

Annual Drinking Water Quality Report for 2015
Salamanca Board of Public Utilities
225 Wildwood Avenue, Salamanca, New York 14779

City of Salamanca, Public Water Supply ID#NY0400349
Town of Great Valley WD #1, Public Water Supply ID#NY0412218 (Killbuck)
Town of Great Valley WD #4, Public Water Supply ID#NY0430052 (Highland Ave.)

Introduction

To comply with State and Federal regulations, the Salamanca Board of Public Utilities 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 calendar 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 Keith King, General Manager, (716) 945-3130. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Salamanca Board of Public Utilities' Monthly Commission Meetings.

What are the sources of our water?

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 originates from fourteen wells, ranging in depth from 50 feet to more than 80 feet. Thirteen wells (WF) are located near Water Street in the center of the City of Salamanca. Another well (GV) is located at the extreme eastern boundary of the City near Great Valley Creek. Since natural filtration of the ground water through an extensive sand and gravel aquifer occurs, only chlorination is required prior to distribution to our customers. The storage tanks, which are located on Newton Run in the City of Salamanca, usually contain between 3.5 and 4 million gallons, which equates to 3.5 to 4 days reserve capacity. During 2015, our system did not experience any water use restrictions.

In 2003, the NYS DOH completed a 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 the wells. The susceptibility rating is an estimate of the potential contamination of the source water. It does not mean that the water delivered to consumers is, or will become contaminated. See section "**Are 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.

As was mentioned before, our water is derived from fourteen wells. The source water assessment has rated the combined susceptibility to contamination for these wells as high from cations/anions (salts, sulfate), enteric viruses, halogenated solvents, herbicides/pesticides, nitrates, other industrial organics and petroleum products; and medium high from enteric bacteria, metals and protozoa. These ratings for the wells are due to their proximity to industrial activities. 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 be obtained by contacting us as noted above.

Facts and Figures

The Salamanca Board of Public Utilities is the supplier of potable water to Customers in the City of Salamanca and in portions of the Townships of Salamanca and Great Valley. There are presently 2,687 service connections, representing an estimated 6,150 potable water users.

The total water produced in 2015 was 516 million gallons. The daily average of water treated and pumped into the distribution system is 1,421,000 gallons per day. Our highest single day was 2,078,000 gallons. The amount of water delivered to customers was nearly 60% of the actual production. The additional quantity of water was used to flush mains, fight fires, for fire training, and leakage. In 2015, water customers were charged \$1.45 per 1,000 gallons of water. Average monthly potable water charges for a family of three should be about \$21.38, or about 71 cents per day. Charges for customers residing in the Townships of Salamanca and Great Valley are presently 175% of those of the City of Salamanca.

Are 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, 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. All of this data, though representative, may be more than one year old. Also available at the Salamanca Board of Public Utilities' business office, is a list of analytical results for parameters where there were no detections.

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 Cattaraugus County Health Department at (716) 701-3386.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectants							
Chlorine Residual - City	No	2015	Avg. = .33 (.03 - .68)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
- G.V. Dist. #1	No	2015	Avg. = .27 (.02 - .55)				
- G.V. Dist. #4	No	2015	Avg. = .33 (.26 - .45)				
Microbiological Contaminant							
Total Coliform - City	No	8/3/15 12/17/15	1 Positive 1 Positive	N/A	0	MCL = 2 Positive Samples (from the same month)	Naturally present in the environment.
<i>E. Coli</i> - City	No	12/17/15	1 Positive	N/A	0	MCL = 2 Positive Samples	Human and animal fecal waste.
Inorganic Contaminants							
Barium	No	8/8/12	High = 150 (79 - 150)	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	No	8/8/12	High = 3 (2.7 - 3)	ug/l	100	MCL = 100	Discharge from steel and pulp mills; erosion of natural deposits.
Copper ¹ - City of Salamanca & Town Districts	No	8/9/14 through 8/12/14	350 (34 - 440)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead ² - City of Salamanca & Town Districts	No	8/9/14 through 8/12/14	2 (ND - 8.7)	ug/l	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits.
Nickel	No	8/8/12	High = 1.1 (ND - 1.1)	ug/l	0	None set	Erosion of natural deposits.
Nitrate	No	12/29/15	High = 2.09 (1.37 - 2.09)	mg/l	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Disinfection By-Products							
Haloacetic Acids				ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
- City	No	8/13/15	1.4				
- G.V. Dist. #1	No	8/13/14	1.6				
Total				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.
Trihalomethanes							
- City	No	8/13/15	11				
- G.V. Dist. #4	No	8/13/15	3.8				
- G.V. Dist. #1	No	8/13/14	6.6				

Notes:

- 1 - The levels presented represent 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 or lead values detected at your water system. In this case, 20 samples were collected within the City and Town districts and the 90th percentile value for copper was the third highest value, 350 ug/l. The action level for copper was not exceeded at any of the sites tested.
- 2 - The 90th percentile values for lead in the City System and the Town Districts combined was 2 ug/l. None of the samples exceeded the action level of 15 ug/l for lead.

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 radioactivity in water.

N/A: Not applicable

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 at values well below the level allowed by the State. 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 City of Salamanca 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>.

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 some infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/DCD 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 saving water is a good idea.

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 costs 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 and helps 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 those 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

The Board of Public Utilities is committed to serving the community by revamping and modernizing the water production and treatment process to take advantage of the most effective and economical technology available. Improvements have recently taken place and more will be undertaken in the near future in response to the changing environment and stricter government regulations.

Development of an additional groundwater source, for additional production capability, is now underway.

Water System Security

The Board of Public Utilities would like to remind residents to remain vigilant of any suspicious activity regarding the water distribution system. Please report any suspicious activity to the Board of Public Utilities or the Salamanca Police Department.

Closing

Thank you for allowing us to continue to provide you and 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 and our way of life. Please call our Office if you have questions.

The United States Environmental Protection Agency maintains a toll-free hotline for Customers with questions regarding Safe Drinking Water: (800) 426-4791.