

**DEFERRED** to a future meeting of Council  
to allow for the Windsor Utilities Commission (WUC)  
to provide an additional report  
**by Council at its meeting held March 19, 2012 [M114-2012]**  
/AA  
Windsor, Ontario March 19, 2012

**REPORT NO. 45** of the  
**ENVIRONMENT & TRANSPORTATION STANDING COMMITTEE**  
of its meeting held January 25, 2012

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**Present:**

- Councillor Hatfield, Chair**
- Councillor Payne**
- Councillor Sleiman**
- Councillor Halberstadt**
- Councillor Valentinis**

That the following recommendations of the Environment and Transportation Standing Committee **BE APPROVED:**

Moved by Councillor Halberstadt, seconded by Councillor Sleiman,  
**THAT** Report No. 59 of the Windsor-Essex County Environment Committee regarding the fluoridation of the water system **BE RECEIVED** for information, and forwarded to City Council; and further

**THAT** the City Solicitor **BE REQUESTED** to investigate further and provide a legal opinion as to the validity of the claim that individual Councillors may be liable if no action is taken regarding the artificial water fluoridation prior to January 2013.

Carried.

Clerk's Note: The Windsor-Essex County Environment Committee Report No. 59 is attached as background information.

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**CHAIRPERSON**

\_\_\_\_\_  
**DEPUTY CLERK**

<b>NOTIFICATION:</b>				
<b>Name</b>	<b>Address</b>	<b>Email Address</b>	<b>Telephone</b>	<b>FAX</b>
All interested parties				

# ENVIRONMENT & TRANSPORTATION STANDING COMMITTEE

REPORT NO. 59  
of the

WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE (WECEC)

of its meeting held  
December 1, 2011  
at 5:30 o'clock p.m.

YQG International Airport – Board Room

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**Members Present at the December 1, 2011 meeting:**

Charlie Wright, Co-Chair  
Councillor Alan Halberstadt, Co-Chair  
Shahbaz Ahmed  
Dean Clevett  
Derek Coronado  
Rick Coronado  
Roger Dzugan (alternate for Mark Bartlett)  
Karen Fallon  
Paul Henshaw  
John Miller  
Juliet Mohammed  
Phil Roberts  
Tamara Stomp

**Members Absent with regrets at the December 1, 2011 meeting:**

Mark Bartlett  
Pauline Cheslock  
Radwan Tamr

**Your Committee submits the following recommendation:**

Moved by T. Stomp, seconded by R. Coronado,  
That the Councils of the Town of Tecumseh, the Town of LaSalle and the City of Windsor **BE URGED** to create a by-law to cease fluoridation of the water system as there are valid concerns regarding the potential adverse impact of fluoridation on the environment.

Carried.

Shahbaz Ahmed, Matthew Child and Dean Clevett voting nay.

**Note:** *The presentation by Kimberly DeYong, Windsor's Fluoride Action Network and Heather Gingerich, Director, International Medical Geology Association entitled "Artificial Water Fluoridation – Environmental Effects & Legal Implications" is attached for information.*

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**Councillor Halberstadt, Co-Chair**

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**Charlie Wright, Co-Chair**

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**Committee Coordinator (A)**

**Notification:**

<b>Name</b>	<b>Email Address</b>
WECEC Committee	ON FILE
Laura Moy, Director Staff Services/Clerk – Town of Tecumseh	<a href="mailto:lmoy@tecumseh.ca">lmoy@tecumseh.ca</a>
Brenda Andreatta, Clerk – Town of LaSalle	<a href="mailto:bandreat@town.lasalle.on.ca">bandreat@town.lasalle.on.ca</a>
John Wladarski, General Manager Windsor Utilities Commission	<a href="mailto:jwladarski@enwin.com">jwladarski@enwin.com</a>
John Stuart, Chief Operating Officer, Windsor Utilities Commission	<a href="mailto:jstuart@enwin.com">jstuart@enwin.com</a>
Donna Mayne, Fluoride Action Network	<a href="mailto:donnaJeanmayne@gmail.com">donnaJeanmayne@gmail.com</a>
Mary Brennan, Director of Council Services/Clerk, County of Essex	<a href="mailto:mbrennan@countyofessex.on.ca">mbrennan@countyofessex.on.ca</a>

# ARTIFICIAL WATER FLUORIDATION

## Environmental Effects & Legal Implications

**Fluoride Free Windsor**

with

**Heather Gingerich**

B.Sc. Biological Science (Guelph)

M.Sc. Earth Science (Waterloo)

International Medical Geology Association  
(Director, Canada)

# ARTIFICIAL WATER FLUORIDATION

- Artificial Water Fluoridation (AWF) is the addition of silicofluorides to drinking water.
- Unlike all other additives that eliminate water-borne pathogens or protect the infrastructure, only silicofluorides are intended as a medical treatment, ostensibly to prevent tooth decay.
- In 1953, the City of Windsor used **sodium fluoride (NaF)** as the delivery agent.
- In the early '60s, sodium fluoride was replaced with **hydrofluorosilicic acid (H<sub>2</sub>SiF<sub>6</sub>)**.
- Current F concentration levels average about 0.65 ppm



**Hazardous toxic waste  
derived from scrubbers of  
phosphate fertilizer  
production sites**

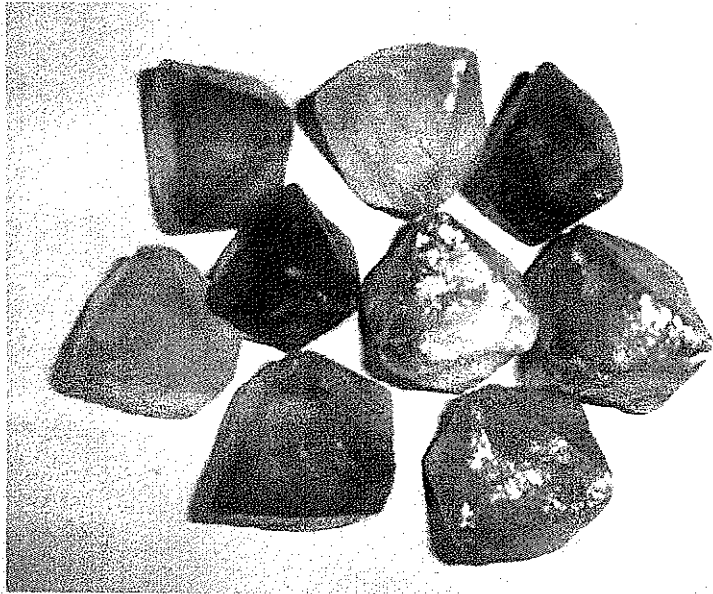
Contaminants include trace amounts of:

- Arsenic (As)
- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Chromium (Cr)
- Radionuclides (Ra, Po)



Photo: [www.fluoridealert.org](http://www.fluoridealert.org)

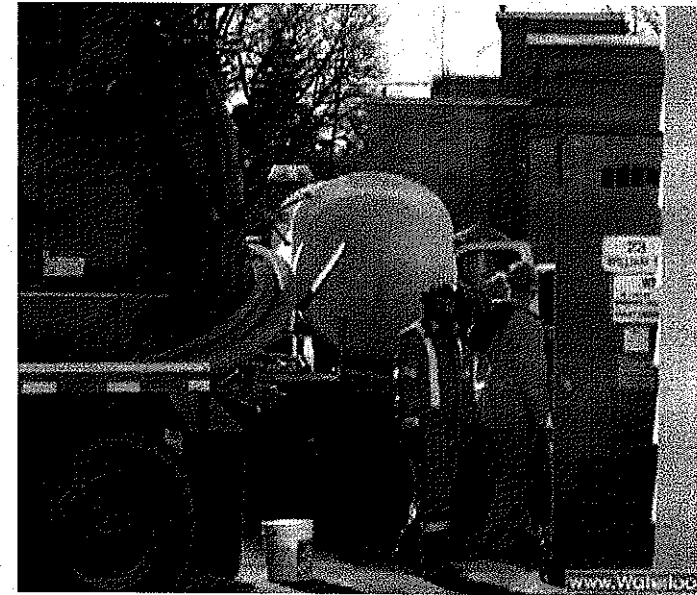
# Comparing Apples to Oranges



## Calcium Fluoride $\text{CaF}_2$

- Naturally occurring
- Safe to hold with bare hands
- Sparingly soluble in neutral pH water
- Fluoride toxicity reduced by calcium
- LD 50 = oral rat, **4250 ppm**

Source: REAGENTS, INC.—MSDS—CALCIUM FLUORIDE



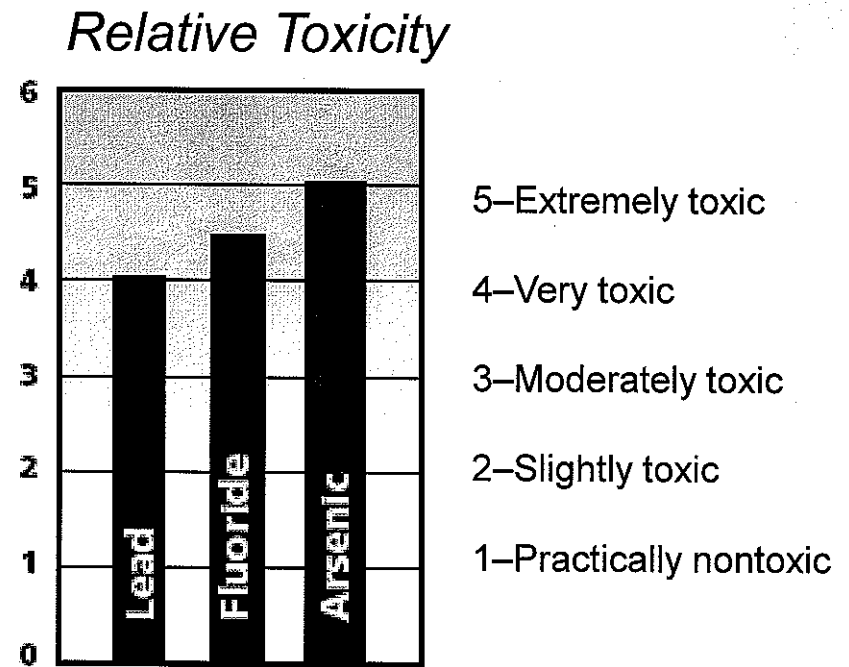
## Hydrofluorosilicic Acid $\text{H}_2\text{SiF}_6$

- Man-made toxic waste product
- Highly corrosive liquid that legally requires full personal protective equipment to handle
- Fluoride toxicity increased by co-contaminants
- LD 100 = guinea pig, **80 ppm (2 % solution)**

Source: Issuing date 06.07.2009 SOLVAY Chemicals

# The Canadian Environmental Protection Act classifies $\text{H}_2\text{SiF}_6$ as an Inorganic Fluoride that is:

- Bioaccumulative
- Toxic
- Persistent
- Man-made



It would cost industry \$7000/tonne to properly neutralize and dispose  $\text{H}_2\text{SiF}_6$ .  
Instead, we **PAY** to have it put in our drinking water.



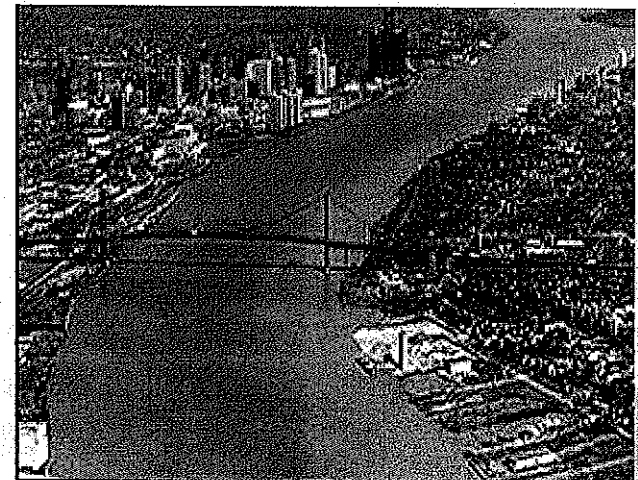
**THE HAZARDOUS WASTE ACT  
does not permit the disposal of  $H_2SiF_6$   
directly into the environment,  
yet 99% of our artificially fluoridated tap water  
returns to our ecosystem.**



“Fluoride passes through the wastewater treatment process unchanged...The West end of Lake Erie gets a huge fluoride injection as a result of these sources.”

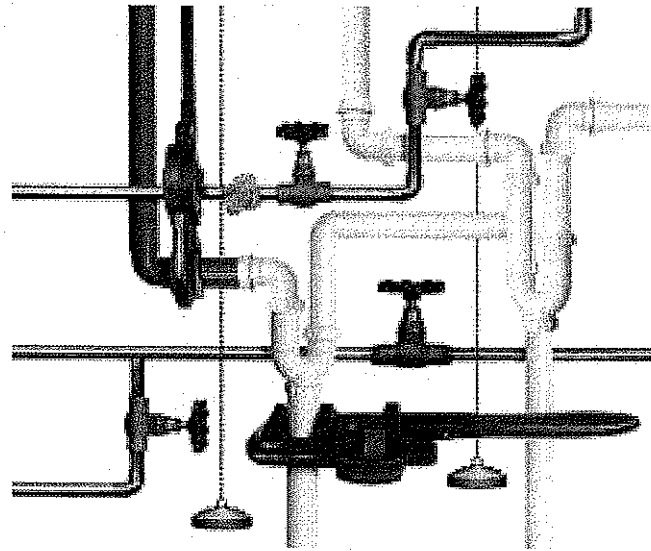
Peter van Caulart, Director of Ontario's Environmental Training Institute

**AWF infuses 4 million lbs of  $H_2SiF_6$  into  
the Detroit River every year**  
(calculated at 1 lb/person; not including F from pharmaceuticals,  
personal-care products, agricultural and industrial chemicals)



# “Dangerous goods / class 8 corrosive substance.”

Transport Canada



- Artificial Water Fluoridation promotes serious corrosion of plumbing and fixtures containing lead, copper, zinc and cadmium. This corrosion produces elevated levels of these metals at the faucet.
- Based on a study of 250,000 Massachusetts children aged 0-5, "prevalence of children with elevated blood lead is about **DOUBLE** that in non-fluoridated communities." (*Masters and Coplan, 1999; Masters et al., 2000*)
- **Ironically, children with higher blood-lead levels also have more tooth decay** (*Journal of the American Medical Association*)

# Legislation That Protects Our Water Is Being Ignored

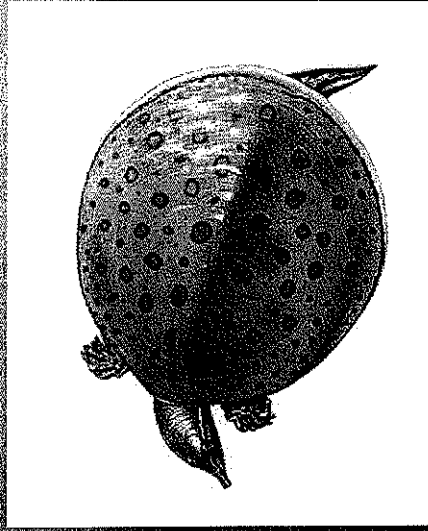
- CEPA's 1993 Priority Substance List Assessment Report "... it has been concluded that inorganic fluorides are entering the environment in quantities or under conditions that may be harmful to the environment."
- Safe Drinking Water Act 2002 "Dilution is no defense for adding a contaminant to drinking water."
- Species at Risk Act S.C 2002 "... cost-effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific certainty."
- Clean Water Act 2006 Empowers communities to take action to prevent threats from becoming significant.

## The Precautionary Principle

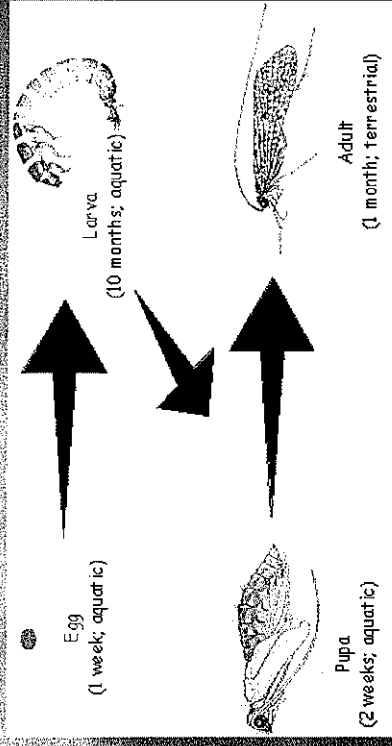
If an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is not harmful falls on those taking the action.

# 7 of 8 Indigenous Ontario Turtles Species at Risk Listed

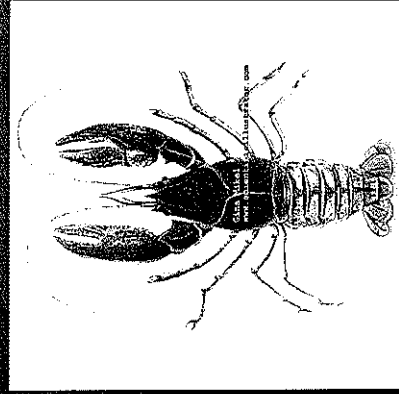
**SARA Protected**



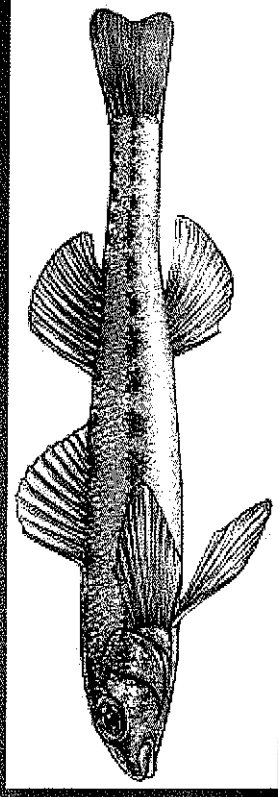
**Keystone F sensitive feeder species**



**↑ Fluoride < 0.12 ppm ↓**



**SARA Protected**



# We Have a Duty to Protect the Environment That Sustains Us



The City of Windsor is licensed to conduct fluoridation. They are not mandated to do so. With this comes culpability in the event of environmental damage and any human health effects, including dental and skeletal fluorosis. This circumstance is increasingly problematic as exposures to fluorides from many sources are on the rise.

Health Canada does not regulate  $H_2SiF_6$ . As such, the agency has no standing in the matter. Its endorsements will not shield municipal councils from liability.

## **True or False?**

Windsor is contractually obligated  
to add fluoride until 2014

# **FALSE!**

**The Fluoridation Act clearly states  
that fluoridation could be ended  
by **LAWFUL AUTHORITY.****

**Therefore, Windsor City Council could pass a bylaw at any time  
instructing the W.U.C. to apply to the  
Ministry of the Environment for an amendment to its license.**

## Statutory Standard of Care

The Safe Drinking Water Act, 2002, includes a statutory standard of care for individuals who have oversight responsibilities for municipal drinking water systems that can extend to municipal councillors as of **January 1, 2013**.

There are legal consequences for negligence, including possible fines or imprisonment.

# We Recommend a Stop to AWF until:

- Safety studies are available from animals (toxicology studies) and humans (clinical trials) demonstrating that  $\text{H}_2\text{SiF}_6$  is safe for everyone.
- Source water monitoring shows that fluoride levels do not exceed Canadian Water Quality Guidelines for the Protection of Aquatic Species of 0.12 ppm Fluoride.
- It can be demonstrated that  $\text{H}_2\text{SiF}_6$  satisfies the NSF 60 Standard and provincial laws (SDWA 2002).



# Organizations in Favour of Fluoride Free Water

- Canadian Association of Physicians for the Environment
- UNICEF
- Council of Canadians
- EPA Headquarters Professionals' Union
- Great Lakes United
- Members of the National Research Council
- International Society of Doctors for the Environment
- American Academy of Environmental Medicine
- Environmental Working Group
- Environmental Health Foundation
- Science and Environmental Health Network
- Center for Health, Environment, and Justice
- 4,000 signed professional members of the Fluoride Action network including **Nobel Laureate in Medicine (2000), Dr. Arvid Carlsson.**

**Thank you for your time**