

Annual Drinking Water Quality Report for 2011
Village of Tully
P.O. Box 1028, Tully, NY 13159
ID# NY3304335

INTRODUCTION

To comply with State regulations, the Village of Tully, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. All samples taken for contaminants met state drinking water standards. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact **Harold Kiehl, plant superintendent at (315) 696-5988 or your local health department at (315) 435-6600**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the first Wednesday of each month at the Municipal Building 5833 Meetinghouse Road, Tully, NY at 7:00PM.

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Village of Tully water department serves approximately 930 people through approximately 350 service connections in its water system. All water supplied in 2011 was from our two Lake Road wells. Both wells are in the same ground water source located off Meetinghouse Road. The wells are approximately 78' in depth. All water pumped from the Lake Road well site is disinfected with sodium hypochlorite and treated with fluoride to help prevent tooth decay.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future. Water suppliers and county and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs.

As mentioned before, our water is derived from drilled wells. The source water assessment has rated the well as having a medium-high susceptibility to microbials, nitrates, metals, herbicides/pesticides, petroleum products, industrial solvents, and other industrial contaminants. While no significant sources of contamination have been identified in the assessment area, the well yields or pumps greater than 100 gpm from an unconfined aquifer. While the source water assessment rates our wells as being susceptible

to microbials, please note that our water is disinfected to ensure that that the finished water delivered into your home meets New York State’s drinking water standards for microbial contamination.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might be reasonably 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 EPA’s Safe Drinking Water Hotline (800-426-4791) or the Health Department at (315) 435-6600.

Table of Detected Contaminants (Lake Road Wells)

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
1. Barium Well #1	N	9/09	0.11	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2. Barium Well #2	N	9/09	0.12	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
3. Copper	N	9/11	0.12 (0.028-0.14) See footnote 1	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
4. Fluoride	N	Daily	Avg. 1.1 (0.3 -2.0)	mg/L	N/A	2.2	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
5. Lead	N	9/11	5.2 (ND-0.023) See footnote 1	ug/L	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.
6. Nitrate as Nitrogen Well #1	N	10/11	2.3	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
7. Nitrate as Nitrogen Well #2	N	10/11	2.0	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
8. Sodium Well #1	N	10/11	72 (71-73)	mg/L	N/A	N/A See footnote 2	Naturally occurring: road salt; water softeners; animal waste

9. Sodium Well #2	N	10/11	56 (55-57)	mg/L	N/A	N/A See footnote 2	Naturally occurring; road salt; water softeners; animal waste
10. Sulfate Well #1	N	12/11	16	mg/L	N/A	250	Naturally occurring
11. Chloride Well #1	N	12/11	130	mg/L	N/A	250	Naturally occurring or Indicative of road salt contamination.
12. Sulfate Well #2	N	12/11	14	Mg/L	N/A	250	Naturally occurring
13. Chloride Well #2	N	12/11	120	Mg/L	N/A	250	Naturally occurring or indicative of road salt contamination
14. Zinc Well #2	N	12/11	0.082	Mg/L	N/A	5	Naturally occurring waste mining

Disinfection by-product

15. Total Trihalomethanes	N	08/10	8.8	ug/L	0	80	By-product of drinking water chlorination.
16. Haloacetic Acids	N	08/10	19	Ug/l	N/A	60	By-Product of drinking water chlorination.
17. Chlorine Residual	N	daily	Avg. 0.5 (0.0-.09)	mg/L	NA (MRDLG)	4 (MRDL)	by-product of drinking water chlorination

1. Lead and Copper: The level presented represents the 90th percentile of the sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the Copper or Lead values detected at your water system and the 90th percentile value was the second highest value at 0.12 mg/L of Copper and 5.2 ug/L for Lead. The action level for Lead and Copper was not exceeded at any site sampled.

2. Water containing more than 20 mg/L of Sodium should not be used for drinking by people on severely restricted Sodium diets. Water containing more than 270 mg/L of Sodium should not be used for drinking by people on moderately restricted Sodium diets.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): 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 contamination.

Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Haloacetic Acids (HAA5): The combined concentration of the following five contaminants: Dibromo-, Dichloro-, Monobromo-, Monochloro-, and Trichloro-, acetic acids.

Total Trihalomethanes (TTHM): The combined concentration of the following four contaminants: trichloromethane (chloroform), dibromochloromethane, bromodichloromethane, and tribromomethane (bromoform).

What does this information mean?

As you can see by the table, our system had no violations in 2011. We have learned through our testing that some contaminants have been detected, however, these contaminants were detected below the level allowed by the state.

Is our water system meeting other rules that govern operations?

We are required to provide a Water Systems Operation Report each month to the Onondaga County Health Department. They are due on the 10th of the following month. The Onondaga County Health Department did not receive this report by the 10th of month for May 2011. This does not pose a threat to the quality of our water.

Do I Need to Take Special Precautions?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for the consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l (parts per million). To insure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2011, monitoring showed fluoride levels in your water were in the optimal range 77% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

Why save water and how do we avoid wasting it?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ♦ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ♦ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and

- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.