

Annual Drinking Water Quality Report for 2009
North Creek Water District
Town of Johnsburg, Warren County
(Public Water Supply ID#5600109)

INTRODUCTION

To comply with State and Federal 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. 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 Charlie Rawson, Water Superintendent at (518) 251-3765. We want you to be informed about your drinking water. If you would like to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held the first and third Tuesday of each month.

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 1,100 individuals through 350 service connections. We are pleased to report that a new well (Well 4R) was placed on-line in late 2009. Therefore, drinking water for the water district is now derived from three drilled wells. These wells are located in the same aquifer. Prior to distribution, chlorine is added to the well water for disinfection and orthophosphate is added to the water for corrosion control. Two 100,000 gallon storage tanks and one 200,000 gallon storage tank provide water storage.

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 the 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.

The source water assessment has rated our water source as having an elevated susceptibility to microbials, salts, sulfate, nitrate, industrial solvents, and other industrial contaminants. These ratings are due primarily to close proximity of the wells to permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government). In addition, the wells draw from an unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying layer to protect it from potential sources of contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination. Public notification is required if regulated contaminants are found in our water, and increased monitoring may result.

The state 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.

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, synthetic organic compounds, lead and

copper, gross alpha, disinfection byproducts, and volatile organic compounds. 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) 793-3893.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Compounds							
Chloride	No	11/18/09 12/04 12/04	5.94 (Well 4r) 3.69 (Well 5) 7.53 (Well 6)	mg/l	n/a	250 (MCL)	Naturally occurring or indicative of road salt contamination.
Manganese	No	11/18/09 12/04	30 (Well 4R) 10 (Well 5)	ug/L	n/a	300 (MCL)	Naturally occurring; Indicative of landfill contamination.
Barium	No	11/18/09	0.0057 (Well 4r)	mg/l	2	2 (MCL)	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	No	11/18/09	0.045 (Well 4r)	mg/l	N/A	2.2 (MCL)	Erosion of natural deposits; Water additive that promotes strong teeth.
Sulfate	No	11/18/09 12/04 12/04	3.91 (Well 4r) 4.24 (Well 5) 5.05 (Well 6)	mg/l	n/a	250 (MCL)	Naturally occurring
Nitrate	No	8/28/09	0.125-0.625 (Range of 3 samples)	mg/l	10	10 (MCL)	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Copper	No	12/2/09	0.757 ¹ ND-4.4 ²	mg/l	1.3	1.3 (AL)	Corrosion of household plumbing systems
Lead	No	12/2/09	1 ¹ ND-1.9 ²	ug/l	0	15 (AL)	Corrosion of household plumbing systems
Sodium	No	11/18/09 12/04 12/04	4.63 (Well 4r) 5.2 (Well 5) 8.67 (Well 6)	mg/l	n/a	n/a ³	Naturally occurring.
Zinc	No	12/04	0.069 (Well 5) 0.043 (Well 6)	mg/l	n/a	5 (MCL)	Naturally occurring; Mining waste.
Radiological Contaminants							
Gross Beta	No	4/02	1.3	pCi/l	0	50 (MCL)	Decay of natural deposits and man-made emissions.
Radium 226	No	3/08	0.005 (Well 5) 0.04 (Well 6)	pCi/l	0	5 (MCL)	Erosion of natural deposits
Radium 228	No	Quarterly during 2008	0.55 (Avg. WL 5) 0.2-1.2 (Range) 0.928 (Avg. W 5) 0.01-1.9 (Range)	pCi/l	0	5 (MCL)	Erosion of natural deposits
Radium 228	No	11/18/09	2.53 (Well 4r)	pCi/l	0	5 (MCL)	Erosion of natural deposits
Stage 1 Disinfection Byproducts							
Total Haloacetic Acids	No	7/23/09	14	ug/l	n/a	60 (MCL)	Byproduct of drinking water chlorination needed to kill harmful organisms.
Total Trihalomethanes	No	7/23/09	2.2	ug/l	n/a	80 (MCL)	Byproduct of drinking water chlorination needed to kill harmful organisms.
Stage 2 Disinfection Byproducts⁴							
Total Haloacetic Acids	No	2009	1.3-3.8 (Range of 4 samples)	ug/l	n/a	60 (MCL)	Byproduct of drinking water chlorination needed to kill harmful organisms.
Total Trihalomethanes	No	2009	2.5-5.1 (Range of 4 samples)	ug/l	n/a	80 (MCL)	Byproduct of drinking water chlorination needed to kill harmful organisms.

Notes:

1 - The level presented represents the 90th percentile of the 20 sites tested in December 2009. 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. In this case, 20 samples were collected at your water system and the 90th percentile value was the 3rd highest sample result. The Action Levels for lead was not exceeded at any of the sites tested. The Action Level for copper was exceeded at 1 of the 20 sites that were tested.

2 - The number presented represent the range of lead and copper sample results (lowest to highest).

3 - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.

4 - During the 2nd, 3rd and 4th Quarters of 2009 and the 1st, 2nd and 3rd and 4th Quarters of 2010, we will be evaluating our distribution system for the presence of disinfection byproducts. The purpose of this evaluation is to determine future sample locations for routine disinfection byproduct sampling. The study consists of the collection of 2 disinfection byproduct samples once every 90 days. Data from samples collected in 2009 is included in herein.

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 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.

N/A: Not applicable

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL violations in 2009. 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 2009, we received a violation for failure to collect a sample for cyanide from well #4. As a result of this violation we are unable to tell you if cyanide was present in the new well. However, Cyanide samples were collected in from both Wells 5 and 6 in 2008 and cyanide was not detected. Since Well #4 is located in the same aquifer as Wells 5 and 6 it is unlikely that cyanide would have been detected in this new well.

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).

WATER CONSERVATION

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.
- ◆ 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.
- ◆ Turn off the faucet while brushing your teeth.

- ◆ 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. We ask that that all our customers help us protect our drinking water source. If you have any questions regarding the information presented in this report, please do not hesitate to contact Charlie Rawson at (518) 251-3765.