Annual Drinking Water Quality Report for 2005

Minerva Water District

Town of Minerva
PO Box 937
Minerva, NY 12851
(Public Water Supply ID# 1500286)

INTRODUCTION

To comply with State regulations, we 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. Last year, your tap water met all State drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. 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 Bruce McGinn at (518) 251-2869. We want you to be informed about your drinking water. If you want to learn more, we would be pleased to discuss any drinking water issues in person.

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 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.

Our water system serves approximately 900 people through 320 service connections. Our water source consists of two drilled wells at the corner of Ridge Rd. and Rt. 28N. Water from both wells is disinfected with sodium hypochlorite before it enters the distribution system. A 200,000 gallon concrete tank on Ridge Rd. provides water storage for domestic and fire flows. A spring at the well site and drilled well supply along Minerva Creek are also available for emergency use.

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, gross alpha, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, 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 the 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, may 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 New York State Department of Health at (518) 891-1800.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Copper	No	7/00	0.34[1]	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems.
Lead	No	7/00	3.2[2]	ug/L	0	15 (AL)	Corrosion of household plumbing systems.
Asbestos	No	12/04	ND	MFL	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.
Barium	No	6/04	0.031	mg/L	2	2 (MCL)	Erosion of natural deposits.
Nitrate	No	5/05	0.11	mg/L	10	10 (MCL)	Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits.

Table of Detected Contaminants

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Radioactive Contaminants							
Gross Alpha	No	3/01	ND	pCi/L	0	15 (MCL)	Erosion of natural deposits.
Gross Beta	No	3/01	ND	pCi/L	0	50 (MCL)	Erosion of natural deposits.
Disinfection Byproducts							
Total Haloacetic Acids (HAA5s)	No	8/04	9.5	ug/L	0	60	Byproduct of drinking water chlorination
Total Tri-halomethanes (TTHMs)	No	8/04	7.6	ug/L	n/a	80 (MCL)	Byproduct of drinking water chlorination

Notes:

1 - The level presented represents the 90th percentile of the 5 sites tested during 2000. 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 values detected at your water system. In this case, 5 samples were collected at your water system and the 90th percentile value was the average between the two highest values. The action level for copper was not exceeded at any of the sites tested.

2 - The level presented represents the 90th percentile of the 5 samples collected. The action level for lead was less than the detectable limit at all 5 sites.

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.

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

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.

Million Fibers per Liter (MFL): million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. 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?

During 2005, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements of the New York State Sanitary Code.

Source Water Assessment Summary

The NYS Dept. of Health has completed a source water assessment for this system based on available information. The assessment includes an assigned susceptibility rating based on the risk posed by each possible source of contamination and how easily contaminants can move through the ground to the wells. The susceptibility rating is only a rough estimate of the potential for contamination of the source water and it does not mean that the water delivered to consumers is, or will become contaminated.

As mentioned earlier in this report, our water is derived from 2 drilled wells. The source water assessment has rated these wells as having an elevated susceptibility. No significant sources of contamination were identified. The wells draw water from an unconfined aquifer and overlying soils are not known to provide adequate protection from potential contamination. Please note that our water supply is disinfected to ensure that the finished water delivered to your home meets the New York State's drinking water standards for microbiological contamination.

The health department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us as noted below.

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 to 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 an 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, our way of life and our children's future. Please call our office if you have questions.