Annual Drinking Water Quality Report for 2014

Village of Delevan
85 S. Main St., PO Box 216, Delevan, NY 14042
(Public Water Supply ID#0400336)

INTRODUCTION

To comply with State regulations, the Village of Delevan, 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 **Daren A. Smith,** Superintendent of Public Works, (716) 492-0281. 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 Tuesday of each month at 7:00 PM at the Village of Delevan Municipal Building.

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 Delevan has two water sources. The first is a number of springs located on Village property just to the west of the Village off Worden Road. This water is collected through sixteen collection structures and flows by gravity to a 50,000 gallon concrete reservoir then on to a new treatment building. The second source is a 370' deep well located adjacent to the storage tank on Worden Road. The well water is pumped to the treatment building. However, in 2012 the well was designated as an emergency source only. All water entering the treatment building is filtered, disinfected by injection of gaseous chlorine and an ultraviolet light, then flows to a 500,000 gallon storage tank where it enters the distribution system. Our water system serves approximately 1,090 people through approximately 400 service connections.

In 2003 the NYS DOH conducted a partial source water assessment for our water system, based on available information. Possible and actual threats to the drinking waters sources were evaluated. The 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 wells and springs. The susceptibility rating is an estimate of potential contamination of the source water. It does not mean that the water delivered to consumers is, or will be become contaminated. See section, "ARE THERE CONTAMINANTS IN MY DRINKING WATER?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with the additional information for protecting source waters into the future.

As we mentioned before, our water is derived from several springs, and if needed, one well. The source water assessment was done for the well only. For the well, the susceptibility to contamination was rated as: medium from enteric bacteria, nitrates and protozoa. The ratings for this source are due to it proximity to pasture land and permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government). While the assessment rates our source as being susceptible to enteric bacteria, 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.

A copy of this assessment, including a map of the assessment area, can by obtained by contacting us as noted above.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: coliform bacteria, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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 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 Cattaraugus County Health Department at (716) 701-3386.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectant							
Chlorine Residual	No	2014	Avg. = .55 (.22 - .85)	mg/l	n/a	MRDL = 4	Water additive used to control microbes.
Microbiological Contaminant							
Total Organic Carbon – Raw	No	2014	Avg. = 1.62 (.7 – 3.3)	mg/l	n/a	TT	Naturally present in the environment.
Turbidity – Filtered[1]	No	2/10/14	0.59	NTU	n/a	TT = ≤ 5.0 NTU	Soil runoff.
Turbidity – Filtered[1]	No	2014	100% < 1.0	NTU	n/a	TT = 95% of samples ≤ 1.0 NTU	Soil runoff.
Distribution Turbidity[2]	No	11/2014	Highest Monthly Avg. = .07	NTU	n/a	TT = ≤5.0	Soil runoff.
Inorganic Contaminants							
Copper[3]	No	10/2/13	130 (41 - 130)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives.
Lead[4]	No	10/2/13	2 (ND - 2)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits
Nitrate	No	3/4/14	4.61	mg/l	10	MCL= 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Disinfection By-products							
Haloacetic Acids	No	2014	High LRAA = 3.6 (ND – 9.0)	ug/l	n/a	MCL = 60	By-product of drinking water disinfection needed to ill harmful organisms.
Total Trihalomethanes	No	2014	High LRAA = 6.78 (3.0 – 9.3)	ug/l	n/a	MCL = 80	By-product of drinking water disinfection needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.

Notes:

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. State regulations require that turbidity must always be below 5.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. The levels recorded were all within the acceptable range allowed and did not constitute a treatment technique violation.

2 – Our highest average monthly distribution turbidity measurement of .07 NTU occurred in November. This value is below the turbidity standard of 5 NTU assigned to our system.

3 - The level presented represents the 90th percentile of the 10 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 values detected at your water system. In this case, ten samples were collected at your water system and the 90th percentile value was the second highest value, 130 ug/l. The action level for copper was not exceeded at any of the sites tested.
4 - The 90th percentile level for lead was 2 ug/l. None of the ten sites exceeded the action level of 15 ug/l.

Definitions:
Action Level (AL): The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.
Locational Running Annual Average (LRAA): This is a calculation of the average of all the readings in the year preceding the date of sampling for a particular sample site.
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.
Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
Picocuries per liter (pCi/L): A measure of the radioactivity in water.
Treatment Techniques (TT): A required process intended to reduce the level of a contaminant in drinking water.

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 current federal drinking water requirements. Regardless, we are required to provide the following information on lead in drinking water:

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Village of Delevan is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 or cooking. If you are concerned about lead in your 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead."

Is Our Water System Meeting Other Rules That Govern Operations?

On November 22nd and 23rd, 2014, the chlorine residual at the filter plant was recorded as being less than 0.2 mg/l for greater than 4 hours. This was a violation of 10 NYCRR Part 5-1.30(b)(2). In addition we received a violation for failing to make state notification when the free chlorine residual fell below 0.2 mg/l. The required public notice was already distributed to our customers in reference to the above violations.

There is nothing you need to do at this time. If a situation was to ever arise where the water is no longer safe to drink, we would notify you immediately in accordance with federal and state regulations.

Be advised that our system was notified by the Cattaraugus County Public Health Laboratory that bacteriological samples submitted to them between April 28, 2014 – July 14, 2014 may have been affected by some laboratory non-conformities. These laboratory non-conformities were identified during a routine on-site assessment by the New York State Department of Health's Environmental Laboratory Approval Program, and were subsequently corrected. While the non-conformities may have resulted in some test results being reported as false negatives, our system incurred no violations.

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 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. 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.