

# Time Line: Hydrofluorosilicic acid is an Inorganic Fluoride - Toxic Substance & Hazardous Waste

**“Water fluoridation is not a public health policy. It is a hazardous waste management policy.”** Dr. J. William Hirzy,  
Senior US EPA Chemist, VP US EPA  
Headquarters Union



**US EPA Unions** representing over 7,000 professionals write to US Congress asking for a national moratorium on artificial fluoridation of drinking water.  
<http://www.nteu280.org/Issues/Fluoride/Press%20Release.%20Fluoride.htm>

**1909 Boundary Waters Treaty** <http://www.ijc.org/rel/agree/water.html#what>

- **Article IV:** “It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.”

**1972 Great Lakes Water Quality Agreement**

- **Article II:** ‘The purpose of the Parties is to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem.’
- “These waters should be: Free from substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life.”

**1978 Great Lakes Water Quality Agreement** <http://www.ijc.org/rel/agree/quality.html>

- ‘the discharge of any or all persistent toxic substances be virtually eliminated.’

**1989 First Priority Substances Lists** [www.ec.gc.ca/substances/ese/eng/psap/psl1-1.cfm](http://www.ec.gc.ca/substances/ese/eng/psap/psl1-1.cfm)

- Priority Substances List 1 - 44 substances/groups of toxic substances include inorganic fluoride (hydrofluorosilicic acid), arsenic, lead, mercury & radionuclides

**1997 Binational Toxics Strategy** <http://www.ijc.org/php/publications/html/bts/btse.html#lot>

- “...will work in cooperation with their public and private partners toward the goal of **virtual elimination** of persistent toxic substances resulting from human activity, particularly those which bioaccumulate, from the Great Lakes Basin

**CEPA 1999, 2006 update of Toxic Substances**  
[http://www.ec.gc.ca/CEPARegistry/subs\\_list/Toxicupdate.cfm](http://www.ec.gc.ca/CEPARegistry/subs_list/Toxicupdate.cfm)

- “**Virtual elimination** of the most dangerous toxic substances is at the core of Canada's Toxic Substances Management Policy”

### CEPA 1999, Section 65 (3) Toxic Substances Definition

- “substances determined to be **"toxic", persistent, bioaccumulative, anthropogenic**, and which are not naturally occurring radionuclides or naturally occurring inorganic substances shall be proposed for implementation of virtual elimination under Section 65 (3) of CEPA 1999.” [http://www.ec.gc.ca/CEPARRegistry/subs\\_list/ToxicList.cfm](http://www.ec.gc.ca/CEPARRegistry/subs_list/ToxicList.cfm)

### CEPA 1999, Section 64 Risk Assessment of Schedule 1 Substances

"A substance is toxic if it is entering or may enter the environment in a quantity or concentration or under conditions that: [http://www.ec.gc.ca/ceparegistry/subs\\_list/Toxic.cfm](http://www.ec.gc.ca/ceparegistry/subs_list/Toxic.cfm)

1. have or may have an immediate or long-term harmful effect on the environment or its biological diversity;
2. constitute or may constitute a danger to the environment on which life depends; or
3. constitute or may constitute a danger in Canada to human life or health."

### 2002 Safe Drinking Water Act <http://www.ene.gov.on.ca/envision/water/sdwa/index.htm>

Section 20 (1): No person shall cause or permit any thing to enter a drinking-water system if it could result in (a) a drinking-water health hazard;

Section 20 (3): Dilution no defence

- For the purposes of prosecuting the offence of contravening subsection (1), it is not necessary to prove that the thing, if it was diluted when or after it entered the system, continued to result in or could have resulted in a drinking-water health hazard.

### 2006 Clean Water Act <http://www.ene.gov.on.ca/en/water/cleanwater/index.php>

Section 15(2)(i): Requirement to identify past conditions that threaten source water that: “are or would be drinking water threats”

**Relative Toxicity:** The toxicity of fluoride is comparable to that of arsenic and lead.

Government policy permits fluoride levels 150 times higher than lead and arsenic.

Maximum Concentration Level of Arsenic = 10ppb  
Maximum Concentration Level of Lead = 10ppb  
Maximum Concentration Level of Fluoride = 1,500ppb

From: Robert E. Gosselin et al, *Clinical Toxicology of Commercial Products* 5th ed., 1984

