

Annual Drinking Water Quality Report for 2017
Village of Springville
30 Nason Boulevard, Springville, New York 14141
Village of Springville (Public Water Supply ID #1400539)

INTRODUCTION

To comply with State regulations, the Village of Springville Water Division, 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 did not violate 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 Ken Kostowniak, Department of Public Works Superintendent at (716) 592-4936, Ext 1589. 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 on the 1st and 3rd Monday of every month. The meetings are held at 65 Franklin St at 7:00p.m.

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.

Our water source is groundwater drawn from three wells. The wells are each approximately 150-feet deep and are located near the intersection of North Central Ave. and Eaton St. The water is pumped from the wells to the water treatment plant where a sodium hypochlorite solution and a sodium permanganate solution are added to the water to enhance the iron and manganese removal process as the water passes through the green sand filters. After filtration, fluoride is added to the water.

Our water is derived from three drilled wells. The source water assessment has rated these wells as having a high susceptibility to enteric bacteria, enteric viruses, halogenated solvents, herbicides/pesticides, metals, nitrates, other industrial organics, petroleum products, and protozoa. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government), low intensity residential land use, and chemical bulk storage to the wells. Also, these ratings are based on NYSDEC mapped data indicating potential sources of contamination within the assessment area. The ratings are based on the fact that wells #1, #2 and #3 are screened and located in a confined aquifer.

FACTS AND FIGURES

Our water system has approximately 1619 service connections, 1410 of which serve 4,248 residential customers. The average cost for water per meter was \$680.00, which includes residential, commercial and industrial customers. The total water produced in 2017 was 137,579,000 gallons. The daily average production was 373,825 gallons per day. Our highest single day was 611,000 gallons. The total amount of water delivered to our customers was 108.6 million gallons. Unaccounted for water was approximately 25 million gallons or about 14% of total produced. Approximately 16.9% of our water is used for backwashing filters, flushing mains, water main breaks, and fires. In 2017 water customers with a 5/8 inch meter were charged \$3.00/1000 gallons of water plus a \$28.00 monthly service charge.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

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 Erie County Health Department at (716) 961-6800.

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. None of the compounds we analyzed for were detected in your drinking water. While the source water assessment rates our well(s) as being susceptible to microbial contamination, 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.

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
Inorganics							
Fluoride	No	4/14/15	1050	Ug/l	N/A	2200	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Copper (1)	No	6/22/16	320 ND - 380	ug/L		1300 ug/L	Corrosion of household plumbing systems.
Lead (2)	No	6/22/16	4 ND - 4.0	ug/L		15 ug/L	Corrosion of household plumbing systems
Disinfection By-Products							
Trihalomethanes	No	8/10/17	45.37	ug/l		80 ug/l	By-product of drinking water disinfection needed to kill harmful bacteria
Haloacetic Acids	No	8/10/17	18.02	ug/l		60 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. THMs are formed when source water contains large amounts of organic matter..
Disinfectants							
Chlorine Residual	No	Daily	1.0	mg/l		4 mg/l	Water additive used to control microbes

NOTES:

1-The level presented represents the 90th percentile of the 20 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, 20 samples were collected at your water system and the 90th percentile value was the third highest value, 320 ug/l. The action level for copper was not exceeded at any of the sites tested.

2 – The level presented represents the 90th percentile of the (include number of samples, e.g. ten samples) samples collected. The action level for lead was not exceeded at any of the 20 sites tested.

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.

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): 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 above, our system did not exceed the regulatory limits for any contaminants tested. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. During 2017, our system was in compliance with all applicable State drinking water requirements. We have a waiver from asbestos testing since past testing has not shown a presence of asbestos in our raw water and there is no asbestos cement pipe in our water system.

We are required to present 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 Springville 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 the 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?

During 2017, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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 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 a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/l. During 2017 monitoring showed that fluoride levels in your water were within 0.2 mg/l of the target for 100% 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 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 firefighting 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 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.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2017, the Village tested, cleaned and/or refurbished one of the three Village source wells. This improvement will provide better water flows for domestic use and fire flows and also improve the quality of the water to each home and business. In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. In 2017, the Village of Springville replaced the watermain along Church Street, and along Franklin Street from Smith Street to North Central Avenue. Improvements will be made in the filter building, repairs and replacement of actuators, valves pertaining to its chlorination control system. In 2018 we plan to clean Well #1, and are actively applying for a grant to drill a new Well #1.

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.