



Protecting PUBLIC HEALTH and the ENVIRONMENT

Fluoride and Anchorage's Drinking Water

Anchorage Water & Wastewater Utility is committed to ensuring reliable service, safeguarding public health, and protecting the environment, long into the future.

The Utility ensures its water quality meets or exceeds federal, state and local regulations. AWWU regularly tests its public water supply several times each day.

AWWU is the recipient of a Platinum Award for Utility Excellence from the Association of Metropolitan Water Agencies, and takes pride in its recognition within the community and throughout the industry as a model in providing safe and reliable water and wastewater services, today and into the future.

Part of our response to community needs is the addition of fluoride to water provided from the Eklutna Water Treatment Facility and the Girdwood well, in support of community dental health. Some facts about fluoride addition are provided below.

- **Anchorage Municipal Ordinance Requires Fluoride in Drinking Water**

Endorsed by the Municipality of Anchorage Department of Health and Human Services, Anchorage Municipal Code 26.440.050 directs AWWU to add fluoride to Anchorage's drinking water.

- **Fluoride Aids in the Protection of Teeth / Agencies Support Fluoride in Drinking Water**

Fluoride benefits customers by protecting teeth and reducing tooth decay. Agencies endorsing the use of fluoride in public drinking water supplies include the national Environmental Protection Agency (EPA), American Dental Association, Centers for Disease Control, and United States Department of Health and Human Services.

The Utility will notify the Anchorage Assembly of any changes to these recommendations.

- **The Amount of Fluoride Added to Drinking Water is Very Small**

Fluoride is added to Anchorage's drinking water at a level that does not exceed the nationally recognized recommendation of 0.7 milligrams per liter at AWWU's Eklutna and Ship Creek Water Treatment Facilities and Girdwood Wells.

- 1.0 milligram per liter is equal to 1.0 part per million (ppm) per liter. For comparison purposes, 1.0 ppm is equal to approximately one-half of a dissolved aspirin tablet in a bathtub of water, or about 50 gallons.
- The National Sanitation Foundation (NSF) and American National Standards Institute (ANSI) certify the fluoride used by AWWU at Eklutna and Ship Creek (sodium fluorosilicate) and at Girdwood (sodium fluoride).
- NSF is a consortium of public health and drinking water professional associations that develops testing standards.
- Any manufacturer, seller, or distributor of water treatment chemicals in Alaska and many other states, is required to demonstrate compliance with NSF/ANSI Standard 60 - "Drinking Water Treatment Chemicals – Health Effects". These standards are adopted by reference in the Alaska Administrative Code by the Alaska Department of Environmental Conservation to ensure that applied chemicals do not pose a health risk to consumers.

(more)



- **.....continued..... The Amount of Fluoride Added to Drinking Water is Very Small**

- NSF/ANSI 60 testing includes purity and safety assurances, in addition to a detailed audit of products and locations by the chemical manufacturer.
- NSF/ANSI 60 certifications occur over a 2-year cycle and include process audits, inspections, assay validations and spot checks.
- AWWU monitors the fluoride concentration in its finished drinking water daily to ensure it meets AWWU treatment objectives.

- **Other Water Quality Additives**

- Polyaluminum chloride is used as a primary coagulant to create a floc with the dirt particles in the water so their weight causes them to fall out of water into sedimentation basins. Any remaining floc is removed by anthracite coal, sand, and gravel filters.
- Chlorine is added to Anchorage's finished water to guarantee the water is safe from harmful bacteria.
- AWWU produces annual Water Quality Consumer Confidence Reports (CCR) reports, in addition to more detailed water quality reports for state and federal regulators. The CCR is available online at www.awwu.biz or in print, by phoning 907-786-5613, to request a copy.

More information:

- Municipal Health and Human Services Department Medical Officer, Dr. Bruce Chandler @ 343-6723; State of Alaska (SOA) Dental Officer, Dr. Brad Whistler; SOA Epidemiologist, Dr. Joseph McLaughlin; Epidemiologist and Director of the CDC Arctic Investigations Program, Dr. Tom Hennessey; and Senior Director of the Division of Community Health Services at Alaska Native Tribal Health Consortium, Dr. Jay Butler.
- Centers for Disease Control: <https://www.cdc.gov/fluoridation/>
- U.S. Environmental Protection Agency: https://www.epa.gov/sites/production/files/2015-10/documents/2011_fluoride_questionsanswers.pdf
- Sandy Baker, AWWU Public Outreach Coordinator 786-5636

Reference: Anchorage Municipal Code 26.40.050 - Fluoridation of water:

- A. The manager of the utility is authorized and directed to continue supplementing the fluoride content of the water supply, to maintain a level of not more than 1.3 parts per million.
- B. All techniques used to apply fluoride, including testing the water before and after the addition of fluoride, determining the fluoride content, and testing for purity of the fluoride chemicals, shall, in all respects, comply with the rules and standards set by the Alaska Department of Environmental Conservation, and the National Primary Drinking Water Regulations.
- C. The personnel who will make the necessary analyses and apply the fluoride will be state-certified water treatment operators.

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