**Annual Drinking Water Quality Report**

**New England, North Dakota**

**2024**

We are pleased to present to you this year's ***Annual Drinking Water Quality Report*.** This report is designed to inform you about the safe clean water 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 treated surface water purchased from the Southwest Water Authority (SWA). The source of SWA water is Lake Sakakawea.

The city of New England is participating in North Dakota’s Wellhead Protection Program. The North Dakota Department of Health will be preparing a Source Water Assessment for the city of New England and Southwest Water Authority at a future date. Information on this program will be made available to the public as it is completed.

The City of New England and Southwest Water Authority in cooperation with the North Dakota Department of Health, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Health has determined that our source water is ***"moderately susceptible"*** to potential contaminants. No significant sources of contamination have been identified.

If you have any questions about this report or concerning your water utility, please contact Jason Jung, City Auditor, at (701) 579-4422. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held onthe first Monday of each month at 7:00 PM in the New England City Hall.If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Jason Jung at the number listed above.

The city of New England would appreciate it if large volume water customers would please post copies of this ***Annual Drinking Water Quality Report*** in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill, can learn about our water system.

The city of New England routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1st to December 31st,2024. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for inorganic contaminants], though representative, is more than one year old.

The sources of drinking water (both tap 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:

***Microbial contaminants***, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

***Inorganic contaminants***, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

***Pesticides and Herbicides***, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. (Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Herbicide” Any chemicals(s) used to control undesirable vegetation.)

***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.

***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 number of certain contaminants in water provided by public water systems.

The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the following table, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

***(NA)***- Not applicable

***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* *(μg/l)* - 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*** - The “Ma**x**imum 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*** - 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.

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| **2024 Test results for the city of New England, ND** **& Southwest Water Authority** |
| **Contaminant** | **MCLG** | **MCL** | **Level** **Detected** | **Unit** | **Range** | **Date** | **Violation****Yes/No****Other Info** | **Likely Source of Contamination** |
| **Inorganic Contaminants** |
| Barium | 2 | 2 | 0.0126 | ppb | N/A | 2016 | No | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Fluoride | 4 | 4 | 0.92 | ppm | N/A | 2016 | No | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate-Nitrite  | 10 | 10 | 0.078 | ppm | N/A | 2024 | No | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Lead/Copper**  |
| Copper | 0 | AL=1.3 | 0.079190th%value | ppm | ND to 0.093810 Samples | 2023 | 0 Sites Exceeded AL | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead\* | 0 | AL=15 | No Detect90th%value | ppb | ND to ND10 Samples | 2023 | 0 Sites Exceeded AL | Corrosion of household plumbing systems, erosion of natural deposits |
| **Total Organic Carbon Removal** |
| Alkalinity, Source | N/A | N/A | 164 | mg/l | 148.00 to 164.00 | 2024 | No | Natural erosion, certain plant activities, certain industrial wastewater discharges |
| Carbon, Total Organic (TOC) - Finished | N/A | TT | 2.91 | mg/l | 1.85 to 2.91 | 2024 | No | Naturally present in the environment |
| Carbon, Total Organic (TOC)- Source | N/A | TT | 3.89 | mg/l | 2.84 to 3.89 | 2024 | No | Naturally present in the environment |
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| **Disinfectants**  |
| Chloramines | MRDLG =4 | MRDL =4.0 | 2.6 | ppm | 1.3 to 3.1 | 2024 | No | Water additive used to control microbes |
| **Microbial Contaminants** |
| Turbidity\*\*  | N/A | TT=.3 | 0.2 | NTU | N/A | 2024 | No | Soil Runoff |
| **Unregulated Contaminants** |
| Alkalinity, Carbonite | N/A | N/A | 4 | ppm | ND to 4 | 2024 | No | N/A |
| Bicarbonate as HCO3 | N/A | N/A | 200 | ppm | 181 to 200 | 2024 | No | N/A |
| Bromide | N/A | N/A | 33 | ppm | 27 to 33 | 2019 | No | N/A |
| **Stage 2 Disinfection By-Products (System-Wide)** |
| Total Halo acetic Acids (HAA5) | N/A | 60 | 9 | ppb | N/A | 2024 | No | By-product of drinking water chlorination |
| Total Trihalomethanes (TTHMs) | N/A | 80 | 7 | ppb | N/A | 2024 | No | By-product of drinking water chlorination |
| **Radioactive Contaminants** |
| Gross Alpha, Including RA, Excluding RN & U | 15 | 15 | 0.359 | pCi/1 | N/A | 2018 | No | Erosion of natural deposits |

**Surface Water Treatment Rule Monitoring Data:**

 Lowest Monthly Percentage of Samples Meeting Turbidity Limits= 100

 **Highest Single Measurement = 0.20**

**Source Water Microbiological Monitoring:**

SWA has a program of testing its untreated water supply for Cryptosporidium, Giardia & E-Coli as part of round 2 of the Long Term 2 Enhanced Surface Water Treatment Rule.

* Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes Cryptosporidium. The most used filtration methods cannot guarantee 100% removal. SWA monitoring did not detect any presence in the source water.
* Giardia is a microbial parasite commonly found in source water. SWA monitoring did not detect any presence in the source water.
* E. Coliform is a pathogenic parasite commonly found in surface water & originates in the intestinal tract of warm-blooded animals. In the 10 samples taken, only 3 detected any presence in the source water with the highest measuring 55 MPN/100ml. Disinfection and filtration effectively removes Giardia.
* To obtain information about these tests you may contact Grace Rixon-Handford, Water Treatment Plant Manager or Sandy Burwick, SWA CFO/Office Administrator at 1-888-425-0241 or e-mail us at swa@swwater.com

***\*\****Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Turbidity is measured every four hours during treatment plant operations. 100% of samples met turbidity limits. Average finished water turbidity for 2023 was 0.3 NTU, and highest single measurement was 0.2.

As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.Your water system monitors for sulfate, which at the present time is an unregulated contaminant. The following results are from the most recent testing in accordance with the regulations.

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 the 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 (1-800-426-4791).

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

USEPA has recently published the Lead and Copper Rule Revision. The purpose of this revision is to strengthen public health protections by removing lead service lines within public water systems. One requirement of this rule revision was to inventory all drinking water service lines within our public water system and notify consumers which type of lines serves each property. You may have recently received a letter from our system with this information.

The inventory is a listing of all service lines and the material composition of each line. They types of lines being documented are Lead lines, Galvanized Requiring Replacement (GRR) and lines made of Unknown Material. Classification of a service line as being compromised of Unknown Service Line material indicates that our system cannot currently confirm the material of both the public and private portions of the line with written records. Non-lead lines also documented; however, we were not required to notify consumers with documented nonlead lines. The classification of the type of service line serving a residence was based on historical data regarding the property and in some cases verification of the type of material on the privately owned side of the line by visual inspection or replacement records of the owner.

**The current Service Line Inventory for our system has been completed and is available for viewing at our office. Please contact CITY OF NEW ENGLAND at 701 579 4422 should you have any questions.**

Additional work to update the service line inventory, including inspection of the line, may need to be performed to further document and confirm the type of material making up both the public and private portions of the line serving your home or business. We will need the help of home/building owners in order to access the service line on the private side of the service line to positively identify the material of the line that carried water within your home/building. Our system may perform this work with our own system employees or we may contract with engineering firms or third-party contractors to complete this work to improve our service line inventory.

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of personas who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of New England is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing of your home.

Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family’s risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly.

**Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water.** Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the City of New England at 701 579 4422. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>

Please call Jason Jung, City Auditor, at (701) 579-4422 if you have questions concerning your water system.

The city of New England works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children’s future.