Annual Drinking Water Quality Report for 2005 Village of Tully PO Box 1028, Tully, NY 13159 ID# 3304335

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 Town Hall, Meetinghouse Road, Tully, NY at 7:30PM.

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 2005 was from our Lake Road well ground water source, located off Meetinghouse Road. The well is approximately 78' in depth. In case of emergency we have one back-up ground water source well on Lincoln Street. This well is approximately 18' in depth. All water pumped from Lake Road well is disinfected with sodium hypochlorite and treated with fluoride to help prevent tooth decay. All water pumped from Lincoln Street well is disinfected with sodium hypochlorite.

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 a drilled well. 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 well 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 Well)										
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination			
Radioactive Contar	ninants									
1. Beta/photon emitters	N	9/01	3.1	pCi/L	0	50 See footnote 1	Decay of natural and man- made deposits.			
2. Combined Radium 226 &228	N	9/01	3.8	pCi/L	0	5	Erosion of natural deposits.			
Inorganic Contamin	ants									
3. Barium	N	11/03	0.123	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.			
4. Copper	N	9/05	0.181 (0.0386- 0.211) See footnote 2	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.			
5. Fluoride	N	Daily	Avg. 1.2 (0.4 -1.5)	mg/L	N/A	2.2	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.			
6. Lead	N	9/05	4.09 (1.09 –5.25) See footnote 2	ug/L	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.			

7. Nitrate as Nitrogen	N	11/05	2.6	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
8. Sodium	N	11/05	57	mg/L	N/A	N/A See footnote 3	Naturally occurring: road salt; water softeners; animal waste.
9. Sulfate	N	9/01	13.2	mg/L	N/A	250	Naturally occurring
10. Zinc	N	9/01	0.0343	mg/L	N/A	5	Naturally occurring; mining waste.
11. Chloride	N	9/01	72.2	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination.
12. Thallium	N	11/03	0.0020	mg/L	0.5	2	Leaching from ore processing sites, discharge from electronics, glass, and drug factories.
Volatile Organics							
13. Carbon Tetrachloride	N	2/04, 5/04, 8/04, 11/04	0.31 (ND – 0.50)	ug/L	N/A	5	Discharge from chemical plants and other industrial activities.
Disinfection by-pro	duct						
14. TTHM Total Trihalomethanes	N	8/04	6.4	ug/L	0	80	By-product of drinking water chlorination.
15. Haloacetic Acids	N	8/04	1.1	ug/L	N/A	60	By-product of drinking water chlorination.
16. Chlorine Residual	N	Daily	Avg. 0.6 (ND – 1.1)	mg/L	N/A (MRDLG)	4 (MRDL)	By-product of drinking Water chlorination.
Microbiological Co	ntaminan	ts					
17. Total Coliform	N	3/10/05	1 Positive Sample See footnote 4	N/A	0	MCL=2 or more positive samples	Naturally present in the environment.

- 1. The State considers 50 pCi/l to be the level of concern for beta particles.
- 2. 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 0.181 mg/l of copper and 4.09 ug/l for lead. The action level for lead and copper was not exceeded at any site sampled.
- 3. 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.
- 4. Each month two routine samples are collected to test for the presence of Coliform bacteria. In March 2005, one out of the two samples taken on March 10th showed the presence of Total Coliform bacteria. On March 15, 2005 four repeat samples were taken and all four sample results were negative. The NYS standard is that no more than one of the samples may be positive in any month. This was <u>not</u> an emergency. If it had been, you would have been notified immediately. Coliform bacteria are generally not harmful themselves. *Coliforms are bacteria, which are naturally*

present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. It should be noted that E. Coli, associated with human and animal fecal waste, was not detected in any of the samples collected.

Definitions:

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

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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. <u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

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

<u>Treatment Technique (TT)</u>: 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.

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

<u>Micrograms per liter (ug/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb). <u>Picocuries per liter (pCi/L)</u>: A measure of the radioactivity in water.

What does this information mean?

The table shows that our system uncovered some problems this year. The Village of Tully had a Total Coliform violation in December 2004. Please refer to the Table of Detected Contaminants footnote 4.

Do I Need to Take Special Precautions?

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).

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.