## Testimony House Bill No. 1605 House Human Services Committee Representative Matthew Ruby, Chairman

February 3, 2025

Chairman Ruby, and members of the House Human Services Committee,

I'm Jim Kershaw Superintendent of the Bismarck Water plant. I personally stand opposed to this bill.

I have been at the plant 41 years. This is my personal learning experience on fluoridation. In the early years I didn't know that much about it. Since 2018, after talking with public health professionals at the local, state, and national level, and reading the research that both supports and opposes Community Water Fluoridation or CWF. I've learned a lot more about how beneficial it is.

I stand with all the public health, dental and medical associations that support CWF. It is critical in a rural state like ND, due to the shortage of dentists and the lengthy waits for appointments, and the costs. Also, the time and miles that some residents must travel for treatment.

ND has a long history of CWF we are in the top 5 states in the nation with 95% of the population on Public Water Systems having Fluoridated water.

Fluoride is the 13<sup>th</sup> most common element in the Earth's crust. Even if you ban CWF, there is still going to be fluoride in the water. In ND It varies from 0.1-0.2 ppm in the Red River system. In the Missouri River system, it occurs naturally at 0.4-0.5 ppm. Ground water can vary quite a bit, from the 0.1 to has high as 9.0 ppm. There are some systems that are close to 0.7 ppm which is considered the optimal value. There are some ND public water systems where it is 1.5 to around 6 ppm. I personally know of a Non community transient system in western ND where the level is 9.0 ppm. EPA's Maximum Contaminant Level is 4.0 ppm. The secondary level is 2.0 ppm, which can cause minor fluorosis (pitting of the teeth). The teeth are strong, and it is merely cosmetic and is only visible under a microscope.

One thing that surprised me is that most dentists support CWF, which is something that would cost them money earned from extra services, that fact alone proved to me that they are truly public health orientated.

Water operators are also public health orientated. Some say that fluoride is the only thing we add to the water. I would like to say that chlorination, PH adjustment and corrosion control treatment that is used to provide a safe coating for service lines in

the distribution system are a couple other things we do to provide public health benefits.

It is NOT forced medication. It is supplementing a beneficial element. The additive used for fluoridation is NO different then the naturally occurring fluoride that is found in ALL water. It comes from mining; they use all the sellable commodities they can. Much like Agriculture (Grain, livestock) or a refinery or ethanal plant.

Most fluoride additives used in the United States are produced from phosphorite rock. Phosphorite contains calcium phosphate mixed with limestone (calcium carbonates) minerals and apatite—a mineral with high phosphate and fluoride content. It is refluxed (heated) with sulfuric acid to produce a phosphoric acid-gypsum (calcium sulfate-CaSO4) slurry. The phosphoric and fluoride gases that are released in the process are then separated. The fluoride gas is captured and used to create fluorosilicic acid.

Fluoride has been in water since the beginning of time, and CWF has been practiced for 80 years. If it caused serious issues, it would have been heavily regulated many years ago. EPA regulates public water systems on things down to the parts per billion and even parts per trillion. The bottled water industry has minimal if any regulation.

At 0.7 PPM (same as mg/l), there has never been any proof it causes harm. Some natural fluoride systems can be higher than the 0.7 ppm, without any being added. Has there been lower IQ's or any other ill effects in those towns? Current science has proven that 0.7 ppm is the optimal value, with 0.6 to 1.0 ppm being the acceptable operating range. Remember it can be MUCH higher in some systems.

For every study that opposes CWF there are two or 3 times that amount in support of it. 7000 to be exact.

Fluoride works systemically, by being in your saliva and coating teeth with a small amount constantly during the day that protects teeth from cavity causing bacteria and restrengthens enamel. It helps all age groups, and not just during childhood tooth development.

The United States has supplemented many elements for public health reasons: Such as Calcium, Folic Acid, and vitamin D in bread and milk. Also, lodine in salt has also been proven beneficial.

Water is the most efficient way to supplement Fluoride for health reasons, that is why CWF is so important.

To put it in perspective 0.7 ppm is equal to:
1" in 23 miles
1 minute in 1000 days.
1 cent in \$14,000.

The claims that CWF causes every ailment from A to Z, that the opponents say seems to be a little outlandish to me.

Especially at the current level of 0.7 ppm.

Places that have stopped Fluoridation have reinstated within 4-10 years due to the 50% or higher increase in cavities. Buffalo NY is one example.

https://www.wgrz.com/article/news/investigations/2-investigates/after-nine-year-absence-fluoride-will-flow-in-buffalos-drinking-water-this-week/71-99dbb0ab-a315-41a6-9ac9-9f0a71471f8d

Keep CWF decisions at the local level, there are probably just as many or more citizens that want it then don't. Don't let a vocal minority affect your decision.

## Thank You

I will be available any time for questions you may have.

## **STUDIES**

Northern District of California court decision DID NOT order the EPA to ban water fluoridation. (The report cited is not surviving peer review and will probably be pulled).

https://ilikemyteeth.org/decision-in-epa-case-as-flawed-as-the-analysis-its-based-on/

Information on Fluoridation. Also is on ADA's website.

**Fluoridation Facts**