



November 10, 2016

Alderman James Bohl – Chair
Milwaukee Water Quality Task Force
200 E. Wells St.
Milwaukee, WI 53202

Dear Alderman Bohl and members of the Milwaukee Water Quality Task Force:

I am writing in regards to the memo prepared by Ms. Tea Norfolk of the Legislative Reference Bureau, regarding the concentration of lead in drinking water for Thurmont, Maryland and Tacoma, Washington. Please note that neither Peter Van Caulart's 2008 study or Geoff Pain's 2015 report, as referenced in the memo, were published in any peer reviewed scientific journals. It is critical that the Milwaukee Water Quality Task Force understand that fluoride has little influence on either corrosion or on the amounts of corroded metals released into the water at the level recommended by the U.S. Public Health Service for fluoridation of public water supplies (0.7 to 1.2 mg/L).

If we further examine some of the published research outlined in the memo such as the 2007 study by RP Maas, et. al published in *Neurotoxicology*, it is important to note that this bench study was done using an unbuffered (acidic) form of fluorsilicic acid at levels of 10-100 mg/L. These levels are significantly higher (14-143 times higher) than the amount used in drinking water (0.7mg/L). When added at the levels recommended by the U.S. Health and Human Services, the pH does not reach an acidic level. Therefore, the corrosive influence of fluoride in drinking water is not significant compared with other ionic influences, such as chloride and sulfate. Because the pH of drinking water is neutral, the acidic properties of the fluoride additive have been completely dissociated. Peer reviewed, published scientific studies by ET Ubansky, et. al.; WF Finny, et. al.; and GM Whitford all support this finding.

It also is important to understand that if there were a tendency for fluoride to leach lead from pipes you would see elevated blood lead levels in residents of all 70,000 homes city wide who still have lead laterals. I personally happen to live in one of these homes in Milwaukee and my son who is 30 months old has not had an elevated blood lead level and until recently had only consumed Milwaukee water. We have since added a filtering system to eliminate lead or other contaminants however thankfully it does not remove fluoride. A peer reviewed study by Dr. M Macek and published in *Environmental Health Perspective* (2006) did not support the elevation of blood lead levels in fluoridated communities, as compared to non-fluoridated communities. This is further supported by the fact that the Centers for Disease Control and Prevention (CDC) has reported an increase in the population with access to fluoridated water since 1970 and a continual decrease in the number of people with elevated blood lead levels. The CDC has published (attached) an engineering fact sheet on the impact fluoridation has on the corrosion of pipes which also supports our claim that fluoride has little influence on either corrosion or on the amounts of corroded metals released into the water.



We are supportive of finding a solution to the issue of lead poisoning caused by drinking water. However, the vast majority of elevated blood lead levels in children were not caused by water consumption. Removing fluoride from the drinking water in Milwaukee will not solve the issue of lead in our water but will exacerbate the immense amount of dental disease in our community and more specifically in our low-income residents. If further information is needed please do not hesitate to contact me directly. I also would encourage the task force to reach out experts in toxicology at the Wisconsin Department of Health Services or the City of Milwaukee Health Department. Thank you for your time and consideration of this additional information, as you continue a very important discussion in our community.

Sincerely,

A handwritten signature in black ink that reads "Matt Crespin". The signature is fluid and cursive, with the first name "Matt" being more prominent than the last name "Crespin".

Matt Crespin, MPH, RDH
Associate Director

CC: Members of the Milwaukee Water Quality Task Force