

Annual Drinking Water Quality Report

Tolna, North Dakota

ND3200944

2009

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. If you have any questions regarding this report, please call Vicky Engen, City Auditor, at 701-262-4749.

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.

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).

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:

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 storm water 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.

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.

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).

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, 2009. 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:

(AL)Action Level

(IDSE)Initial Distribution System Evaluation

(TT)Treatment Technique

(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 Primacy 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 quadrioion 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								
Contaminant	Violation Yes/No	Date	#Samples	Action Level (AL)	90 th Percentile	Samples Exceed AL	Units	Likely Source of Contamination
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	15	4.975	0	ppb	Corrosion of household plumbing systems, erosion of natural deposits

Contaminant	Violation Yes/No	Date	MCLG	MCL	Highest Compliance Level	Unit of Measurement	Range of Detections	Likely Source of Contamination
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
Disinfect ion Byproducts								
4. HAA5	No	8/22/06		No	2.19	ppb	N/a	By product of drinking water disinfect ion.
5. TTHM	No	8/22/06		No	1.7	ppb	N/a	By product of drinking water disinfect ion.
Disinfectants								
6. Chlorine	No	5/31/09	MRDL-4		0.9	ppm	0.1 to 1.1	Water additive used to control microbes.

Table of Unregulated Contaminants

(The data presented is for 2009 or the most recent in accordance with state and federal regulations.)

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 2009.

Test Results

<u>Contaminant</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>
7. Alkalinity, Total	2/19/08			272	ppm	N/a
8. Bicarbonate as HCO ₃	2/19/08			331	ppm	N/a
9. Calcium	2/19/08			25.1	ppm	N/a
10. Chloride	2/19/08			29.6	ppm	N/a
11. Conductivity @25C UMHOS/CM	2/19/08			679	Umho/cm	N/a
12. Hardness, Total (as CaCO ₃)	2/19/08			103	ppm	N/a
13. Magnesium	2/19/08			9.8	ppm	N/a
14. Manganese	2/19/08			0.014	ppm	N/a
15. PH	2/19/08			7.28	PH	N/a
16. Potassium	2/19/08			4.8	ppm	N/a
17. Sodium	2/19/08			98.1	ppm	N/a
19. Sodium Adsorption Ratio	2/19/08			4.2	obsvns	N/a
20. Sulfate	2/19/08			34	ppm	N/a
21. TDS	2/19/08			366	ppm	N/a
22. Zinc	2/19/08			0.405	ppm	N/a

Violations:

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 2009.

If present, elevated levels of 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. Greater Ramsey Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Use water from the cold tap for drinking and cooking. **When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking and cooking.** If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

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.

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

