

Annual Drinking Water Quality Report

Tolna, North Dakota

ND3200944

2007

We're 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. The City of Tolna purchases its water from the Greater Ramsey Water District. Greater Ramsey Water District's water source is entirely groundwater. Water is obtained from the Spiritwood Aquifer, drawn from 3 production wells located in Nelson County. Greater Ramsey Water District's treatment plant uses a process to remove iron and manganese from the water. Prior to leaving the plant, chlorine for disinfection, fluoride to help prevent tooth decay, and a chemical to help prevent problems associated with lead and copper plumbing located in older homes, is added.

A. Source of Greater Ramsey Water District's Water:

Greater Ramsey Water District used three wells that draw from the Spiritwood Aquifer. Our treatment plant uses a process to remove the iron and manganese from the water. Prior to leaving the plant, we add chlorine for disinfection, fluoride to help prevent tooth decay, and a chemical to help prevent problems associated with lead and copper plumbing located in older homes.

B. Source Water Assessment

Our public water system, 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 not likely susceptible to potential contaminants. Information from the wellhead protection report is available for review at our office during normal business hours. Arrangements can be made at our business office to obtain a copy of the report.

C. Contaminants which may reasonably be expected to be found in drinking water and bottled 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:

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 stormwater, industrial or domestic wastewater discharges, oil production, mining or farming.

Pesticides and herbicides, which come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

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.

If you have any questions about this report or concerning your water utility, please contact Vicky Engen, Tolna City Auditor, at (701) 262-4749. 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 on the first Monday of each month at 7:00 PM in the Tolna City building. If you are aware of non-English speaking individuals who need help with the appropriate language translation, please call Vicky Engen at the number listed above.

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. Food and Drug Administration 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 effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 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).

Tolna 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, 2007. 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 radioactive contaminants], though representative, is more than one year old.

The City of Tolna 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.

In the tables to follow, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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

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

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

(MRDL) Maximum Residual Disinfectant Level: 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.

Highest Compliance Level: The highest level of that contaminant used to determine compliance with a National Primary Drinking Water Regulation.

Range of Detections: The lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points

Abbreviations: ppb-parts per billion or micrograms per liter; ppm-parts per million or milligrams per liter; ppt-parts per trillion or nanograms per liter; ppq- parts per quadrillion or picograms per liter; NA-not applicable; ND-none detected; pCi/L-pecocuries per liter (a measure of radioactivity), umho/cm= mirromhos per centimeter (a measure of conductivity), obsvns=observations/field at 100 Power, IDSE= Initial Distribution System.

TEST RESULTS								
Lead/Copper								
<u>Contaminant</u>	<u>Violation Yes/No</u>	<u>Date</u>	<u>#Samples</u>	<u>Action Level (AL)</u>	<u>90th Percentile</u>	<u>Samples Exceed AL</u>	<u>Units</u>	<u>Likely Source of Contamination</u>
1. Copper 90 th Percentile	No	8/14/07	5	1.3	0.525	0	ppm	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
2. Lead 90 th Percentile	No	8/14/07	5	1.5	4.975	0	ppb	Corrosion of household plumbing systems, erosion of natural deposits

<u>Contaminant</u>	<u>Violation Yes/No</u>	<u>Date</u>	<u>MCLG</u>	<u>MCL</u>	<u>Highest Compliance Level</u>	<u>Unit of Measurement</u>	<u>Range of Detections</u>	<u>Likely Source of Contamination</u>
Inorganic Contaminants								
3. Arsenic	No	10-15-07	0	10	3.45	ppb	n/a	Erosion of natural Deposits, runoff from orchards, runoff from glass and electronics Production waster
Radioactive Contaminants								
4. Combined Uranium	No	7-28-03		30	0.324	ppb	n/a	Erosion of natural deposits
Disinfection Byproducts								
5. Total Trihalomethanes (TTHM)	No	12-31-07 9 samples		80	3	ppb	2.35 to 2.58	By-product of drinking water chlorination
Disinfectants								
6. Chlorine	No	5-31-07	MRDL =4	MRDL =4.0	1	ppm	.39 to 1.5	Water additive used to control microbes

As you can see by the table, results from testing our water (the highest compliance level column) are much lower than the amounts allowed (the MCL column). Our system had **no violation**. We're proud that our drinking water meets or exceeds all Federal and State requirements. We have learned through monitoring and testing that some contaminants have been detected. The EPA has determined that our water is safe at these levels. No unregulated contaminants were detected in 2007.

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 a number of unregulated organic contaminants, which could indicate a contamination of the water supply from a pesticide or petroleum spill or leak. Your water system also monitors for sulfate, which at the present time is an unregulated contaminant. No unregulated contaminants were detected in 2007.

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.

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we may need to increase the average amount of chlorine in the distribution system. Please call Vicky Engen, Tolna City Auditor, at (701) 262-4749 if you have questions concerning your water system. October had the highest number of Total Coliform Samples—total Coliform Postivies for that Month :2 Violations= Public notice 10-1-07 MCL (TCR), Monthly 10-1-07.

The City of Tolna 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.

Mayor

Ken Quam

Tolna Council Members

Steve Dahl

Bret Poehls

Delores Clute

Jeremy Gronaas

City Auditor

Vicky Engen

Tolna Public Works Superintendent

Dennis Johnson



