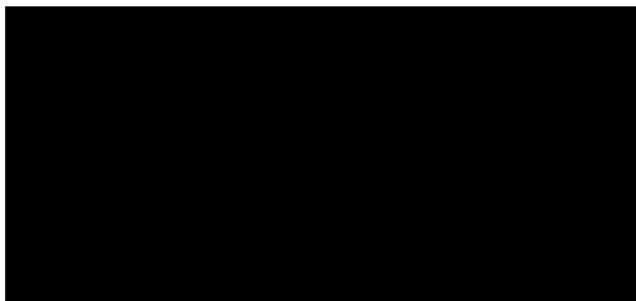


Ref: [REDACTED]

Civic House, 110 Trafalgar Street
PO Box 645, Nelson 7040, New Zealand

13 December 2024

P (03) 546 0200
E LGOIMA@ncc.govt.nz
nelson.govt.nz



OFFICIAL INFORMATION REQUEST – FLUORIDATION

I refer to your official information request dated 6 December 2024 'LGOIMA (Local Government Official Information Act request)' regarding the fluoridation of the Nelson drinking water supply, which is reproduced below:

"...Could you please give me the names of the fluoride compounds which will be added to our Nelson water supply? Could you please advise me what residues will also result from the addition of said chemicals? Please advise also what company/source we will be purchasing these compounds from. Does council have a copy of the process used to add the fluoride compounds to the water to produce the correct amount of fluoride and what amount will that be at the point of consumption as I know different levels are maintained in different areas....some higher than 1ppm for instance..."

I am able to confirm the following in response to your queries:

- 1) Council is using hydrofluorosilicic acid (HFA) in the fluoridation process. The compounds in Hydrofluorosilicic Acid are Hydrogen ions (H^+) and Hexafluorosilicate ion (SiF_6^{2-}), Hydrofluoric acid (HF), Fluoride ions (F^-), and silicic acid $Si(OH)_4$.
- 2) The residues primarily include fluoride ions and potential precipitation of silicon dioxide (SiO_2) in certain conditions.
- 3) Council's contractors purchase the HFA from IXOM Industries.
- 4) The Ministry of Health have approved the automatic dosing process used to add the HFA into the water supply. Council is testing the water in the network during the commissioning procedure to monitor distribution across the city.
- 5) The Direction from the Director General of Health requires Council to dose fluoride in the range 0.7mg/l – 1.0mg/l. Council is commissioning the dosing plant to deliver 0.85mg/l. Council expects this to be the concentration in the network once commissioning has been completed. Council does not expect fluoride to accumulate in the network.

You have the right to seek an investigation and review by the Ombudsman of this response.

Continued/...

Internal Document ID: [REDACTED]

Information about how to make a complaint is available at www.ombudsman.parliament.nz or Freephone 0800 802 602.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Alec Louverdis', with a long horizontal stroke extending to the right.

Alec Louverdis

Deputy Chief Executive / Group Manager Infrastructure

