



Nome Joint Utility System is pleased to present to you this year's Annual Water Quality Report. It is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is the Moonlight Springs aquifer which is classified as a ground water source. Water to the community is provided by three artesian wells located north of the Nome-Beltz High School at the base of Anvil Mountain. These wells are capable of adequately supplying Nome's year-round water needs. The infiltration gallery previously used is no longer connected to our distribution system; however, this could be reactivated in the event of an emergency and is available to provide an additional source of fire fighting water to the facilities in the vicinity of the high school.

### THIS REPORT SHOWS OUR WATER QUALITY AND WHAT IT MEANS.

Nome Joint Utility System routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period January 1 to December 31, 2024. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

TEST RESULTS								
Contaminant	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Inorganic Chemicals								
Nitrate [measured as Nitrogen] (ppm)	10	10	0.235	NA	NA	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Contaminant	MCLG	AL	Detect in Your Water	Range		Sample Date	# Samples Exceeding AL	Typical Source
				Low	High			
Copper - Action level at consumer taps (ppm)	1.3	1.3	0.081	0.003	0.118	2023	0/20	Corrosion of household plumbing systems; erosion of natural deposits
Lead - Action level at consumer taps (ppm)	0	0.010	0.0024	0.002	0.0075	2023	0/20	Corrosion of household plumbing systems; erosion of natural deposits
Water Treatment and Disinfection Byproducts								
Total Trihalomethanes (TTHM) (ppb)	NA	80	2.9	NA	NA	2024	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	0	NA	NA	2024	No	By-product of drinking water disinfection
Chlorine (ppm)	4	4	0.26	0	0.26	2024	No	Water additive used to control microbes. Chlorine and fluoride are added to the water system to protect the health and safety of the public. O-06-10-02 Nome City Code.
Fluoride (ppm)	NA		0.84	0	0.84	2024	No	Water additive which permits strong teeth. Chlorine and fluoride are added to the water system to protect the health and safety of the public. O-06-10-02 Nome City Code.

### DEFINITIONS:

**Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.

**Parts per million (ppm)** or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb)** or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**Maximum Contaminant Level (MCL)** - The 'Maximum Allowed' (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The 'Goal' (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Method Reporting Limits (MRL)** - the lowest concentration that can be reliably reported under current laboratory operating conditions.

## SOURCE WATER ASSESSMENT AND ITS AVAILABILITY:

The Nome Joint Utility System obtains drinking water from three local groundwater wells at Moonlight Springs (WL001, WL002, and WL003). In 2004, ADEC completed a Source Water Assessment report for these wells. To request a copy, please contact the ADEC Drinking Water Program or NJUS at (907) 443-6307. The assessment found that the wells have low susceptibility at the wellhead and medium susceptibility at the aquifer level. Overall vulnerability was rated low to medium, with slightly higher susceptibility to nitrates/nitrites and volatile organic compounds (VOCs).

## HEALTH EFFECTS:

### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA's Safe Drinking Water Hotline (800-426-4791) or on EPA's website [epa.gov/safewater](http://epa.gov/safewater). The Hotline can also provide more information about contaminants and potential health effects.

### Why are there contaminants in my drinking water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

### Additional Information for Lead

We have completed the initial Lead Service Line Inventory. No lead service lines were found. The following link can be used to access inventory information: <https://ak-lsli-adec.hub.arcgis.com/>. Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NJUS is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact NJUS (907)443-6307. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>

## VIOLATIONS:

NJUS submitted one routine Total Trihalomethanes (TTHM) sample for analysis for potential disinfection byproducts by its third-party laboratory by deadline. Delayed processing by the laboratory resulted in a violation being assessed against the system. Health effects of the delayed results are unknown but unexpected, as eventual test results did not exceed allowable limit. This violation returned to compliance on 9/9/24. The 2023 sanitary survey for the System identified three deficiencies: Well #3 sanitary seal had a gap and was repaired in 2024 to restore a watertight seal. The access hatch on the 6th Avenue reservoir is redesigned to meet current regulatory stipulations, to be complete July 2025. The system issued reports related to recent upgrades, including replacing and upgrading all three well pumps, VFDs, adding a pressure transducer, bypassing an atmospheric tank, installing an in-line static mixer, and modifying chlorine and fluoride feed systems; these were completed by July 26, 2024.

## QUESTIONS:

Please call our office if you have questions. We at Nome Joint Utility System work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water source, which is the heart of our community, our way of life and our children's future.

## CONTACT INFORMATION:

If you have any questions about this report or concerning your water utility, please contact NJUS Superintendent Thomas Simonsson (907-443-6307) or NJUS General Manager, John Handeland (907-443-6587).

**We want our valued customers to be informed about their water utility. If you want to learn more, you may also attend any of the regularly scheduled Nome Joint Utility System Board meetings.**

**Meeting Location:** NJUS New Powerplant Conference Room

**Meeting Time:** Third Tuesday of every month, 5:30 PM