PUBLIC COMMENTS: WATER UTILITY BOARD
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October 28, 2014

Re: Official comments Re: Water Fluoridation Review
To: Madison Water Utility Board, 119 East Olin Ave., Madison, WI
Date: Oct. 28, 2014, 4:30 pm

From: Susan Michetti, 605 Sheila St., Mt. Horeb, WI 53572 608-334-3515
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To Whom It May Concern:

My background

I am a political scientist with a focus on environmental and medical research regarding adverse health effects to humans and to the environment. I have a background as an investigative hard news reporter in multi-media (print, radio, video). I was trained in the scientific methods of social science research and set the curve for my outstanding academic performance.

While I am a member of Sierra Club's John Muir Chapter of Wisconsin and have officially represented that group in the past with official testimony as a volunteer or as an official representative elected or appointed to various leadership positions within Sierra Club spanning 3.5 decades, my presentation here is as an individual. I have chosen this path because my investigation into vast diversity of issues that interplay in the water fluoridation history goes beyond the limited role I would have to maintain as a Sierra Club official rep at this time.

Intentions and observations impacting rationality:

I seek to bring to the Madison Water Utility Board understanding into the events and criteria that have allowed the hazards of water fluoridation to escape appropriate vetting, for not only the safety of human populations, but also for the safety of the environment and its wildlife, including aquatic concerns.

I learned about the Madison Water Utility Board's water fluoridation review only 3 calendar days ago. Upon request, I can supply you with additional information, documentation, and/or sources that support the facts of this presented testimony in order that you may seriously investigate. I apologize if any part of this may not be as well organized and as clear as I hope it may be: In 3-days it was hard to put together a comprehensive story that is required into to provide you enough facts to have insight into the inappropriate activities surrounding water fluoridation, over which you have not had much control and which you have not had sufficient documentation.

I ask you to put aside your emotional beliefs and pre-conceived ideas in order to re-examine this issue open-mindedly and from a scientific viewpoint, which is required for you to make decisions in the best interest of our entire community. In discussing this issue, it is evident that inadvertent subliminal emotions too often become engaged that interfere with

rational decision-making. I ask you to be aware of your reactions and to question yourself about possible inconsistencies with your actual values as opposed to your beliefs.

This is obviously a non-partisan issue, because Dane County people on both the right and the left agree that water fluoridation must be revoked because it harms people and the environment. While others believe it is the silicofluorides that must be revoked, the Fluoride Review makes it clear that all fluorides cause adverse health effects and that the more studies are needed before scientific risk assessments of the safety of public health can be made.

My request for your action:

I ask the Madison Water Utility Board to recommend to Madison's City Council to immediately revoke its 1948 authorization of water fluoridation to its drinking water on the basis that NO trustworthy scientific risk analysis of its public safety exists, particularly to cover sensitive populations and ethnic and racial populations, despite proven scientific facts identifying many known adverse health effects are occurring. This recommendation to revoke applies to any other governmental agencies that may participate in this type of authorization here.

If you do not make this recommendation, I request of you, the Madison Water Utility Board, to publicly *scientifically prove the safety of your actions to add contaminated industrial-grade silicofluoride Super Fund toxic status water fluoridation product to our drinking water*, as a substitute replacement of the pure sodium fluoride pharmaceutical-grade product.

Such a proof of safety would require you to provide the public with sufficiently reliable and trustworthy peer-reviewed scientific studies that prove the public safety of the primary silicofluoride agents used to fluoridate the public drinking water system in Madison—this pertains to the same items of silicofluorides that are currently listed as substances recommended for study by the National Toxicology Program (NTP) specifically because they have NOT been proven safe. Chemicals proven safe would never be listed as needing NTP study! This alone proves safety assurances untrustworthy.

I request of you to obtain solid documentation for a basic question: *Where is the proof of safety for public health obtained by the Board of Health Madison and Dane County?*

Such documentation would identify any and all specific reliable peer-reviewed rigorous and thorough studies of incidences and rates of all known adverse health effects, as these type of studies must be conducted rigorously---prior to any claims of safety of public health.

The most complete source for known adverse health effects is the Fluoride Review that evaluated the studies worldwide until 2006 for the EPA as a peer group of highly qualified scientists in a completely independent setting at the National Academy of Sciences (NAS). It also identified what has been studied and what needs to be studied. Not only must known adverse health effects yet be studied for incidences and rates, but also with specific components for sensitive populations and ethnic and racial populations. Madison has had 66 years to do this, but this still has not been done. If you wanted so much to protect dental decay, then you have a responsibility to prove that your method to do this is harmless to everyone, but you haven't done this. You just make untrustworthy claims of safety.

All adverse health effects of all populations must be protected for safety under the Safe Water Drinking Act (SWDA). This is the primary definition of safety, not EPA Maximum Contaminant Levels (MCLs) which sometimes have been inappropriately set, specifically the case for fluoride and for arsenic, both of which are involved here. The intention and spirit of the law behind MCLs has never been to allow water works to add harmful pollutants up to

the cut-off point that has far too often been politically compromised or negotiated for technological shortcomings.

It is now publicly unacceptable for the Board of Health Madison and Dane County to continue to use industry spin, apparently blinding repeating out-dated erroneous information coming from the top of CDC's dental division and from the top of Public Health Service. It is inappropriate for Board of Health Madison and Dane County to claim this as supporting public safety.

Where is the this claimed scientific information that would have to be documented by the US EPA-contracted state-of-the-art Fluoride Review's work of the world's research in 2006; or where are the studies done after 2006 that provide the very scientific studies required in order for any risk assessments of public safety? The former National Academy of Sciences (NAS), National Research Council (NRC), Fluoride Review was published in 2006.

The spin from the CDC's dental division has been thoroughly refuted by former Professor Paul Connett, Chemist (see the FluorideAlertNetwork website), who has worked with the Sierra Club on public health issues involving air and water toxics.

The Fluoride Review panelists determined scientific facts vs. unsupported claims for the EPA. They peer-debated the reliability and flaws of the fluoride studies. This was done through the scientific method of assessing areas of strengths and weaknesses in studies.

The NAS was an extraordinarily independent and the trustworthy source for American science because its funding came from tax-payers. The red flags of flawed science where researchers are instructed to rig the studies for profitable *"findings"* did not exist at the NAS: it wasn't corporate or industry funded or profit-motive driven. Red flags are placed on the bulk of studies financed by most industries, which are particularly notorious in the chemical industry.

To the extent that the Madison Water Utility Board as well as the Board of Health Madison and Dane County fail to prove their positions with appropriate studies supporting the numbers used in scientific risk analysis for all populations of public heath, including sensitive, ethnic, and racial populations, in terms of the actual specific fluoridation product being used, this is the extent to which these safety assurances remain superficial and untrustworthy and inappropriately unprotective of public health.

From what specific silicofluoride studies were the numbers taken for application to risk assessment of public safety?

The Fluoride Review has identified multiple known adverse health effects that are occurring from water fluoridation, but more studies are needed in order to determine incidences and rates among individual variabilities. Without this risk analysis information, no safety assurances can be made by any scientist, particularly in the face of scientific facts proving that adverse health effects are occurring from silicofluorides.

Where is this scientific silicofluoride data required to be in place for scientific risk analysis of public safety? The numbers can't be crunched to determine the proper amount of fluoride to add to the drinking water without this data for risk analysis of public safety. This is the data that hasn't been studied. The adverse health effects are a proven fact. Any public safety assurances are untrustworthy without a scientific risk analysis of public safety. The Madison Water Utility Board and the Board of Health Madison and Dane County have failed to conduct an actual scientific risk analysis of public safety for this unique area with its variables. Worse yet, fluoridation is an optional addition to public drinking water. It is not necessary. This does not involve a threatening public contagion where consideration of possibly bypassing rules might be controversially justified with experiments of unknown adverse health effects. No justification can possibly exist to take these types of risks with public health without a contagion, but it is happening.

From my perspective, water fluoridation should be illegal under the Safe Drinking Water Act to the extent that any members of the population, including myself, have been or will be adversely harmed.

Assumptions are inappropriate and false that the EPA MCLs for fluoride and heavy metals prevent this harm, as you will see documented below. Assumptions are inappropriate and likely illegal by those who claim health safety in the absence of sufficient studies that are necessary to have reliable incidence and percentages identified in order to do the required health and safety risk assessments. If any of these required risk assessments can't be made due to the failure to conduct studies, then a reasonable person should have been able to conclude that the safety had not been proven, but this has been grossly distorted by incompetent people hired to be public health professionals, if not by the influence of corruption from above them. Such behavior, at best, derives from an inappropriate and erroneous conception of the elements of scientific risk assessments that prove the safety of public health, and, at worst, from corruption of the process for the benefit of few and the harm of many. It is time to follow the money and the power.

The major issues indicating water fluoridation must be discontinued:

The single over-riding major scientific issue against water fluoridation is the lack of proven safety.

To prove public health safety requires funding extensive rigorous, thorough, and peer-reviewed toxicology research using the same chemical, the specific silicofluoride found in the product, in order to identify incidences and their rates/percentages of each of the already known adverse health effects (which the Fluoride Review identified as occurring facts).

As an active member and not an official spokesperson, I can inform you that most of Sierra Club position's protect and defend the safety and biological integrity of the health of humans, wildlife, and the environment by conducting rigorous, thorough studies and research using the most stringent scientific methods and analysis in order to achieve safety and best practices. These require having sufficient studies without flawed findings not only proving adverse impacts or health effects but going beyond that to have sufficient studies of the second scientific type that measure incidences and rates of each known health effect to cover safety in the full range of variability (not just adult white males, but women, children, elderly, and ethnic minorities). Without accurate incident and rate data that has never existed in terms of the silicofluoride water fluoridation chemicals, no reliable risk assessment of public safety can be claimed to have been done scientifically. Sierra Club's positions may help government prevent errors and omissions involved in inadequate application of scientific methods and rules.

Sierra Club has a position to protect and defend the safety of public health in drinking water, in general, that goes beyond its general water fluoridation position. Sierra Club has positions on Safe Drinking Water, Maximum Contaminant Levels (MCLs), water waste treatment, contaminants and hazardous substances including heavy metals and toxics, Super Fund substance hazards, and other issues that may impact water quality. Sierra Club policies demand rigorous scientific methods and analysis be applied at each step of each process in a transparent way to achieve the status of best and safest practices. Sierra Club clearly has a position that dilution is not the solution to pollution, and this position would oppose the use of Super Fund waste status silicofluorides in drinking water. Many parts of the entire federal, state, and local governmental interactions impacting drinking water quality and or water fluoridation do not meet the relatively high standards of the entire collection of Sierra Club policies. Much of these pertain to issues beyond local governmental control: nevertheless, they impact local drinking water, and in particular water

fluoridation, in ways that this Board may wish to inquire for additional details. If you are interested in reviewing these policies, please ask me.

Important ethical and undemocratic issues involve lack of informed consent. Engaging in lack of informed medical consent, which happens non-stop with water fluoridation, shows disrespect for proper medical ethics as well as for democratic choice and control over one's own body.

Some important issues span the bridge between the fields of medical ethics and scientific public health safety. These involve inappropriate dosing treatment for the sole purpose of prescribing medicine to prevent dental decay to all who ingest tap water as well as lack of appropriate and necessary medical monitoring for individual variability.

Solid scientific practices monitor individual variability in order to refine and fine-tune scientific risk assessments of public health safety by feedback corrections (for errors; for changing circumstances); these in turn may be incorporated into the scientific requirements for margin of safety (that is being ignored with the water fluoridation method of solving dental decays). Public health does not exist in a static environment, but requires sufficient monitoring to keep the risk assessments accurate.

In terms of the disproportionate racial harm from environmental hazardous operations and their public health safety risks, the environmental movement, particularly the Sierra Club, has put special efforts to help protect neighborhoods and communities where the public health of poor and impoverished people, particularly ethnical minorities, is subjected disproportionately to safety risks. Usually this involves issues that surround the location of hazardous operations or the dumping of waste in poor and ethnic communities that degrade the environmental quality, but what is happening with silicofluoride water fluoridation (as opposed to pharmaceutical grade sodium fluoride) takes an unprecedented turn for the bad.

Unfortunately, significant racial harm to blacks already has been proven to be occurring with water fluoridation with the CDC's NHANES data from 1994 to 2004. It is the outgrowth of the overall failure to prove safety sufficiently. The fact that it appears unintended is irrelevant when it is causing racial harm.

If credible and trustworthy scientific risk assessments had been conducted for the safety of public health, the disparity of significant disproportionate harm in the black community from water fluoridation compared to white folks would have been discovered before the harm began. But safety assurances from the Board of Health Madison and Dane County *"weren't all they were bragged up to be."*

The Board of Health Madison and Dane County identified in the 1999 Madison Water Utility water fluoridation review that the sole purpose of their advocacy for water fluoridation is to prevent dental decay, with a specific focus on low socioeconomic and ethnic children. Some interpret this as code for black children.

Yet, the poor ethnic children that fluoridation proponents claim to help prevent dental decay are racial members of the same group being significantly disproportionately harmed by dental fluorosis using the CDC's own NHANES racial data from 1994-2004.

Another safety sub-issue involving NSF Standard 60 also derives from the lack of proven safety studies. NSF Standard 60 claims that toxicology studies prove human safety pertaining to the water fluoridation product. NSF International, Drinking Water Additives Certification Program, General Manager Stan Hazan, responded in a letter dated

7-7-2000 to Congressman Ken Calvert, Chairman, Subcommittee on Energy and the Environment, Committee on Science:

"The standard requires that the manufacturer of a product submitted for certification provide toxicological information, if available. NSF requires that manufacturers seeking certification to the standard submit this information as part of their formulation or ingredient supplier submission."

When asked to *"provide all lists complying with the above requirement submitted by manufacturers of hydrofluosilicic acid and silicofluorides,"* NSF Drinking Water Additives Certification Program chief responded: *"NSF has based its certification on the product use not exceeding the EPA's MCL for fluoride.*"

The extent that NSF bases its certification on EPA's MCL---not toxicology studies proving human safety of the silicofluoride water fluoridation product, NSF Standard 60 contains improper and false safety assurances for the public drinking this water.

The NSF Chief Stan Hazan answered: *"There have not been any studies on hydrofluosilicic acid or silicofluorides submitted to NSF under claimed Confidential Business Information protection."*

The Congressman asked, *"What is the purpose of establishing a maximum allowable level (MAL) for additives…?*"

The NSF Chief responded: *"The purpose of establishing a maximum allowable level (MAL) for individual drinking water additives products at 10% of the MCL is to recognize that contaminants may enter drinking water from other points throughout the system, including the source water, during the treatment and distribution process, and either through direct addition or surface contact. Limiting individual products to a contribution of 10% of the MCL for a given contaminant provides an extra margin of safety so that it is unlikely that the summation of the contributions from all potential sources will exceed the MCL at the tap."*

The Congressman asked, *"Under what circumstances or authority is an additive certified when the MAL of 10% of the established MCL is exceeded?*"

The NSF Chief responded: *"A MAL of greater than 10% of the MCL can be established by the certification body in limited case if it can be reasonably documented that there are no other significant sources of the same contaminant, that together, would result in the finished drinking water contaminant concentration exceeding the MCL. Fluoride has an MAL of 1.2 mg/liter, which is 30% of the MCL. This is justified on the basis of the limited number of other potential sources of fluoride ion to drinking water. For example, water that naturally contains sufficient fluoride is not additionally fluoridated, and fluoride is seldom present in other additives."*

This further shows that NSF not only has not based its fluoridation product certification on public health safety toxicology studies, but that NSF has stretched the EPA's MCL for fluoride three-times higher, after the EPA level already had been stretched beyond safety, by a corrupt EPA chief, based on the information provided by EPA's Dr. Marcus (See item 7 below).

This as an area that needs investigation because the NSF Standard 60 assures public safety of fluoridated drinking water using an industrial Super Fund status fluoridation product known to have the high levels of contaminants including heavy metals and sometimes radioactive substances. Yet, when NSF is interrogated by Congress, NSF Standard 60, upon which Madison Water Utility and all local water works depend for public safety, contains meaningless assurances without any supporting documented proof of safety. These false assurances to local water works have been going on for nearly 30 years.

I suspected that these studies must not exist, because not only were they not in the Fluoride Review but the panel informed the NTP silicofluorides, being used in water

fluoridation products, lack safety studies. The reason for my frustration at being unable to get NSF staff to identify the specific toxicology studies upon which they would base any reliable scientific risk assessment of public safety has been explained. From my perspective, and until I am informed otherwise, the entire scientific risk assessment process regarding any safety claims for silicofluoride water fluoridation products appear to be circular claims that are not supported by any science at all. The whole story has all been made-up fiction between those on the inside at NSF who led the NSF Standard 60 consortiums, *but why was it perpetrated by Board of Health Madison and Dane County?*

I have been unable to locate any scientific support that proves the safety of the silicofluoride water chemicals, and I am waiting to be informed.

Until reliable scientific documentation is provided that backs up scientific risk assessment that is required to determine public health safety, there is no assurance and no proof of safety.

To the contrary, the Fluoride Review proves adverse public health effects are occurring. Public exposure to Super Fund substances is unaccepted, including Super Fund substances that are diluted down to meet the Maximum Contaminant Levels (MCLs). This is where the entire safety system for drinking water quality breaks down. The MCLs are determined to be levels above which contaminants are removed from the water for public safety.

How did contaminants receive enough status that shifted when MCLs became, incorrectly or wrongly, sometimes referred to as the levels to which contaminants can be ADDED to the water for public safety? Is there any substance behind this apparently outrageous claim about which I remain in the dark? Where and how did this erosion of safe drinking water start?

I strongly oppose poisoning our drinking water in this way. I am concerned that safety studies of environmental impacts are almost non-existent. Yet, the tap water extends into the environment as well as the fluoridated waste water that flows ubiquitously without containment. I strongly am offended that I might be chronically ill as a direct cause of this corruption at NSF and involving other public officials that allowed the water I drink to be poisoned for my entire lifetime. In fact, a licensed osteopathic doctor prescribed either a reverse osmosis or water distillation filtration system to partially remove the fluoride, because she suspected that my symptoms that have been diagnosed as fibromyalgia resembled those of fluoride poisoning. I can't afford this. I ask you to stop harming me.

Further clarification and supporting information for the above requests:

1. Initial history of Madison's fluoridation was emotionally based, not safety based:

In 1948, the City of Madison started water fluoridation with absolutely no science supporting its safety and without its benefits proven.

The population of Grand Rapids MI became part of a clinical trial in 1947 that required 15 years of study for safety, adverse effects, and benefits. In 1942, the adverse effects criteria for dental fluorosis classification were established by HT Dean [(*American Association for the Advancement of Science*, Pub. 19, pp. 23-31 *Fluorine and dental health*), used by PHS, Public Health Service (PHS), Department of Health and Human Service (DHHS), Feb. 1991].

The City of Madison, Wisconsin recklessly adopted water fluoridation in an emotional frenzy when the Grand Rapids' clinical trial was only 1/15th completed. This was in the study's infancy---prior to any determination of any results of benefits, safety, or adverse effects. Irresponsibly in 1948, the City of Madison started water fluoridation based on emotionally-based feelings, which are formally stated in the official document from 1948.

It's a common fact that Bayer sold sodium fluoride as a rat poison in the first half of the 20th century. Rat poison was widely used in 1948. Sodium fluosilicate, too, was once widely used for ant, roach, and beetle insecticides and occasionally as an rodenticide, per the 5th Edition of *Clinical Toxicology of Commercial Products*. The City of Madison should have known this in 1948, as should have any reasonably informed person at that time, but this fact apparently was not considered in their emotional rush to be among the first in the nation to fluoridate our water---before the clinical trials had any results.

Sodium fluoride's known lack of safety as a rat poison is a much more accurate descriptor than the industrial PR spin of safety, blindly adopted by the captured CDC and its captured Public Health officials across the nation. Today most pesticides contain fluoride and petrochemicals. The atomic bomb requires fluoride to work, too. Fluoride is literally a killing element. Teflon harms from fluoride.

Lack of safety proof is a major reason to immediately stop water fluoridation.

Now, I ask you to revoke this irresponsible action started 66 years ago without any proven public health safety.

2. National Academy of Science (NAS) National Research Council (NRC) Fluoride Review in 2006 woke up the scientific and medical community to manifestations of adverse health effects from fluoride, in general:

The NAS NRC completed the world's first state-of-the-art scientific review of the fluoride research in 2006, which I refer to as the Fluoride Review. Our nation's foremost scientists, representing a good balance of unduplicated scientific fields and value systems, came together at the behest of the US EPA to conduct this truly independent Fluoride Review. These scientists were fully qualified in rigorous scientific thinking, analysis, and assessment methods to review the studies reliably.

This Fluoride Review panel came from tax-payer funding and was truly independent of the US Environmental Protection Agency (EPA) and other political and corporate influences. There were no corporate or profit-making funding sources that raise characteristic red flags warning of unscientific bias and untrustworthy claims posing as science. The Fluoride Review panel members came from well-balanced diverse scientific disciplines.

This Fluoride Review panel was instructed to review, analyze, and assess all of the information known about fluoride and its health effects. In this process, the weaknesses and strengths of the studies was assessed in order to sort scientific facts from unsupported findings. The overwhelming evidence proved that adverse health effects were occurring from ALL fluorides, in general, as a class---pharmaceutical sodium fluoride, natural environmental calcium fluoride, silicofluorides, and other fluorides. More research studies existed for sodium fluoride, much less for silicofluorides. The epidemiological records for silicofluorides were remarkably complete, covering every country throughout the USA. (Professor Roger Masters at Dartmouth used this remarkably thorough epidemiological data in his findings that silicofluoride water fluoridation in black communities caused disproportionate suffering compared to similarly fluoridated white communities as well as non-fluordated black communities when all the other variables factored.)

Most of the medical and scientific communities were shocked to learn from the Fluoride Review about fluoride's systemic harm and adverse side effects---not only harming newborn infants, but also harming millions of adults suffering endocrine disruption, thyroid disease, calcium metabolism (resulting in bone weakening, increased fractures, osteopenia, osteoporosis, parathyroid disease, C-cell disease), pineal gland, cognitive dysfunction, immune system dysregulation, kidney dialysis problems, digestive system problems,

glucose metabolism dysregulation (resulting in increased obesity, diabetes, and pancreas disease).

Today, the majority of scientists worldwide oppose water fluoridation, and support the scientific integrity of NAS NRC Fluoride Review of 2006: *Fluoride in Drinking Water: A Scientific Review of EPA's Standards*. I refer to this as the Fluoride Review. The world of environmental, biological, and medical scientists is relatively small community. The Fluoride Action Network (FAN) is run by former Professor of Chemistry at Syracuse, Paul Connett, PhD. On this website, you can find the names of some of the various scientists and medical professionals who are actively calling for a water fluoridation ban.

Most joined this action based on the 2006 Fluoride Review.

We ask you join the larger medical and scientific communities in opposing water fluoridation on the basis of scientific review of the public health hazards of fluorides.

3. EPA's chief strangely gave the Fluoride Review panel a work order specifically NOT to make a scientific recommendation on the safety of water fluoridation that would have been extremely useful at the local government level for direction:

The Fluoride Review panel was instructed to identify all information known about fluorides, in general. Implicit in this was analyzing and discovering flaws and limitations in studies that impacted safety findings. While most research used pure sodium fluoride, the largest arena of public health impact by fluorides, currently in the USA, comes from widespread water fluoridation, which contains industrial forms of silico-fluorides (which are fluorides plus silicon, heavy metals, and sometimes radioactive substances from its yellow-cake uranium mining origin that transfers its waste to the big ag fertilizer industry from which much of the industrial-grade Super Fund status water fluoridation product derives).

Unfortunately for local government faced with debating water fluoridation, this Fluoride Review panel was strangely instructed in the work order by their contractor, the US EPA chief, that they were not to make a recommendation from their collected and analyzed fluoride information regarding the safety of water fluoridation.

I implore to you that any public safety decisions should err on the side of safety when decision-makers do not understand the science, are confused, or recognize that the needed safety proof is missing.

4. Why would this Fluoride Review panel be ordered by the EPA to not to end their work naturally with a recommendation about the safety of water fluoridation?

Some have pointed to apparent revolving doors and hidden corporate influence at the top of the US EPA (2003-2006) as blocking a recommendation on the safety of water fluoridation that may have clearly instructed local governments to revoke water fluoridation and Congress to ban it.

On November 16, 2000, Robert C Thurnau, Chief, Treatment Technology Evaluation Branch, Water Supply and Water Resources Division, Office of Research and Development, National Risk Management Research Lab for the US EPA sent a letter to Research Professor Roger D. Masters at Dartmouth College that EPA does not have any *"empirical scientific data on the effects of fluosilicic acid or sodium silicofluoride on health and behavior."* Robert Thurnau also verified that EPA's National Health and Environmental Effects Research Lab (NHEERL), which conducts health effects research, only has some acute toxicity data regarding effects of silicofluorides on health and behavior. <u>This was an admission that the EPA had no proof of safety for the water fluoridation products in 2000 that matches the similar findings of EPAs own independent Fluoride Review panel in 2006</u>.

Based on research findings of widespread adverse health effects of fluoride, in general, combined with epidemiological studies of unique adverse silicofluoride associations

at the County level, it seems likely that this Fluoride Review panel would have recommended the discontinuation of water fluoridation nationwide. This possibility was blocked by the work order from the EPA chief who contracted them.

I received an email from one of the Fluoride Review panelists, the senior risk analyst, Dr. Kathleen M. Thiessen, PhD., with clarification that the findings of the Fluoride Review panel proves sufficient harm to stop water fluoridation. Dr. Thiessen is a senior scientist at SENES Oak Ridge, Inc., Center for Risk Analysis with biomedical genetics and endocrine training.

The Fluoride Review panel unanimously found that the *"existing regulatory limits for fluoride in the drinking water are not protective"* and that this was determined *"on the basis of health effects that have long been associated with fluoride: dental effects and skeletal effects."*

The Fluoride Review panel pointed out areas for study where adverse health effects could be important at regular drinking water levels. Several studies show increase in prevalence of goiter with increase of fluoride in drinking water. Other studies show differences in mean hormone measurements, including hypothyroidism. There is sufficient studies to say that there are these adverse health effects, but not enough studies to show percent of affected individuals.

We ask you to stop water fluoridation because sufficient scientific studies prove adverse health effects are occurring in humans.

5. Fluoride Review's Senior Risk Analyst explains that adverse effects are occurring with water fluoridation because no margin of safety exists and no medical monitoring exists for the individual variabilities.

In an interview with Fluoride Alert (FAN) on July 29, 2006, Dr. Thiessen said that treating everyone with the same general dose of fluoride fails to take into account variability in diet, water consumption, genetic susceptibility, and individual response to fluoride exposure. She said, *"We're dealing with uncontrolled and unmonitored exposures to an agent that is known to have adverse effects on humans."* She has no problem with fluoride as a prescription with an appropriate medical professional monitoring exposure, side effects, and effectiveness.

She said: *"Fluoride is not an essential nutrient."* The few studies that attempted to show that were unsuccessful. *"The general opinion by all concerned is that fluoride is not an essential nutrient. The body does not have a systemic requirement for it,"* she said.

Dr. Thiessen said, *"The concentration of fluoride that's used for supposedly the benefits is also in the range where adverse health effects are seen or begin to be seen. There's an overlap of the so-called beneficial range and the so-called adverse health effect range. And that's no margin of safety."*

"A margin of safety should be pretty much what it implies: That in order to account for things we don't know about, or an individual who sometimes drinks, or regularly has a higher intake than we think he does, or has exposure from other sources, or is more susceptible than the individuals we are used to dealing with. We have to allow for these variabilities, and that's what the margin of safety is supposed to do."

"Depending on the information base that's available, sometimes there's an extra margin of safety put in when we have information from animal studies and we don't have comparable information, or not enough information, from human studies. It's an extension of the principle of 'first do no harm,' *of don't do anything that's going to be damaging. If we make a mistake, let it be on the side of safety."*

"It's certainly unwise to provide unmonitored or uncontrolled exposures to individuals, large numbers of individuals, of any contaminant, or any potential agent, that could cause adverse health effects."

On August 8, 2000, J. Charles Fox, Assistant Administrator, Office of Water, US EPA responded to Congressman's Calvert's inquiry from May 2000 that Agency of Toxic Substance and Disease Registry's *ATSDR Toxicological Profile* (1993; Section 2.7, Table 1) identifies populations *"as sensitive and includes data on the prevalence in the US of the underlying physiological, nutritional, or age-related condition….Individuals that fall in each of the categories listed in Table 1 have a number of specific risk factors that impact their health status such as body weight, diet, and life style."*

Table 1 identifies these sensitive populations to fluorides as 52 million elderly, 22 million CVD patients, 2 million renal disorders, 27% Vitamin C deficiency, 37% Magnesium deficiency, and 44% calcium deficiency. We are at 76 million plus the individuals with nutritional deficiencies that would appear to render the majority of the American population at risk. This is absolutely unacceptable risks!

If the majority are at risk, some toxicity exists that extends far beyond the customary sensitive populations. This begins to add evidence to the findings that fluoride truly is the protoplasmic poison of some molecular scientists.

EPA later expanded this list acquired from Table 1 to include missing sensitive populations from the Congressional inquiry in 2000.

EPA requires public water systems to provide their clients with health effects information about contaminates including fluoride under Consumer Confidence FR 63(160):44512-44536.

Has Madison Water Utility provided these sensitive populations at risk from fluorides with health effects information on contaminants in their water supply that will disproportionately harm them, based on toxicological safety studies by ATSDR? If not, where is the supporting scientific documentation that the risk analysis for sensitive populations involves reliably computations that in turn is applied to show that margin of error has placed the actual contaminant level below the exposure threshold?

I request that this Board stop water fluoridation, because the failure to medically monitor for individual variabilities as well as populations sensitive to fluoride is allowing adverse health risks to occur. This supports other findings elsewhere, including the presence of symptoms and diagnoses corresponding to known adverse effects within our population, that the margin of safety is insufficient.

6. *Why would the head of US EPA choose to withhold the most credible expert-debated recommendation about water fluoridation safety from local governments--when the head of US EPA knew, or should have known, that the local governments generally would be confused without this type of independent highest quality credible expert guidance?*

The head of US EPA knew, or should have known, the need for this type of credible expert guidance was primarily at the level of local government where the decision-making usually was made to use or not use water fluoridation. The head of US EPA knew, or should have known, that the Fluoride Review panel was the most qualified entity anywhere in the world to provide the most credible scientific-based recommendation to guide local government. The head of US EPA knew, or should have known, that the Fluoride Review panel was in the best position to make a recommendation regarding the safety of water fluoridation because it already had analyzed the entire fluoride literature intimately and completely understood this literature as unique experts in this field with the highest qualifications in the world.

We ask you to recommend repeal of the Madison City Council authority authorizing water fluoridation, due to the lack of a scientifically-qualified safety recommendation from US EPA or its Fluoride Review panel, upon which the scientific determination of safety itself depends. If you are confused about the science, it is because your *"partners"* have went out their way to leave you confused.

7. The US EPA scientists have tried, unsuccessfully, to regulate water fluoridation for more than 20 years, which has undermined their work to sufficiently regulate public health water quality standards to prevent adverse health effects:

"Dilution is not the solution to pollution!" The detail-minded career scientists and other professionals on the US EPA staff (separate from the chief) recognized the water fluoridation Super Fund dilution problem now for more than two decades.

The water fluoridation chemicals are Super Fund waste byproducts of aluminum and big ag phosphate fertilizer manufacturing (Cargill Fertilizer and others). These chemicals are captured in the industry's wet scrubbing systems [SLwe.org]. They contain the pollutants regulated as unacceptable in the air because they have harmed sometimes to the point of death humans, cows, and orange groves downwind, particularly in Florida. Such severe adverse impacts come from high concentrations of known carcinogens, such as arsenic, lead, chromium, aluminum, other heavy metals, perhaps sometimes radioactive substances, and silicofluorides. Being classified as the most hazardous substances on earth, these contaminants receive Super Fund waste status. This is what this Board is adding to our drinking water. Our wells are being poisoned. *Why is this happening?*

Peer-reviewed studies have found an association between consumption of water containing hydrofluosilicic acid or sodium silicofluoride, also referred to as silicofluorides, and higher serum lead levels in children. [*Neurotoxicology*, Dec 2000; *Internat'l J of Environmental Studies*, Sept 1999].

EPA scientists understand the full extent that water fluoridation has been basically unregulated for the last 65 years without any federal oversight, except for the Super Fund mandatory identifying documentation (traveling only with the 1st purchase from each batch, but not listed on the container label). This documentation is carelessly regarded at the water works as a routine piece of paper to file, but not to actually verify with local government lab testing. *Where is the disconnect between NSF staff information that assigns responsibility for safety and contaminant verification to the local water works and the reality at the local water utility?*

In his historic capacity as Senior Toxicologist at EPA's Office of Drinking Water in 1990, Dr. William Marcus said, *"EPA should act immediately to protect the public, not just on the cancer data, but on the evidence of bone fractures, arthritis, mutagenicity, and other effects….The type of cancer of particular concern with fluoride, although no the only type, is osteosarcoma, especially in males."*

The Fluoride Review identified that dental fluorosis constituted a scientific medical fact of adverse health effects from fluoride that was being found significantly in the general population. Dental fluorosis is the first symptom that warns of other more severe health effects. The standards must not only be protective of such adverse health symptoms and their deeper effects but also must provide a sufficient margin of safety to avoid development of illness within the population.

I believe this was the rationale used when some local water departments, such as Mt. Horeb, lowered its fluoride level to .7 in order to incorporate the dental fluorosis numbers into their fluoridation levels. While this was better than no action, where it was done widely, the proof of harm after the deed proves that gross unacceptable errors had creep into the

risk analysis process in order for claims of safety to show harm. It also showed the claims of safety in the past were untrustworthy.

Since the very root of the problem (missing studies; uncompleted risk assessments; and inappropriate margins of safety) hadn't been corrected, it is predictable that as more studies are conducted, that more adjustments will be made to stop proven harm. The policy of adjusting numbers in hindsight to accommodate for failure to strictly follow the safety rules with scientific methods up front is an extremely untrustworthy way to determine public health policy, if not outright illegal. If not a direct violation of SDWA, then it constitutes willful recklessness and negligence because local governments have continually been informed by concerned citizens that there were safety problems as well as major civil rights issues.

In late 2006, shortly after the Fluoride Review was released, a scientific Harvard study of the highest quality proved that the nearly always lethal osteosarcoma in human teenage males was caused by specifically by fluoride.

Fifteen years has passed before this exoneration of the firing of Dr. Marcus for persistently insisting that his EPA bosses had erred in inappropriately raising the fluoride MCL and that it would harm the public in violation of the Safe Drinking Water Act. Responding to the 2000 Congressional inquiry, the EPA defended its efforts at compliance with SDWA by using documentation involving Dr. Marcus and others to prove that discussions with staff about water fluoridation occurred.

The EPA staff forms the water quality contaminant rules to protect public health from harmful pollutants. As a person who has specifically testified at State of Wisconsin and at EPA hearings regarding levels for the MCLs, I have been repeatedly informed that rules for contaminant levels are nearly always negotiated compromises, deviating upward from true public health protection for political or technology reasons. The ideal contaminant level known for actual public safety supported by scientific risk assessment is too often lower than the negotiated legal rule with higher exposure.

I saw the way the public hearing permitted the compromise of public safety as it pertains to arsenic in the EPA process, but thankfully the Doyle-Lawton Administration and its legislature made the Wisconsin arsenic rule much tighter than EPA in order to more safely protect health. Even minute amounts of arsenic less than 1 cause bladder cancer. Yet arsenic is present in almost every silicofluoride water fluoridation batch NSF lab testing documentation. *Why would Board of Health Madison and Dane County allow the known carcinogen at minute amounts to be ADDED to our drinking water and call this safe?*

EPA scientists work with data indicating adverse health effects associated with insufficiently regulated heavy metals and other water pollutants.

The EPA's Maximum Contaminant Levels (MCLs) for fluorides have been historically identified as early as 1986 by its toxicologists, chemists, physical scientists, statisticians, biologists, engineers, and attorneys as too high to protect public health based on the scientific data. They stated that the Safe Drinking Water Act requires each Recommended Maximum Contaminant Level (RMCL) to be set at a level at which no known or anticipated adverse health effect will occur, and that the top management at EPA overrode the staff in setting the fluoride RMCL (at 2 mg/L).

On 9-5-2000 J. Charles Fox of the EPA's Office of Water responded to Congressman Calvert's May 2000 question concerning if SDWA of 1996 required EPA to set its MCL(G)S to protect all persons, including sensitive populations: *"The Safe Drinking Water Act of 1996…,Section 1412(b)(4)(a) states that 'Each maximum contaminant level goal established under this subsection shall be set at the level at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety."*

Congressman Calvert's inquired to verify that *"no known or anticipated adverse effects"* and with and *"adequate margin of safety"* were occurring on protected sensitive populations.

Mr. Fox provided information that research was ongoing to identify groups beyond Agency of Toxic Substance and Disease Registry's (ATSDR's) Table I with increased sensitivity of dose-responses to fluoride, such as infants, children, persons with allergies or hypersensitivity to chemicals, and those drinking over 4 Liters of water daily. Mr. Fox said: *"EPA acknowledges that the MCL does not protect infants and children against dental fluorosis."* Mr. Fox said: *"Neither the NAS(1993) report, nor the ATSDR (1993) Toxicological Profile on Fluoride provides data that identify any individuals with a fluoride-specific hypersensitivity or allergy. No judgment can be made regarding the effects of fluoride in drinking water on such a population without data from studies of such populations or knowledge of the mechanisms underlying the adverse response."* Mr. Fox indicated that EPA did not take into consideration health effects of ingested fluoride retention with impaired renal function, a group that includes individuals with diabetes, and that NAS said *"more research was needed to adequately assess the risk."*

Since sensitive populations are to protected, and since Mr. Fox at the EPA admits the MCL is not protective for dental fluorosis, fluoride-hypersensitivity, fluoride allergy then the dose must be set at zero to provide not only no known adverse effects on infants but also has an adequate margin of safety.

Where are the risk assessment numbers for each of these sensitive populations?

If the studies have never been conducted, if the data doesn't exist, then all assurances of protections and compliance with Safe Drinking Water Act (SDWA) are scientifically unsupportable and untrustworthy. It is time to investigate why the health of these sensitive populations has been mistreated as disposable. Water fluoridation has been ongoing for over 65 years. The public health situation is unacceptably unprotected, particularly because studies have not been conducted for all the different types of populations in the USA, including sensitive populations as well as ethnic and racial variables.

How is it that decisions regarding the silicofluoride water fluoridation product have escaped proper oversight and scrutiny for failing to comply with the SDWA?

When were EPAs ongoing studies of individuals from these sensitive populations finished comprehensively to provide sufficient risk analysis data?

What were the safe levels of fluoride determined to be for each of these sensitive populations, including those in ATSDR's Table 1?

Do the contaminant levels appropriately account not only for safe levels but also for "adequate margin of safety" for these sensitive populations?

Why weren't ethnic and racial groups studied for likely genetic variability?

I ask you to immediately stop water fluoridation because the safety protections and the margins of safety required by SDWA are not being properly and legally applied to all sensitive populations as well as ethnic and racial variability. SDWA does not say these people's health is disposable if some combination of circumstances blocks sufficient proper scientific studies that are required before any risk analysis of public health can be made. The threshold parameters must be reduced legally to provide safety for all these populations, but this has not been done completely.

8. Could this strange and unprofessional behavior at the head of the EPA that directly contradicted the scientific evidence and staff scientists originate from big ag fertilizer industry pressure with political campaign contributions influencing revolving doors or some other type of power and influence? Might this behavior

originate from community surrounding the mining process, nuclear power, and nuclear arms?

In the industry periodical, *Phosphorous and Potassium # 103, Sept/Oct 1979, pg 33-39*, ***Fluorine recovery in the fertilizer industry—a review*** by HF Denziger, HJ Konig, and GEW Kruger states: *"The fluorine compounds liberated during the acidulation of phosphate rock in the manufacture of phosphoric acid and fertilizer are now rightly regarded as a menace. The industry is now obligated to suppress emissions of fluorine-containing vapours to within very low limits in most parts of the world."*

"*As with any pollution control operation, it is highly desirable for the operator of a fluorine scrubbing operation to find a use or market for the recovered fluorine to help defray at least partially the cost of the operation."*

9. Water fluoridation has virtually no federal oversight:

EPA lack of oversight:

All the 11 unions of scientists and other professionals at the US EPA demanded that EPA ban water fluoridation. They also testified to the US Congress to ban water fluoridation, but it hasn't happened after more than 2 decades have passed.

It is the science is being whittled away and ignored for more than 20 years, particularly surrounding water fluoridation, leaving public health insufficiently protected while adverse health effects are occurring.

The EPA denies it has any authority to regulate water fluoridation. It only regulates fluoride.

US EPA Office of Water, Assistant Administrator, J. Charles Fox responded in writing on 9-5-2000 to Congressman Calvert's inquiry of May 8, 2000: *"EPA is not involved with the decision of any drinking water system to fluoridate its water supply. Individual systems make the decisions regarding which fluoridation chemical to use, if fluoridation is practiced. Most States require that systems select fluoridation chemicals certified against ANSI/NSF Standard 60: Drinking Water Treatment Chemicals—Health Effects."*

"EPA supported the development of the Standards for Drinking Water Additives (ANSI/NSF Standard 60 and 61) to insure that the chemicals used for fluoridation (sodium fluoride, sodium silicofluoride, and hydrofluosilicic acid) did not contain impurities that might be deleterious to health and were evaluated against the Standard. Standard 60 requires that all fluoridation chemicals be analyzed for the presence of regulated heavy metals (ANSI/NSF 1998)."

FDA lack of oversight:

The FDA denies it has any authority to regulate water fluoridation. It only regulates the prescription drug sodium fluoride.

On May 8, 2000 Congressman Calvert asked Department of Health and Human Services (DHHS), Public Health Service, Food and Drug Administration, if health claims being made for fluoride-containing products that they reduce dental caries whether *"such claims mandate that the fluoride-containing product be considered a drug, and thus subject the product to applicable regulatory controls."*

Melinda K. Plaisier, FDA Associate Commissioner for Legislation, responded on 12-21-2000: *"Fluoride, when used in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or animal, is a drug that is subject to FDA regulation."*

In response to the Congressman's inquiry about any New Drug Applications (NDA), she responded that the several NDAs were approved as fluoride topical products. The fluoride products to be ingested *"prior to enactment of the …Drug Amendments of 1962 to*

the Food, Drug, and Cosmetic Act in which efficacy became a requirement, in addition to safety, for drugs marketed in the US."

She continued (in late 2000) that these grandfathered "drugs in use prior to 1962 are being reviewed under a process known as the drug efficacy study implementation (DESI). The DESI review of fluoride-containing products has not been completed." She also wrote, *"As you know, the EPA regulates fluoride in the water supply*."

Presidential appointments to EPA and FDA involve corporate revolving doors:

The appropriate expedition of studies regarding fluoride's health effects show decades of inappropriate delays throughout the US governmental offices expected to be protecting public health and shifting responsibility to others in a circular way makes almost no progress for decades.

Presidential appointments over the years to both the EPA and the FDA have made czars of attorneys and high level administrators working for corporations that these specific agencies have a responsibility to regulate. The agency chiefs and often the number 2 head of internal operations nearly always go through corporate revolving doors back and forth with the regulator. I say: "*It's the fox in the hen house*."

The regulation of water fluoridation *"fell through the cracks in the system"* for 65 years and counting

Presidential executive order powers didn't clarify fluoride jurisdiction:

Let's get back to observations of how the regulation of water fluoridation never happened at the federal level:

Presidents of the USA clearly have executive order powers. It appears to be executive responsibility to clarify boundary and jurisdiction disputes of federal agencies over fluoride vs water fluoridation regulation, but for some unknown reason this hasn't materialized despite both fluoride issues being connected to drinking water and health issues. Yet, the scientific evidence has proven that adverse health effects are occurring from water fluoridation. It's the extent that requires more study. It's the incidences and percentages that require more study. The federal government has had 65 years to perform these risk assessments on silicofluorides, but it hasn't happened.

Public health is not being protected because nobody at the federal level has the will and the decision-making power to do proper follow-up on the studies and reviews required for the public safety risk assessments.

MCLs to protect health are being twisted to allow ADDING known harmful toxins:

The spirit of Maximum Contaminant Levels (MCLs) to protect public health is being circumvented and violated, particularly when optional, diluted Super Fund hazardous status products with known harmful carcinogenic contaminants are DELIBERATELY AND INTENTIONALLY BEING ADDED to drinking water when they are not necessary for infectious disease. Adding unnecessary contaminants to the drinking water, as long as the toxin is diluted *"sufficiently"* to stay below enforcement levels where water contaminants must be removed, is irrational semantic non-sense.

This type of circumvention of contaminant rules is an insult to public health. Worse yet, something is wrong when it comes from public health officials, whom I observe behaving as if their careers are captured. Such circumvention constitutes an insult to the public health minded-scientists at the EPA who tried their best to establish adequate levels only to have their revolving door chiefs alter their MCLs into *"inappropriate errors"* that failed to meet the mathematics required by the proven science. This is more than abdication of responsibility by the EPA and the FDA—it is corruption at the top.

The studies upon which risk assessments are based have been delayed and blocked:

Why haven't the needed health safety studies for silicofluorides been funded and started yet, particularly when the Fluoride Review panel recommended this in 2006? Why did it take decades to do the Fluoride Review? Why do apparent loopholes expand and expand after they have been exposed repeatedly?

Why has public health fallen prey to an apparent loophole game of delays, industry spin involving distortions of semantics that reverse the meaning or twist it sideways, such as turning black into green, and turning consumer protection into corporate/industry protection that victimizes the public?

Blocking scientific studies is a unacceptable game that has been ongoing by corporate polluters for the last 6 decades. The chemical industry, led by Monsanto, is notorious for buying *"research results"* through funding researchers and destroying all semblance of rigorous, thorough scientific procedures in ways that are out-of-control.

Secret studies have been conducted and deliberately hidden from the public:

Sometimes, the US government has been complicit with serious civil rights violations, particularly aimed at unsuspecting black folks, who remained completely unaware that hideous experiments were being conducted on them to study the deleterious effects of fluorides and also of uranium in association with the Manhattan Project.

Insidious evidence by BBC's award-winning investigative journalist, Christopher Bryson, in his book, *The Fluoride Deception*, indicates that folks from the Manhattan Project were instrumental in starting water fluoridation to get rid of the hazardous fluoride waste created from the nuclear and war purposes that burned holes stories-deep in the ground and killed cows and orange trees downwind. Bryson's research came from the thousands of documents the former President Bill Clinton declassified at the end of his last Presidential term. This declassification centered on the black folks who had been mistreated and abused by Manhattan Project-associated researchers that administered fluorides and uranium to them without their knowledge or suspicion. Apparently these black men had the bad luck to get sick and go to the wrong hospitals at the wrong time. These people were plagued with strange illnesses for the rest of their lives.

Have you noticed the common elements of fluoride combined with disrespect of people's civil rights to have informed medical consent and to have control over what goes in their bodies that are present both in the unjustifiable actions of water fluoridation and of Manhattan Project researchers mistreating and abusing black people?

Oversights ranged over 65 years

In connecting the dots from my perspective, these lapses of attention to civil duty at the head of federal agency wasn't really an oversight. It was predictably developed by the corporate-regulator marriage that pre-empted concern for each agency's major consumer protection purpose.

Who benefits financially or in some other way while the public drinking wells are being poisoned?

10. Informed medical consent requirements are ignored and violated:

Ethical and caring medical professionals do not force harmful medication upon a captive population that must drink water. Why would dentists violate this?

Public drinking water fluoridation violates basic principles of informed consent governing the use of *any* pharmaceutical drug---almost all of which have known adverse side effects *requiring an MD to evaluate the individual advantages and disadvantages*.

This essential individual medical assessment does not happen here.

This flawed and inappropriate treatment strategy constitutes a major reason to ban water fluoridation now and forever.

11. Flawed medical treatment is irresponsible and inappropriate:

"One-dose fits all" is inappropriate medical treatment for individuals in any setting. It's inappropriateness is magnified when it extends into public drinking water to treat masses.

"One-dose fits all" ignores that about 1% of the population is allergic on an individual basis to each element, including fluoride. How many of the people walking around, with systemic red rashes and blistering or swollen areas, are manifesting direct allergic symptoms from the fluoride in their drinking water?

The Physician's Desk Reference (PDR) indicates about 1% population develop allergic symptoms from the presence of fluoride. Worse yet, it is unlikely that those with fluoride-caused ugly repulsive skin problems have any clue that it is the fluoride in the water to which they are allergic. (Their dermatologist or allergist generally can't test to possibly identify direct cause without going outside most health insurance plans.)

We ask you to revoke water fluoridation in order to discontinue flawed inappropriate medical treatment that violates medical ethics and treatment policies.

12. Huge uncontrolled field experiment ignoring scientific methods and analysis and violating medical ethics regarding inappropriate lack of safety and now recognized potential harm:

The recommendations for water fluoridation have put American health at risk in a huge field experiment in which most of the controls have been heedlessly destroyed. Not only was adverse health outcome was not sufficiently considered for safety, the official records show safety was never considered at all.

Generally, the US Federal Drug Administration (FDA) requires each pharmaceutical to go through human clinical trials mandating the reporting of all adverse side effects, but the sodium fluoride medication prescribed by dentists was grandfathered in, escaping the requirement for this medication-specific clinical research (as occurred with other early drugs).

No safety studies were conducted on the sodium fluoride dental medication.

It is widely reported in the today's news that it is unacceptable to expose any patient to untested experimental drug(s) with unknown safety, except with extreme controversy under extreme circumstances where that experimental drug might actually be the only hope to save human life. Sodium fluoride is an untested experimental drug with unknown safety, but the entire public is being exposed to unknown adverse health risks for the unnecessary claimed benefit of prevention of dental cavities among socially economic impoverished children.

We ask you to stop this unnecessary and unjustifiable exposure to the experimental drug in the water fluoridation that not only has already happened but continues in Madison WI.

13. Fluoridation product substituted for pharmaceutical pure sodium fluoride is composed of polluted Super Fund status waste:

Not only is the fluoridation drug experimental and untested, but it went through a *"switch and bait"* process. The grandfathered, pure sodium fluoride drug that the dentists approved was substituted for an extremely harmful polluted *"medication"* product. The

corporate spin claimed *"affordability"* of this polluted substituted product to naïve and gullible local governments that were already sold on its ability to prevent dental decay.

This toxic water fluoridation product being purchased by towns, villages, cities, and states throughout the USA travels with National Standards Foundation (NSF) lab test documentation as well as mandatory official paperwork identifying its source as carrying federally classified Super Fund mandatory reporting status. This procedure was verified in 2006 by Susan Michetti.

We do know that only the most toxic chemicals on earth carry Super Fund status, and we do know that the fluoridation products used in the USA carry Super Fund status. Therefore, we know that the fluoridation product is among the most toxic chemicals on earth until the local water works dilutes it down (as the solution to pollution).

Knowledge of these facts does not reassure the water drinking population of Madison that our fluoridated tap water is safe when it has been used to dump toxins that have been locally diluted roughly 4-5 times as directed by the manufacturer on the container label.

The Super Fund contaminated fluoridation chemicals used for "medication" tested positive in some batches by NSF for antimony, arsenic (most), barium, beryllium, cadmium, chromium, copper, lead, mercury, selenium, and thallium, per Mr. Hazen at NSF's Drinking Water Additives Certification Program. NSF testing in early 1998 did not find radionuclides (alpha and beta emitters). NSF certifies for the product use to not exceed EPA's MCL for fluoride. NSF rules for contaminants at use are diluted to 1/10th of EPA's MCL when added to drinking water at its Maximum Use Level.

Is aluminum now being found in some water fluoridation chemicals, as reported? Are water fluoridation chemicals coming from other countries? In 2006, the silicofluoride fluoridation products seemed to originate only from Florida and Texas with distributors located anywhere.

It is indefensible to protect a small subpopulation from dental cavities while harming health effects in the larger population, particularly sensitive populations. It is indefensible to add harmful heavy metals to our water supply, but high levels of heavy metals are diluted down daily and disposed of for the pollutants' industries of origin in our drinking water and in our body, corresponding with the rise of cancer, increased cognitive issues and ADHD, and new epidemics of chronic disease impacting quality of life for millions.

We ask you to immediately stop water fluoridation because there can be absolutely no justification for adding heavy metals, including lead and arsenic, to our drinking water, because it is known that these heavy metals harm people at minute levels far below the EPA negotiated and politically compromised MCL levels. This is why 11 of the EPA unions of scientists and professionals demanded a couple decades ago and received non-fluoridated bottled drinking water in order to continue working at EPA Headquarters in the greater Washington DC area, identifying the reason for the request as necessary in order to protect their brains from the toxins in the water fluoridation product.

14. The silicofluoride water product harms tooth enamel, resulting in dental fluorosis, and likely contributes to raising raises children's blood lead 50%. This fluoride effect is much stronger with silicofluorides than with pharmaceutical sodium fluoride.

PubMed abstracts a study by Coplan MJ, Patch SC, Masters RD, Bachman MS, *Neurotoxicology,* 2007 Sep;28(5):1032-42, Epub 2007 Mar 1, **Confirmation of and explanations for elevated blood lead and other disorders in children exposed to water disinfection and fluoridation chemicals.** *"Living in communities with silicofluoride treated water (SiFW) is associated with 2 neurotoxic effects: (1) Prevalence of children with elevated blood lead (PbB>10 microg/dl) is about double that in non-fluoridated communities (Risk Ratio 2, chi2p<0.01). SiFW is associated with serious corrosion of lead-bearing brass*

plumbing, producing elevated water lead (PbW) at the faucet. New data refute the long-prevailing belief that PbW contributes little to children's blood lead (PbB). It is likely to contribute 50% or more. (2) SiFW has been shown to interfere with cholinergic function. Unlike the fully ionized state of fluoride (F-) in water treated with sodium fluoride (NaFW), the SiF anion, [SiF6]2- in SiFW releases F- in a complicated dissociation process. Small amounts of incompletely dissociated [SiF6]2- or low molecular weight (LMW) silicic acid (SA) oligomers may remain in SiFW. A German PhD study found that SiFW is a more powerful inhibitor of acetylcholinesterase (AChE) than NaFW. It is proposed here that SiFW induces protein mis-folding via a mechanism that would affect polypeptides in general, and explain dental fluorosis, a tooth enamel defect that is not merely "cosmetic" but a "canary in the mine" foretelling other adverse, albeit subtle, health and behavioral effects…. In 1999 and 2000, senior EPA personnel admitted they knew of no health effects studies of SiFs. In 2002 SiFs were nominated for NTP animal testing. In 2006 an NRC Fluoride Study Committee recommended such studies."

Apparently, the industry is blocking our ability to know if ingesting their products are causing our adverse health effects.

We ask you to immediately discontinue the use of silico-fluorides in our drinking water because we have been waiting for decades for silico-fluoride health studies that still have not been started.

15. The fluoridation product's NSF testing rules lack federal oversight and are industry driven. Why does a discrepancy exist between NSF Standard 60s assurances of safety in fluoridated public drinking water compared to the listing of these same substances on the National Toxicology Program (NTP) as needing safety studies?

Are the manufacturers only asking and paying for what toxins they ask to be certified? Why aren't all the potential toxins found in various NSF lab testing and signed documents listed consistently for each water fluoridation "batch"?

NSF staff said that the water fluoridation manufacturers have the responsibility to request NSF to measure the precise amount of each toxin *"known to be present."*

The NSF lab test documentation travels with its water fluoridation product.

This responsibility is not legally mandated. It lacks federal oversight.

EPA and FDA deny that they possess authority to regulate or ban water fluoridation, but many legal outsiders disagree, maintaining that these agencies have authority that they relinquishing here. Congress has not given any federal agency such authority after this controversy arose decades ago.

The NSF rules, requested by the US EPA Office of Water in 1988, derive from agreement among NSF, product manufacturers, original stakeholder groups, other regulatory and water utility representatives, including Conference of State Health and Environmental Managers, American Water Works Association, and The Association of State Drinking Water Administrators.

Does NSF Standard 60 protect public safety as it claims? What is the definition of a batch? How is it that products for an entire year often come from the same batch?

NSF Standard 60 covers products used for drinking water treatment (*NSF Fact Sheet on Fluoridation Chemicals*, Feb. 2008). Although this fact sheet claims *"The standard requires a full formulation disclose of each chemical ingredient in a product"* (being added directly to drinking water). It identifies this *"requires a toxicology review to determine that*

the product is safe at its maximum use level and to evaluate potential contaminants in the product."

Where is this toxicology review? What safety study is NSF using? If any toxicology safety review had ever been conducted, then *"primary agents used to fluoridate public drinking system"* would not appear on the National Toxicology Program's (NTP) *"substances recommended for study"* list, but they do. The NTP's listings prove that the claims of NSF Standard 60 (that NSF has been unable to substantiate) are untrustworthy.

Routinely printed notices in the Federal Register call for public comments for nominations to the National Toxicology Program for toxicological studies of chemicals and other agents *"for which sufficient information is not available to adequately evaluate potential human health hazards."* These Federal Register notices by PHS constitutes evidence that PHS representations know, or should know, that the water fluoridation chemicals have NOT been proven to be safe for human consumption. *So why do Wisconsin and Dane County Public Health Service officials testify to this committee that water fluoridation is safe, when they know, or should know, that such assurances are false?*

Susan Michetti requested silicofluoride safety study documentation from NSF, but various NSF staff was unable to identify how the safety of the product at its maximum use was scientifically proven to be safe. She asked if NSF has conducted any independent safety research into silicofluorides or what other entity's safety research might NSF being using to support its safety determination of silicofluorides, but this type of documentation was not available to support the claims of NSF Standard 60.

Where's the transparency to support claims of sufficient risk assessment of toxicology studies to prove public safety?

Susan Michetti suspects that this Standard 60 safety assurance is a superficial claim because it remains unsubstantiated by actual scientific safety study pertaining to silico-fluorides. The recommendation in 2006 by the Fluoride Review panel that such a silico-fluoride safety study needs to happen can be interpreted as evidence that NSF's assurance lacks credibility when it comes to silico-fluorides being added to drinking water.

NSF staff informed Susan Michetti that the rules required NSF lab testing to *"measure"* levels of *"manufacturer-identified"* toxins present in industrial silico-fluoride water fluoridation products. NSF staff clarified that NSF only tests for what the corporation identifies and pays for to be certified as accurately measured. NSF does not do any extra testing to identify every chemical ingredient in the industrial silico-fluoride water fluoridation products. and that the fluoridation manufacturer is responsible for identifying all known contaminants that NSF is to measure. NSF guarantees only that their measurements are accurate for the contaminants that are identified by the manufacturer for them to test.

Contrary to common but false assumptions, this NSF testing does not cover *"the toxic waterfront."* This NSF lab measurement is performed only to the extent that NSF's non-client(s), the product manufacturer(s), requests testing of manufacturer-identified toxins to NSF. The manufacturer identifies what toxin is to be tested. The toxin measured is *"already known to be present." What happens to public safety when others toxins not identified by the manufacturer are omitted from testing for certifications?* NSF is paid for each lab test ordered by these manufacturers. NSF insists that the corporations for which it does lab tests are not *"client(s)."* NSF does not test for toxins that were not identified as requiring measurement testing by the manufacturers. The identification responsibility belongs to the manufacturers, not to NSF.

NSF lab responsibility is limited to guarantee accuracy of NSF measurement of each toxin tested in each product batch. A single product batch testing may cover up to an entire year of manufacturing, but situations vary according to batch. *What is the definition of a batch?* Decades ago, NSF lab test documents show that NSF regularly tested 10-12 toxins

per batch. Within the last decade, NSF lab test documents are showing much less testing, such as 2 or 3 toxins, primarily lead, arsenic, or aluminum, in addition to the hydrofluorosilicic acid. The product label has a logo that identifies it has been NSF tested; The NSF lab findings do not appear on the product label, contrary to what may be expected for accuracy in consumer disclosure involving diluted Super Fund toxic substance, but rather are required to be sent to the consumer, the local water works department, with only the first product purchased from each batch. (The local water works generally receives many shipments throughout a year apparently from the same batch.)

NSF's only stated function is measurement accuracy of lab findings. In several discussions with Susan Michetti within the last decade, NSF staff emphasized that NSF makes absolutely NO safety claims for the use of these fluoridation products in drinking water applications. It is recommended that the consumer, the local water works department, retest each product batch in order to determine if what was received meets the specifications identified.

How does this correlate with the safety assurance of NSF Standard 60?

To date, Susan Michetti remains uninformed of any local water department that actually tests the water fluoridation products to verify if it may contain more heavy metals or radioactivity that was not measured. These products travel with these manifests of these lab test results by NSF only with the first product purchased from a batch, whenever the definition of a batch changes.

16. All responsibility for adverse health effects and adverse environmental impacts are assumed by the local government authorizing entities regarding use of the water fluoridation products.

This NSF clarification to Susan Michetti shows that ultimately the consumer, which in this case is the Madison Water Utility Board, is responsible for the contents and any adverse impacts or health effects associated with the contents.

NSF clearly disavows responsibility and specifically puts responsibility for identity of toxin testing on the manufacturer and specifically puts responsibility for verification that the product batch hasn't been *"inadvertently switched by an error in transit and distribution"* upon the consumer, the local government's water entity.

There is no guarantor of product safety or appropriateness of use by the NSF or by any other entity. This liability completely falls on the local government that authorized this product use which is solely responsible and liable. If the local government contains authorizations from multiple governmental entities, those likely may share in the liability.

NSF also disavows any responsibility for the uses to which the water fluoridation product may be put, but only accepts responsibility for making accurate measurements.

Unstudied and unknown local environmental impacts:

There are unstudied and unknown local environmental impacts to wildlife of cumulatively degraded Super Fund diluted waste water quality dumped into the environment in extremely diluted amounts over decades.

Dr. Theo Colburn, PhD, documented the disabling effects of endocrine disruptors and mimickers in wildlife from toxics that came from chemicals released unnaturally into the environment from human activities involving pesticides, herbicides, waste water plants, manufacturing, and other sources more than two decades ago.

In this research, chlorine was identified as being a halogen with wildlife endocrine disruption characteristics. The fact that fluoride was also a halogen with extensive, but varying, endocrine disruption patterns that harmed living organisms, in general, went under *"the radar."* Today, the deleterious impacts of fluorides (and bromides) to the environment

and to wildlife in general are entering human awareness, while the actual adverse impacts remain grossly underestimated even among environmental professionals, primarily due to lack of studies. The damage is being observed in its infancy, while the mechanisms remain unknown—just like too many mechanisms in endocrine medical science remain unknown.

Sierra Club has a position that the lack of scientific information can not be interpreted that no adverse impacts are occurring in the environment.

17. Fluoride is a toxic endocrine disruptor that causes abnormalities, serious health effects, and cumulative exposure may likely eventually lead to cancer:

The Fluoride Review identifies endocrine disruption, thyroid dysfunction, and thyroid cancer, among other illnesses, as being caused by fluoride exposure.

Most of us know that iodine, chloride, fluoride, and bromide are the 4 members of the halogen elemental family with many similar physical and chemical characteristics and actions that fit into the similar types of locks and keys on receptors. Every thyroid hormone centers tyrosine around iodine molecules. Fluoride is a halogen that has no nutritional value.

Unlike iodide with nutritional value to the human body, fluoride does not have specialized routine interactions, called cascades, that each serve in a unique and specific helper function dedicated to a specialized pattern that superiorly assists the body perfectly in its various functions, as part of the neuroendocrine system that behaves as a servo computer that miraculously keeps the body running efficiently.

Dr. Kathleen Thiessen, the senior risk analyst on the Fluoride Review panel as well as an endocrine specialist, has verified that it is accepted among the scientific research community that fluoride does not have a nutritional value and that fluoride has not been found required for any human mechanism that serves the physical body.

Instead, fluoride serves as a unwanted disruptor to this otherwise efficient system. Fluoride may uniquely block, interfere, or adversely modify the functionality of thyroid hormone (which has a major job to regulate the speed of the human engine/motor that controls systemic metabolism at the cellular level throughout the entire body, thinking speed, weight, nutrient absorption in the intestines, blood pressure, heart rate pulse, fluid retention, blood sugar, and much more including balanced relationships with other hormones).

Much remains unknown, but that is no excuse to fail to take action to stop water fluoridation because we also know that the overwhelming evidence presented by the Fluoride Review shows unquestionably that serious adverse health effects are being caused by fluoride. We do not have to know all the mechanisms, the way each molecule travels, interacts, and modifies biology to end up with adverse medical illnesses.

In fact, the bulk of medical illnesses have unknown mechanisms. The endocrine surgeons complain of the absence of sufficient clinical studies regarding best practices dependent on so many unknown factors about the way the body works that thyroid and other endocrine surgery may impact.

Even familial genetic disorders are rarely the sole cause of a major disorder.

More and more genetic disorders now have identified triggers of environmental exposures, such as fluoride and other toxics.

Over the last 30 years, medical science has stopped blaming most chronic illnesses on genetic causes.

Medical experts have shifted to understanding that environmental toxins are required to be present before triggering genetic contributions to illness. This includes environmental toxins associated with the water fluoridation product. In other words, without the environmental toxins, most of the chronic illness would not occur.

18. The few, isolated proponents posture with denial--ignoring the state-of-the art science while clinging to non-representational selected flawed studies:

If any public health professional or dentist continues to claim that scientific evidence of systemic safety and dental health benefits exist with fluoride, particularly as official public testimony for public decision-making, when such talk is composed of unsubstantiated misleading PR spin, why are these few folks isolated, alone, and contradicting virtually the entire scientific and medical world as well as the scientific analyses set forth with rigorous scrutiny and scientific methods in the National Academy of Sciences, National Research Council's Fluoride Review in 2006?

Why are these few folks continuing to cite selected individual flawed studies to make their points after the NAS NRC identified the flaws that discredit virtually all of their sources?

Why are they not quoting to support their points from the acclaimed state-of-the-art NAS NRC Fluoride Review that identified data from all over the world that was consistently supported by multiple studies after flawed info was put into appropriate perspective?

Why are they not quoting from the NAS NRC Fluoride Review that identified precisely where more research was needed based on the existing information?

Could it be that they do not know how to explain their position's discrepancies with the flaws that were pointed out by the Review Panel pertaining to their claims?

Why are these few folk alone ignoring the existence of the thorough and rigorous scientific analyses conducted by the most impartial NAS NRC Fluoride Review paid with taxpayer money, not corporate interests?

Is this denial of reality to avoid apologies of past mistakes, or is it worse than that?

Do we have time for lack of appropriately intelligent input by unscientific public health officials or dentists that refuse to open-mindedly read, acknowledge, and rationally deal with the most thorough and rigorous scientific review that specifically searched out and included all the world-wide fluoride literature scrupulously to the extent that it had everything translated into the American language in order to scientifically analyze and assess it systematically with rationality for completeness using the time-tested scientific methods?

The funding was tax-payer supported, which is as reliable science as a research review will ever be in terms of being trustworthy. The primary red flag for untrustworthy science research is financial contributions by a profit-seeking industry or corporation, which did not happen here with the NAS NRC Fluoride Review.

People are getting hurt. Infants, thyroid disorders, fatal osteosarcoma, other endocrine dysfunctions including diabetes, fluoride caused deaths with kidney dialysis, and disfiguring dental fluorosis from excess fluoride browning teeth are happening in real time. There is no question that these are happening. Whether you read or don't read the Fluoride Review, you as public policy makers and shapers are responsible for the adverse health effects caused by fluoride and identified in that public review. It is past time to immediately stop water fluoridation here for all these reasons. To not stop it is committing intentional negligence at this point.

19. Water fluoridation disproportionately and significantly harms the very poor blacks it claims to protect with its coded reference to the socially economic impoverished:

Look at the list of fluoride impacts on health identified by the Fluoride Review, and you will realize that fluoride has serious adverse systemic effects that are unacceptable to public health in general. The only reason stated by proponents of forced water fluoridation is a claim to prevent dental decay, primarily for socially-economic impoverished children. Prevention is not a justifiable excuse to harm others, but this is what water fluoridation is

doing. Prevention is unnecessary. Water fluoridation to prevent dental decay is not at all like some possibly justifiable public health contagion containment matter like Ebola. Prevention is an excuse for water fluoridation that does not hold up under rigorous scrutiny.

It is not acceptable to medically harm millions of white and black people without their knowledge of why such awful things are happening to such great people, but this is happening with water fluoridation.

Findings prove disproportionate harm to blacks:

Worse yet, the epidemiological findings of Professor Roger D. Masters at Dartmouth College indicate that black people in specific are being harmed disproportionately compared to white folks by silicofluorides in the drinking water. The harm affects spontaneous, emotional reactions and cognitive functions adversely. These symptoms are listed in medical texts as indicators of endocrine disruption and/or imbalance. *How much harm needs to be suffered while the details of the mechanisms are being researched and debated into the future? How much harm is being suffered by professional incompetence and misunderstanding of scientific risk assessment methodology?* Professor Masters would very likely share his findings with you again. He sent the Madison Water Utility Board extensive information on his findings in 1999, but apparently you ignored scientific information. He's the expert on explaining his data.

Andrew Young, the former mayor of Atlanta Georgia and former US Ambassador to the UN, wrote to the Georgia legislation in April 2011 with a request to repeal Georgia's statewide mandatory community water fluoridation law, stating that African Americans are disproportionately affected by dental fluorosis and have a greater concern about fluoride due to their burden with higher rates of kidney disease and diabetes.

The CDC data identifies that blacks have significantly higher dental fluorosis than whites, with 58% and 36% respectively, from 1994-2004 NHANES data.

If the only stated goal of water fluoridation is supposed to prevent dental decay for social economic impoverished and ethnic children, which is code including poor children who are black, then evidence has already rose up sufficiently against the only publicly stated goal of water fluoridation to completely discredit it. These 3 sources identified above are solid indicators of disproportionate harm by water fluoridation against the very social economic impoverished group that Board of Health Madison and Dane County claims to be trying to protect—African Americans.

The Water Utility Board has now been informed of factual evidence that the goal to prevent poor blacks from dental decay has instead increased their fluoride burden and suffering. This is scientific measurements of dental fluorosis coming from the CDC's own NHANES data. With the dangers of fluoride that have been presented to you, we ask you to take action to stop harming at risk persons with water fluoridation and its known associated toxins.

Will the Water Utility Board stop its water fluoridation program that is significantly disproportionately causing harm to its black folks?

The Water Utility Board has no other reason for water fluoridation except to protect people, particularly poor black folks, from dental decay. It is impossible to protect people when you are harming them with what you identify as their protection. I am asking you to stop water fluoridation to stop racial harm. I am asking you to stop it because the only stated reason for fluoridating the water have been proven sufficiently irrational. The only stated reason does not make sense in view of the overwhelming evidence now available to you that completely contradicts that reason to protect poor blacks from dental decay through

a mechanism that harms them with much more serious medical problems than dental decay.