



DATE: November 19, 2015

TO: Washington State Board of Health Members

FROM: David DeLong, Board Staff

SUBJECT: DISCUSSION POINTS - PETITION FOR RULE-MAKING REGARDING LEAD AND ARSENIC CONTAMINATION OF FLUORIDATION ADDITIVES

Background and Summary:

Mr. Steel's petition proposes the following rule language:

“Fluoridation chemical additives allowed to be added to Group A public drinking water shall have test results that show the additive at full strength contains no detectable lead or arsenic.”

Mr. Steel makes several arguments in support of his proposal:

1. Mr. Steel asserts that this rule is needed because many fluoride additives have “unsafe amounts of lead and arsenic”.
2. Mr. Steel asserts that the SDWA did not contemplate the intentional addition of contaminants to drinking water, especially from additives that are not necessary to make water “safe and reliable”.
3. Mr. Steel asserts that the board's authority regarding fluoride additives in Group A water systems is limited to assuring that water is “safe and reliable” and that a water additive that is non-essential to safe water is contrary to the Board's authority when it raises the level in the water above or further above the MCLG.

The Department of Health has provided a recommendation (Tab 11d) to the Board indicating that the “regulatory framework provided in Washington State statute and rule is sufficient to protect public health and provide safe and reliable drinking water without adopting the requested rule.”

Regulatory Framework in Washington State:

1. Board Authority (Tab 11f): RCW 43.20.050(2)(a) and (f).
 2. Safe Drinking Water Act:
 - a. Defines contaminant as: “any physical, chemical, biological, or radiological substance or matter in water.”
 - b. Directs EPA to set MCLG's at a level where no health impacts are known or expected to occur and to simultaneously set a regulatory MCL at a level as close to the MCLG as feasible.
 - c. The SDWA acknowledges that chemicals are used in water systems. This directly contradicts Mr. Steel's assertion that the intentional addition of contaminants was not contemplated in the SDWA even for chemicals not necessary to make water “safe” such as treatments for esthetic water quality issues (e.g. taste, odor, color).
 3. WAC 246-290-220 requires all drinking water treatment chemicals, including fluoride additives, comply with NSF/ANSI standard 60. The standard is used to evaluate and approve
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substances both from the standpoint of control of the “active ingredient” and other components or contaminants contained in the product. (Review NSF protocols for acceptable contaminate levels and product testing).

- a. The NSF “fluoride fact sheet” (provided as part of the petition Tab 11c) shows results of NSF sampling of fluoridation additives: 43% have some arsenic contamination and 2% have some lead contamination.
4. An informal review of water quality data publicly available on the department’s Office of Drinking Water website for lead and arsenic contamination led ODW staff to conclude that there is no correlation between the addition of fluoride and an increase in arsenic or lead.

The Board has previously taken a policy position in favor of community water fluoridation as part of the Board’s published Oral Health Strategies and recommends the community water fluoridation as a sound public health practice.

Possible discussion points for the Board to consider:

- Does it make sense to single out fluoride chemicals for increased product purity requirements?
- Does the current regulatory structure provide adequate public health protection?

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