From:	Gary Cohen
To:	Water
Cc:	Subeck, Lisa; Zellers, Ledell; Cnare, Lauren; Verveer, Michael; Bidar-Sielaff, Shiva; Rummel, Marsha; King, J Steven; Resnick, Scott; Skidmore, Paul; Cheeks, Maurice; Chris Schmidt; Larry Palm; Lucas Dailey; John Strasser; David Ahrens; Denise DeMarb; Joseph R. Clausius; Anita Weier; Mark Clear; Matthew J. Phair; Heikkinen, Thomas; Piper, Robin; Heinrich, Janel; Voegeli, Doug; Bruce Mayer; Nelson, Larry; Mike DePue; Patrick Delmore; Mayor
Subject:	Contact Water Utility Board
Date:	Monday, October 27, 2014 10:58:59 AM
Attachments:	ATT00001.png

Dear Council Persons and members of the Water Utility Board,

I am writing to all the members of the City Council, as well as our Mayor, members of the Water Utility Board, and others about the review of the water fluoridation policy of the City of Madison and its Water Utility Board to be address at the public meeting on October 28, 2014. I strongly oppose the continued fluoridation of our water supply, as well as the MWU (Madison Water Utility) hiding from the public information about groups at higher than average risk for fluoride poisoning.

I testified at the hearing on water fluoridation before this Board back in 2009. The Board evidently didn't hear a word we said back then, but in the five years since the last review things have changed. Dr. Paul Connett, PhD, the director of Fluoride Action Network, has had his book published "The Case Against Fluoride: How Hazardous Waste Ended Up in Our Drinking Water and the Bad Science and Powerful Politics That Keep It There," by Paul Connett, PhD, James Beck, MD, PhD, and H.S. Micklem, DPhil.

Both Dr. Connett and I are PhD chemists. I got my BS in Chemistry from Rensselaer Polytechnic Institute, where I graduated cum laude, and my PhD from Northwestern University. My field of specialization was organic chemistry.

In Paul's book he gives dozens of reasons to oppose water fluoridation. They include health, ethical, legal, ethical, occupational, and environmental issues.

If you don't want to read the book, you can get a detailed summary called "50 Reasons to Oppose Fluoridation" by Paul Connett at http://fluoridealert.org/articles/50-reasons/. Both the book and the online summary are written for the layperson, so don't worry about being able to understand the greater part of it if you are not technically inclined. Please read the online page. It's a detailed summary of all the issues.

On the back cover of "The Case Against Fluoride" are these two review quotes:

"Sweden rejected fluoridation in the 1970s, and in this excellent book these three scientists have confirmed the wisdom of that decision. Our children have not suffered greater tooth decay as World Health Organization figures attest, and in turn our citizens have not borne the other hazards fluoride may cause." Dr. Arvid Carlsson, Nobel Laureate in Medicine or Physiology (2000)

"Alfred North Whitehead said the scientific method means leaving 'options open for revision.' An ancient Roman adage says that 'whatever touches all must be approved by all.' These characterizations of science and democracy are the reasons for reading this book. Especially if you and your family are drinking administratively mandated fluoridated water." Ralph Nader

Another excellent site, which is devoted to a critique of the American Dental Association's booklet "Fluoridation Facts," is "The Fluoride Debate" at http://www.fluoridedebate.com/index.html.

Now I want to take some time to argue against "Fluoridation of Public Drinking Water" (updated June 4, 2014) by Public Health Madison & Dane County. Their seven-page review is a superficial discussion of some of the health issues involved, and does not even mention that there are legal, regulatory, ethical, occupational, and environmental issues with water fluoridation.

Some of what they wrote is almost embarrassing to read. For example, they say on page 1: "The discovery of the potential health applications of fluoride in the early 1930s led to the development of the first clinical trial of artificial fluoridation of community water supplies in Grand Rapids, MI in 1945. The trial was designed to last for 15 years prior to any potential recommendation for the expansion of water fluoridation to other communities; however, the popularity of the program led to its initiation in other cites the following year. The City of Madison, Wisconsin began the fluoridation of drinking water supplies in 1948." What this means is that a scientific experiment was barely started (and it turns out had major methodological flaws), but that didn't stop Madison from instituting water fluoridation based on NO SCIENCE.

On page 1: "Opponents of water fluoridation of community water supplies cite two major issues to question the effectiveness of the program; a comparable reduction in dental caries in non-fluoridated communities and the improved availability of fluoride-containing products make the treatment of community drinking water unnecessary." (page 1) Only partially true. There are many other reasons to question the effectiveness of the program. One of the most compelling is found at the link above (http://fluoridealert.org/articles/50-reasons/) item #12. The rate of tooth decay in countries that do not fluoridate their water or salt has dropped just as fast as in countries that do in the period 1970 - 2000. But also look at items #13 through #17 for supporting evidence.

On page 1: "A survey involving over 39,000 children conducted in the United States from 1986-1987 evaluating this issue indicated that the benefit to fluoridated compared to non-fluoridated communities amounted to an estimated 0.6 fewer decayed tooth surfaces per child. However, this argument ignores the diffusion effect of fluoride containing products including food, beverages, dietary supplements, and dental products that were manufactured in fluoridated communities and sold in non-fluoridated areas." The problem with the diffusion argument is that many nations in Europe don't fluoridate their water or salt have the same decrease in dental caries as we have in the U.S. See item #12 above. Furthermore, you don't need to fluoridate the water to buy and use fluoridated toothpaste. And added to that is that the CDC has stated that the effect of fluoride (if there is any) is topical. Very little of the fluoride in water makes contact with the teeth, while the contact is major with toothpaste and dental topical fluoride treatments. In any case, saying that each child had 0.6 few decayed tooth surfaces is an admission that if there is any effect it is very small. And another point is that most of the studies on tooth decay in children involved baby teeth, which are eventually lost anyway.

On page 2: "Oral hygiene has gradually improved in the United States over the past several decades, including the increased use of fluoride-containing dental products such as rinses, toothpaste, and topical gels. However, disparities in use of and access to products and services promoting oral health remain, especially among low socioeconomic status and ethnic populations. The use of water fluoridation has provided an effective and cost efficient method to deliver preventative services to promote oral health to all residents within a community served by municipal water supplies, regardless of socioeconomic status or access to care." (page 2) Again, the facts are that the amount of tooth decay in poor urban centers is a major health crisis in spite of the water being fluoridated for decades. If water fluoridation had any significant effectiveness, it has not been demonstrated in poor communities. Also, do you really believe that poor children cannot afford to buy fluoridated toothpaste, very little of which is needed daily to have its intended effect?

On page 2: "Efforts to prevent or remove community water fluoridation are most commonly motivated by concerns of fluorosis of teeth and bone, increased risk of hip fracture among the elderly, and cancer." Add to that the concerns that babies who are breast fed have almost no fluoride intake from breast milk, (Mother Nature realizes the danger of fluoride so has filtered it out), while those who are bottle fed with Madison water are being severely poisoned, by comparison, by fluoride. Also, those who have kidney problems and are on dialysis should never be using Madison city water. I believe the CDC once recommended that cities that fluoridate their water should warn their residents about this, but I have never seen the Madison Water Utility do this.

Then there is this shocking revelation in the paper "Draft Water Utility Board Fluoridation Policy 2014.pdf" which can be downloaded from the Agenda for the October 28, 2014 of the Water Utility Board meeting. The following is an image of what it says complete with strike through:

~~The Board does not recommend by the Madison Water Utility or Public Health Madison and Dane County the issuance of health warnings to the general or special populations when fluoride levels are maintained at the recommended levels. The Board supports the Madison Water Utility's public notification guidelines detailed in its standard operating procedures for fluoridation. These guidelines currently require notification whenever fluoride is detected in the distribution system at a level above 4 parts per million or if the running annual average at any entry point exceeds 2 parts per million.~~

In other words, the Water Utility Board had shamelessly instructed the Water Utility to keep at risk persons in the dark about the well-known dangers of fluoride, including women with their infants, and those on kidney dialysis. The red portion of the document evidently is from 2009. It shows clearly that the Board has been well aware that water fluoridation is NOT SAFE FOR EVERYONE, and if it is not safe for everyone, then under no circumstance can it be deemed, in general, "safe and effective." We now know that the Board has been aware that this is a lie. But why is it crossed out? Does this mean that the MWU will now notify people that are at risk from fluoride exposure, or, more likely, is it hoping that the issue will disappear if it is not mentioned?

And not only is this unethical, it puts the Board and the City of Madison at risk of being sued. I would suggest that the Board either reverse this policy, or better yet end water fluoridation for all the reasons, and more, given in this email. Ending water fluoridation is by far the best policy and would end the need to inform the public about possible risks.

On page 3: "Both excessive and inadequate intake of fluoride has been associated with an increased risk of hip fracture among the elderly. However, two recent studies reported no difference in the rates of hip fracture between fluoridated and non-fluoridated communities at recommended levels of fluoride additive to water supplies." But what about the diffusion argument that they make elsewhere? If the amount of exposure is becoming more and more similar in fluoridated and non-fluoridated communities, how can they compare the hip fracture rate between them?

On page 4: "Regulatory processes are in place to protect community water supplies that either restricts and/or prevents the introduction of impurities from the fluoridation of drinking water. The U.S. Environmental Protection Agency (EPA) is responsible for the regulation of drinking water and to assure its safety in accordance with the Safe Drinking Water Act (SDWA)." What they don't mention is that EPA Headquarters Union of Scientists oppose water fluoridation. See http://www.nteu280.org/Issues/Fluoride/NTEU280-Fluoride.htm. The first paragraph says: "The following documents why our union, formerly National Federation of Federal Employees Local 2050 and since April 1998 Chapter 280 of the National Treasury Employees Union, took the stand it did opposing fluoridation of drinking water supplies. Our union is comprised of and represents the approximately 1500 scientists, lawyers, engineers and other professional employees at EPA Headquarters here in Washington, D.C." The story with the article is compelling.

On page 5: "While not a health concern, dental fluorosis is, for some, a cosmetic concern. Increased rates of dental fluorosis are due to increased exposure to fluoride containing products found in general US society and are noted in both fluoridated and non-fluoridated communities." There are numerous things wrong with this statement. First, this "cosmetic" problem is a severe psychological problem for many youths. And the cost of covering it over, with veneers for example, is considerable. Second, the statement that it is not a health problem has no scientific basis. You may be surprised to learn that dental fluorosis is not a superficial problem with the enamel, but is an internal problem of the teeth. What is the long-term effect on dental health? No one knows because it is being ignored by dental and medical professionals. Third, if the bones of the teeth are being damaged internally, what is fluoride doing to the other bones of the body that you can't see, as well as all your other internal organs? The fact is that very few researchers in the U.S. are looking into this issue.

In the entire document by PHM&DC they only address health issues, and completely ignore the legal, regulatory, ethical, occupational, and environmental issues that are covered in FAN's "50 Reasons to Oppose Fluoridation."

1) Fluoride is a drug according to FDA regulation. Its purpose is to prevent a disease, dental decay. All dentists know that dental caries are caused by a bacteria, so tooth decay is a bacterial infection.

Additionally, fluoride is a drug unapproved by the FDA. Therefore, putting it in the water is a medical treatment, also unapproved, and any government putting it in the water in the U.S. is practicing medicine without a license using an unapproved drug. And even if you had a license, you cannot treat people without their informed consent. This is both illegal and unethical. Obviously, no consent, informed or otherwise, is occurring. This one fact is enough of a reason to oppose fluoridating the water, along with the lack of good science, and all the potential health problems involved.

2) The occupational issue is that hydrofluorosilicic acid, which is used in Madison, is incredibly dangerous in high concentration, before it is added to the water. It is so corrosive that it will eat through both glass and stainless steel, so has to be transported and stored in special containers. This also brings up the question of how much damage it does to people's homes, businesses, and city infrastructure even after been greatly diluted.

3) What about the environmental issues? We are dumping this poison into our water, and ultimately into our streams, rivers, and ground water. Once there it effects everything that it touches. I haven't yet mentioned that fluoride is one of the most toxic elements in the periodic table. It is known to interfere with over a hundred, and probably many hundreds, of the body's enzymes, making them either hypoactive or hyperactive. The pharmaceutical industry, as I recollect, uses fluorine in around 25% of its drugs as a poisoning element. Fluoride has also been shown to be an endocrine disruptor in humans (http://fluoridealert.org/issues/health/endocrine/).

4) The entire water fluoridation program is a grand experiment in which the participants are unaware of what is going on and not giving informed consent. While we suggest no evil intent on the part of the promoters of water fluoridation, this program is, none the less, a violation of the Nuremberg Code which requires informed consent when any person is involved in any such experimentation. Of course, this is not the case.

And as an aside, five years ago at the meeting of the MWU public hearing on water fluoridation a dentist spoke in support of Madison's policy. He said that he had been to England and that the people there have very poor teeth. He attributed that to the water not been publicly fluoridated. Besides the fact that no study has ever shown that not having fluoride in the water is the *cause* of poor dental health, he seemed to not be aware of the huge amount of fluoride in the tea that the British drink. According to Wikipedia (http://en.wikipedia.org/wiki/Health_effects_of_tea#Fluoride): "A 2013 British study of 38 teas found that cheaper UK supermarket tea blends had the highest levels of fluoride with about 580 mg per kilogram, green teas averaged about 397 mg per kg and pure blends about 132 mg per kg. The researchers suggested that economy teas may use older leaves which contain more fluoride. They calculated a person drinking a litre of economy tea per day would consume about 4 mg of fluoride." That is 4 ppm fluoride, or around five to six times the amount found in Madison's drinking water after fluoridation. In other words, the majority of the British are probably drinking self-fluoridated water. So now how do you explain the poor dental health of the British, and the lack of benefit of water fluoridation?

So far I haven't even mentioned the effect of the Agricultural Act of 2014 (better known as the "Farm Bill") that was passed recently. Unfortunately, it includes language that reverses the US Environmental Protection Agency's (EPA) proposed phase-out of sulfuryl fluoride as a direct fumigant on non-organic food. This chemical breaks down to, among other things, fluoride. The body excretes only a portion of the fluoride it takes in, while the rest is being deposited in soft tissue and the bones. The American people are having their entire bodies poisoned with fluoride just in the hope that a little bit gets to the surface of their teeth to make them harder. But it is not only the teeth that get harder. The pineal gland (which makes melatonin needed for sleep) is hardened and the arteries, evidently, are also hardening. The joints are hardened causing the symptoms of arthritis. This is all stupid or insane.

I conclude with the "Conclusions" from "50 Reasons to Oppose Fluoride."

"When it comes to controversies surrounding toxic chemicals, vested interests traditionally do their very best to discount animal studies and quibble with epidemiological findings. In the past, political pressures have led government agencies to drag their feet on regulating asbestos, benzene, DDT, PCBs, tetraethyl lead, tobacco and dioxins. With fluoridation we have had a sixty-year delay. Unfortunately, because government officials and dental leaders have put so much of their credibility on the line defending fluoridation, and because of the huge liabilities waiting in the wings if they admit that fluoridation has caused an increase in hip fracture, arthritis, bone cancer, brain disorders or thyroid problems, it will be very difficult for them to speak honestly and openly about the issue. But they must, not only to protect millions of people from unnecessary harm, but to protect the notion that, at its core, public health policy must be based on sound science, not political expediency. They have a tool with which to do this: it’s called the Precautionary Principle. Simply put, this says: if in doubt leave it out. This is what most European countries have done and their children’s teeth have not suffered, while their public’s trust has been strengthened.

Just how much doubt is needed on just one of the health concerns identified above, to override a benefit, which when quantified in the largest survey ever conducted in the US, amounts to less than one tooth surface (out of 128) in a child’s mouth?

While fluoridation may not be the greatest environmental health threat, it is one of the easiest to end. It is as easy as turning off a spigot in the public water works. But to turn off that spigot takes political will and to get that we need masses more people informed and organized. Please get these 50 reasons to all your friends and encourage them to get fluoride out of their community and to help ban this practice worldwide."

Gary Cohen, PhD
Madison, WI