



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.

Recognized with a Platinum Award for Utility Excellence from the Association of Metropolitan Water Agencies, AWWU applies best practices to serving the community's current and future needs. The utility ensures its water quality meets or exceeds federal, state and local regulations, and tests the public water supply several times each day.

Fluoride is a public health recommendation that comes from the health experts and policy makers. AWWU's priority is staying abreast of the Safe Drinking Water Act (federal and state) regulatory changes and updates whose sole purpose is for safe, clean drinking water.

With an awareness of the current scientific and public health literature, and in compliance with Anchorage Municipal Code, fluoride is added to water provided from the Eklutna Water Treatment Facility and the Girdwood wells. Some facts about fluoride addition are provided below.

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

Anchorage Municipal Code 26.40.050 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 Amount of Fluoride Added to Drinking Water is Very Small**

Fluoride is added to Anchorage drinking water at a level that does not exceed the nationally recognized recommendation of 0.7 milligrams per liter at AWWU's Eklutna Water Treatment Facility 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 (sodium fluorosilicate) and at Girdwood (sodium fluoride).
- 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.



-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 and ADEC compliance.

- **Fluoride is one of the chemicals added in the drinking water treatment process**

- Polyaluminum chloride is used as a primary coagulant to create a floc with the dirt particles. The larger floc particles fall out of water in sedimentation basins. Any remaining floc are removed by anthracite coal, sand, and gravel filters.
- Filter aid polymer is added to the process just prior to the filters to enhance filter performance.
- Chlorine is added to Anchorage finished water to disinfect the water and make it 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) 786-5636 to request a copy.

More information:

- Centers for Disease Control: <https://www.cdc.gov/fluoridation/>
- National Sanitation Foundation (NSF): NSF is a consortium of public health and drinking water professional associations that develop testing standards. <https://www.nsf.org/>
- Alaska Division of Environmental Health (ADEC): <https://dec.alaska.gov/eh/dw/dwp/>
- 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, (907) 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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