

Annual Drinking Water Quality Report for 2016
VILLAGE OF DRYDEN
16 South Street
(NY-5404412)

INTRODUCTION

To comply with State regulations, the Village of Dryden, will be annually issuing a report describing the quality of the villages 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 Paul Sabin at 844-8865. 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 at Dryden Village Hall, 2nd floor on the third Thursday of the month at 7:00 P.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 New York State Health Department 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 supplied by 4 ground water wells in the Village of Dryden. The wells are located on South Street, Lake Road, and Jay Street. The water is disinfected with chlorine gas and treated with CARUS 8100 for corrosion control, then pumped to two holding reservoirs. During 2016, our system did not experience any restriction of our water source.

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. This state water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily these contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the water source; it does not mean that the water delivered to the consumers is, or will become contaminated (see Table I page 2). The source water assessments provide resource managers with additional information for protecting water source in the future. Water suppliers and county and state health departments will use this information to direct future source water protection activities. These may include quality monitoring, resource management, planning, and educational programs. As mentioned before, our water is derived from 4-drilled wells. The four wells draw from an unconfined aquifer and the overlying soils do not provide adequate protection from potential contamination. While the source water assessment rates our wells 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 States drinking water standards. While nitrates (and other inorganic contaminates) were detected in our water, 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 from natural sources. The presents of contaminants do not necessarily indicate the water poses a significant health risk.

TABLE I

SUSCEPTIBILITY RATINGS

A copy of this assessment, including a map of this area can be obtained by contacting us, as noted below.
L=LOW, M=MEDIUM, H= HIGH

<u>WELL LOCATIONS</u>	<u>WELL NUMBER</u>	<u>MICROBIAL</u>	<u>NITRATES</u>	<u>VOCs</u>	<u>OTHERS</u>
JAY STREET WELL	2568143	M-L	M-L	M-L	M-L
LAKE ROAD WELL 1	2568144	M-H	M-H	M	M
LAKE ROAD WELL 2	2568146	M-H	M-H	M	M
SOUTH STREET WELL	2568145	M	M	M	M

Water Quality for Community Water Systems throughout the United States is available at <http://www.epa.gov/safewater/dwinfo/index.html>

EPA's Safe Drinking Water Hot Line (800-426-4791) Tompkins County Health Department (274-6688)

FACTS AND FIGURES

Our water system serves about 2000 residents; this correlates to about 800 connections. The total water produced in 2016 was 52,798,000 gallons. The daily average of water treated and pumped into the distribution system was 142,000 gallons per day. Our highest single day average was 394,000 gallon per day, the reason for this was hydrant flushing. The current water and sewer rates for 2016 are listed in Table II.

TABLE II

<u>AMOUNT OF USAGE</u>	<u>WATER</u>	<u>SEWER</u>	<u>UNITS</u>
FIRST 1250 GALLONS	\$32.81	\$48.10	MINIMUM BILL
NEXT 13750 GALLONS	\$5.44	\$3.77	PER THOUSAND GALLONS
NEXT 25000 GALLONS	\$6.29	\$4.36	PER THOUSAND GALLONS
NEXT 20000 GALLONS	\$6.75	\$4.68	PER THOUSAND GALLONS
NEXT 40000 GALLONS	\$7.23	\$5.01	PER THOUSAND GALLONS
NEXT 100000 GALLONS	\$7.69	\$5.33	PER THOUSAND GALLONS
NEXT ALL GALLONS	\$8.16	\$5.33	PER THOUSAND GALLONS

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As 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, Asbestos, Synthetic Organic Compounds and Radiological Samples. 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 results presented are more than a year old. Contaminants that have been tested and were not detected by the laboratory are Total Coliform, Nitrates, Asbestos, Pesticides, Herbicides, Volatile Organics, Arsenic, Ketones, and Radiological Contaminants.

Table III depicts which compounds were detected in your drinking water.

POTENTIAL SOURCES OF CONTAMINATION

- (A) Arsenic may come from erosion of natural deposits, runoff from orchards, or runoff from glass and electronics production waste.
- (B) Barium may come from discharge of drilling wastes, metal refineries, and erosion of natural deposits.
- (C) Fluoride may come from erosion of natural deposit; discharge from fertilizer and aluminum factories.
- (D) Copper may come from corrosion of pipes and erosion of natural deposits.
- (E) Lead may come from corrosion of pipes and erosion of natural deposits.
- (F) TTHM and HAA5 come from disinfection by-products.

TABLE III TABLE OF DETECTED CONTAMINANTS						
<u>Contaminant</u>	<u>Violation (Yes/No)</u>	<u>Date of Sample</u>	<u>Level Detected</u>	<u>Regulatory Limit (MCL or AL)</u>	<u>MCLG</u>	<u>Unit of Measurement</u>
TTHM			13.5		0	ug/l
HAA5	NO	8/18/16	7.90	80	0	ug/l
ARSENIC	NO	8/18/16	0.011	60	0	mg/l
BARIUM	YES	2016	0.19	0.010	0	mg/l
COPPER	NO	avg.	0.15	2.0	0	mg/l
FLUORIDE	NO	7/6/16	0.1	1.3	0	mg/l
NITRATES	NO	7/28/15	.0643	2.0	0	mg/l
	NO	7/6/16		10.0		
		5/2/16				

Notes: The level copper above presented represents the 90th percentile of the ten samples collected. The action level for lead was not exceeded at the 10 sites tested; the action level for copper was not exceeded at any sites tested.

Definitions:

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

HAA5: Total Haloacetic Acids (Monochloroacetic, Dichloroacetic, and Trichloroacetic, and Monobromoacetic and Dibromoacetic)

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.

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).

TTHM: Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform)

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had one MCL violation in 2016. Arsenic was detected at our Jay St. well. The MCL for arsenic is 0.010 mg/l. The last quarterly sample average was 0.011 mg/l. In 2001, the USEPA proposed the Arsenic rule. In 2006, NYS promulgated this rule as a condition of primacy. This rule now requires all public water systems to meet a reduced MCL of 0.010 mg/l. At the time the rule was enacted, the MCL for arsenic for many years was 0.050. Then they changed it to 0.010 which put the village in violation. We have been working closely with our engineering firm and with the NYS Department of Health to resolve this issue. The Village is on a time schedule adopted by the Tompkins County Board of Health on November 11, 2012 to remediate the MCL contamination before April 1 of 2018. The Village is moving forward and has been working with the DEC and the Town of Dryden on developing the Dryden Lake Well that would replace the Jay St Well. We are also working closely with State Senator James Seward regarding funding opportunities for the water project. Additional information on Arsenic and the Arsenic Rule can be found on the USEPA and the NYSDOH web sites. The Village would also like to present the following information on Arsenic in drinking water.

NYS and EPA have promulgated a drinking water arsenic standard of 10 parts per billion. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic

from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.”

LEE ROAD RESERVOIR

The Village Of Dryden owns and operates two water supply structures. One is a water storage tank and one is a open water storage reservoir. The water reservoir has a building made of steel that covers the reservoir. However, the steel structure has aged and has had locations develop openings in the cover due to the age of the structure. Openings in the structure have been deemed a violation that may allow contamination into the reservoir.

“Uncovered finished water reservoirs are a pathway for contaminants to enter the drinking supply. Therefore, it is necessary to cover reservoirs or treat the discharge that comes from the reservoirs. Inadequately treated water may contain disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms like nausea, cramps, diarrhea, and associated headaches. These symptoms, however, are not only by organisms in drinking water, but also by other factors. If you have experienced any of these symptoms and they persist, you may want to seek medical advice.”

The steel reservoir cover structure has been temporarily sealed by the Village to provide a covered structure over the water supply reservoir. In addition, the Village has initiated a weekly inspection plan to inspect the condition of the cover and provide ongoing maintenance and repair of any openings as needed.

The Village is planning on replacing both reservoirs. The tanks must be replaced before April 1, 2018 per Tompkins County BOH Time Table of Compliance Orders.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2016, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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 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.
- ◆ 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 of water a day.

- ◆ 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. Turn off all taps and water using appliances, read the meter. Wait 15 minutes and read the meter again, if the reading changed you have a leak.
- ◆ All meter heads have a little red triangle. When you turn all your water off, the triangle should stop spinning. If it still spins when all the water is off that means you have a leaky toilet.

SYSTEM IMPROVEMENTS

The Village is seeking other water sources to replace the Jay St. well because of the arsenic issue. The Village is looking at two wells near Dryden Lake. The Village has a compliance schedule with the Tompkins County Health Department to replace the Jay St well. The Village also plans on replacing the two outdated reservoirs. Replacing the reservoirs, will give the Village more storage capacity, and the Village won't be in violation for the open reservoir at Lee Rd.

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 the Public Works Department our office if you have questions, at 844-8865 or notice any changes to your watercolor or flow.

VILLAGE OF DRYDEN
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