

Annual Drinking Water Quality Report for 2014
Village of Sherman
P.O. Box 629
Sherman, NY 14781
Public Water Supply ID# NY0600373

INTRODUCTION

To comply with State regulations, Village of Sherman, annually issues 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 all 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 Doug Crane, Public Works Superintendent, 716-761-6781 or the Village of Sherman at 716-761-6781. 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 Wednesday of every month at 7:00 PM in the Village Office.

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 system serves approximately 720 people, several small businesses and Sherman Central School through 326 service connections. The source of our drinking water is from groundwater wells. These wells tap a sand and gravel aquifer formed by glaciers. The water is now treated with chlorine, and pumped directly into the distribution system. 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. While nitrates and other inorganic contaminants were detected in our 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 from natural sources. The organics that were detected are byproducts of the disinfection process; they are not the result of contamination of our wells. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected.

As mentioned before, our water is derived from 2 drilled wells. The source water assessment has rated these wells as having a high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted wastewater treatment facilities to the wells. In addition, one well draws from an unconfined aquifer and the overlying soils are not known to provide adequate protection from potential contamination. And the other well draws from a confined aquifer (an aquifer bounded above and below by geology that restricts the passage of ground water), the aquifer

recharge area (the section of land that receives precipitation and allows it to infiltrate into the aquifer) is considered vulnerable to 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.

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, lead and copper, volatile organic compounds, 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 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 Chautauqua County Health Department at 716-753-4481.

Table of Detected Contaminants							
Contaminant	Violation	Date of Sample	Level Detected	Unit Measurement	Regulatory Limit (MCL/ AL)	MCLG	Likely Source of Contamination
INORGANICS CONTAMINANTS							
Nitrate (Well 1)	No	8/28/14	1.33	mg/l	10 (MCL)	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (Well 2)	No	8/28/14	2.46	mg/l	10 (MCL)	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Lead	No	9/11/13	2.5 ¹ Range ND-4.0	ug/l	15 (AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	No	9/11/13	0.135 ² Range 0.026-0.179	mg/l	1.3 (AL)	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Barium	No	9/25/12	0.098	mg/l	2 (MCL)	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
RADIOLOGICAL CONTAMINANTS							
Radium 228	No	Quarterly Mar. 08- Jan 09	0.461 Range ND-1.08	Pci/l	5 (MCL)	0	Erosion of natural deposits
STAGE 2 DISINFECTION BYPRODUCTS (173 West Main)							
Total Trihalomethanes	No	8/28/14	33.9	ug/l	80 (MCL)	N/A	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	8/28/14	13.0	ug/l	60 (MCL)	N/A	By-product of drinking water disinfection needed to kill harmful organisms.
Chlorine residual	No	Daily (2014)	Avg. 0.90 Range 0.45-1.91	mg/l	4 (MCL)	N/A	Water additive used to control microbes

Notes:

1 – The level presented represents the 90th percentile of the 5 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 lead values detected at your water system. In this case, 5 Lead samples were collected at your water system and the 90th percentile value was calculated by averaging the two highest sample result levels. (2.5ug/l). The action level for lead was NOT exceeded at any of the sites tested.

2 – The level presented represents the 90th percentile of the 5 samples collected. 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 lead values detected

at your water system. In this case, 5 Copper samples were collected at your water system and the 90th percentile value was calculated by averaging the two highest sample result levels. (0.135mg/l). The action level for copper was not exceeded at any of the 5 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.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

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 the level allowed by the State.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2014, 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).

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

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 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. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. 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.