

**From:** Findantruth

**Sent:** April 8, 2019 12:41 AM

**To:** Joe Bachetti <[jbachetti@tecumseh.ca](mailto:jbachetti@tecumseh.ca)>; Andrew Dowie <[andrew@andrewdowie.ca](mailto:andrew@andrewdowie.ca)>; Rick Tonial <[rtonial@tecumseh.ca](mailto:rtonial@tecumseh.ca)>; Bill Altenhof <[baltenhof@tecumseh.ca](mailto:baltenhof@tecumseh.ca)>; Brian Houston <[bhouston@tecumseh.ca](mailto:bhouston@tecumseh.ca)>; [tania.jobin@bell.net](mailto:tania.jobin@bell.net); Laura Moy <[lmoy@tecumseh.ca](mailto:lmoy@tecumseh.ca)>

**Subject:** Vote "no" to arsenic (Hydrofluorosilicic Acid HFSA contains arsenic)

Dear Mayor and Councillors,

If the Tecumseh Council chooses to move forward with reintroducing fluoride to the water, then you have an obligation to do so in the most responsible way possible.

The Fluoridation Act permits a municipality, by way of a by-law, to establish, maintain and operate a fluoridation system in connection with the waterworks system.

The Act defines “fluoridation system” as a system comprising equipment and materials for the addition of a chemical compound to release fluoride ions into a public water supply”

Your decision on **what chemical compound is added** is of utmost importance. I am proposing that council consider amending the bylaw to read that only pharmaceutical grade Sodium Fluoride NaF be added and not Hydrofluorosilicic Acid or Hexafluosilicic acid, or any fluorosilicate.

There are very good reasons for making this critical decision:

1. Hydrofluorosilicic Acid has never been tested for safety and is therefore not in compliance with the Ontario Safe Drinking Water Act and the Municipal Drinking Water License (Schedule B, Section 14.1).
2. Hydrofluorosilicic Acid contains arsenic, lead and radionuclides.

Section 166(1) of the Ontario Safe Drinking Water Act (SDWA) states that the subject Act prevails over all other Acts, including the Fluoridation Act.

According to section 14.1 of the Municipal Drinking Water Licence, issued under the SDWA, all chemicals added to the water must meet applicable standards and those standards require certain testing and evaluation of the chemical.

Nothing has changed since 2013 when the WUC administration **admitted that Hydrofluorosilicic Acid has never been tested by the National Sanitation Foundation.**

This is a link to a copy of a 2014 letter from the Government of Canada in reply to a Freedom of Information Request, that the Government of Canada isn't in possession of a single study related to the safety of

HFSA. <https://fluoridefreewindsor.files.wordpress.com/2015/04/h-c-no-studies.png>

Also, the EPA states that, "*In collecting the data for the fact sheet, EPA was not able to identify chronic studies for these chemicals.*"

Stan Hazan, General Manager, Drinking Water Additives Certification Program, National Sanitation Foundation (NSF) in a 2004 deposition:

*"NSF failed to follow its own Standard 60 procedures"*

*"I would say that the HFSA submissions have not come with the tox studies referenced."*

I realize this information may seem shocking that such a widely used chemical has never been tested for safety, but it. The bottom line is, the use of hydrofluorosilicic acid, or Hexafluorosilicic acid would be in contravention of the SWDA and the Water Licence.

Section 10 of the SDWA states that the water must be potable and meet, at a minimum, the requirements of the prescribed drinking water quality standards.

Section 20(1) of the SDWA prohibits permitting anything to be added to the water system if it could result in (b) a contravention of a prescribed standard.

Section 20(3) states that Dilution isn't a defence for contravening Subsection (1).

The Ontario Drinking Water Quality Standards states that *arsenic cannot exceed 0.01 milligrams per litre.*

This is a link to a letter and petition to the EPA and written by J. William Hirzy, Ph.D., a former EPA Senior scientist and, at the time of this letter of 2013, a Chemist in Residence at American

University. [https://www.epa.gov/sites/production/files/documents/tsca\\_21\\_petition\\_hfsa\\_2013-04-22.pdf](https://www.epa.gov/sites/production/files/documents/tsca_21_petition_hfsa_2013-04-22.pdf)

*“Silico fluoride agents used for artificial fluoridation of public water supplies contain arsenic. For example, **HFSA is typically reported by suppliers to contain about 30 parts per million (ppm), or 30 milligrams of arsenic per kilogram of HFSA.** This amount of arsenic in HFSA delivers about 0.078 microrams of arsenic per liter of drinking water.....Pharmaceutical grade of sodium fluoride is available containing typical levels of arsenic of less than 1 milligram per kilogram of sodium fluoride, which delivers 0.00084 micrograms of arsenic per liter of drinking water, a 99% reduction from the amount delivered by HFSA”.*

Health Canada states on their Dietary Reference Intakes table, “*Although a UL was not determined for arsenic, there is no justification for adding arsenic to food or supplements.*” I think it is quite reasonable to extend that thinking to our water.

If that isn't enough to convince you to amend the bylaw, please consider this from Dr. Hirzy, “*With respect to the excess cancer cases caused by arsenic in HFSA a recent publication by Hirzy et al, (Reference 1), shows that for **typical levels of arsenic in HFSA and pharmaceutical grade NaF,** the latter produces about **100 fold** fewer lung and bladder cancer cases than the former. That study also shows that using typical pharmaceutical grade NaF rather than HFSA delivering an average level of arsenic reported as determined by NSF tests, as to which see the supplemental material in Reference 1, results in over **500 fold** fewer lung and bladder cancer cases.”*

Dr. Hirzy also writes, “*...conversion of the acid to the sodium salt does little or nothing to reduce the levels of lead, arsenic and radionuclides in the final fluoridation product solution used for fluoridation.*”

While section 20(2) of the SWDA permits you to violate the prescribed standards and add cancer-inducing levels of arsenic to our water, by virtue of a statutory authority, in this case being the *Fluoridation Act*, **it is not the responsible approach for you to**

**take.** You are considering the decision to add fluoride to the water because of your belief that it will be a net benefit. Now, continue to make decisions that you will only add a pharmaceutical grade product and not to also add arsenic, lead and radionuclides. While the law may be interpreted to have the legal authority to add arsenic to our water - ask yourselves, "Is this the responsible decision to make?"

**While there may be controversy about the proven negative health consequences water fluoridation - there is NO controversy about arsenic being poison to people-even in the minute amounts contained in HFSA.**

I am also proposing that the bylaw be amended to include warnings be issued to all rate payers for caution in consumption of the fluoridated water if you are pregnant and for infants, as other municipalities and States have done. (New Hampshire, Milwaukee, Vermont and New York State)

**If you are going add fluoride to the water, then do it right, do it responsibly.**

While my first desire is that you would vote against the bylaw to add fluoride to the water, I would ask that you do the right thing and amend your bylaw so that only pharmaceutical grade sodium fluoride could be used.

Sincerely,

Cheryl Burr