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November 13, 2015

State Board of Health

Re: Public Testimony on Citizens' Petition for the Nov. 19, 2015 Meeting Agenda

Dear Members of the SBOH:

I make this submission on behalf of King County Citizens Against Fluoridation and Washington Action for Safe Water (collectively "Citizens")

The proposed rule calls for test results for fluoridation chemical additives to show that the additive at full strength contains no detectable lead or arsenic. The concept of the proposed rule is to ban such additives that have feasibly detectable lead or arsenic. The limits for "feasibly detectable lead or arsenic" may have to be established by the hearing process. NSF reports that it is not feasible with its existing equipment to test raw hydrofluorosilicic acid (HSF) for lead and arsenic. But it is not necessary to test raw HSF to determine detectable lead or arsenic. Currently, NSF dilutes raw HSF to 60 mg/L pure water and then detects lead and arsenic. Petition at A3 to A4. It detects arsenic to 1 ppb. Petition at A6. If NSF could dilute raw HSF to 60 g/L and then detect arsenic to 1 ppb it would lower its detection limit by a factor of 1,000 using its existing equipment. NSF should be asked for the maximum concentration of HSF in g/L that it can analyze for arsenic and lead using its existing equipment.

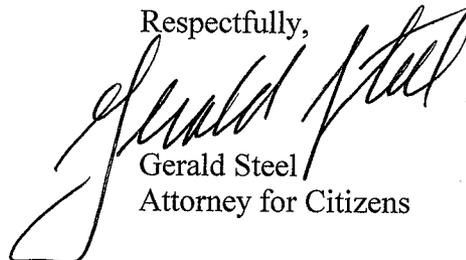
A 2014 published article by Phyllis J. Mullenix describes the methods she has used to test raw HSF for lead and arsenic. This full article can be accessed at:  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4090869/>

Mullenix reports in the Abstract of this article:

Metal concentrations were analyzed in three hydrofluorosilicic acid (HFS) and four sodium fluoride (NaF) samples using inductively coupled plasma-atomic emission spectrometry. Arsenic levels were confirmed using graphite furnace atomic absorption analysis.

Citizens recommends that the SBOH refer this regulation to a hearing and use the hearing process to define "feasibly detectable lead or arsenic" which could then be used to define the term "no detectable lead or arsenic" in the proposed rule. Thank you.

Respectfully,



Gerald Steel  
Attorney for Citizens