Annual Drinking Water Quality Report for 2014

Village of Hoosick Falls

24 Main Street, Hoosick Falls, NY 12090

Public Water Supply Identification Number NY4100041

INTRODUCTION

To comply with State regulations, the Village of Hoosick Falls, 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 is 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 New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Francis J. Hurlburt, Chief Water Operator, Village of Hoosick Falls, 24 Main Street, Hoosick Falls, NY 12090 Telephone (518) 686-0200;* We want our valued customers to be informed about their drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. They are held on the 2nd Tuesday of each month, 6:00 PM at the *Village Hall, 24 Main Street,* Telephone *(518) 686-7072 or e-mail us at Villageclerk@hoosick.org*

WHERE DOES OUR WATER COME FROM?

The Village of Hoosick Falls is served by three drilled wells (3, 6 & 7) using an aquifer that borders the Hoosick River. The wells were deemed Ground Water Under the Direct Influence of Surface Water (GUIDI). Because of this designation we are required to comply with the Surface Water Treatment Rule (SWTR) and provide filtration.

Pumping capacity for each well is approximately 900,000 gallons per day. Treatment of the raw water consists of chlorination in order to protect against contamination from harmful bacteria and from other organisms. A polyphosphate compound is also added for corrosion control. This serves to reduce lead and copper leaching into the water from residential water pipes, minimize corrosion in the water mains and minimize discoloration from iron and manganese, thereby reducing staining of plumbing fixtures and laundry. We have a 360,000 gallon storage tank located at Rensselaer Street and a 300,000 gallon storage tank at Rogers Avenue to meet consumer demand and to provide adequate fire protection.

The Village of Hoosick Falls has a 1.5 MGD membrane filtration plant. Water is pumped from our 3 wells and chlorinated. Potassium permanganate is added to aid in iron and manganese oxidation and removal. The water then flows to a 26,000 gallon pretreatment tank where the chemical treatment is given additional time to work. From the pretreatment tank the water then travels to two skids with 32 membrane filters each. Each membrane can filter out particulate material as small as 3 microns which includes the microorganisms Cryptosporidium and Giardia. After filtration the water flows to a 171,000 gallon contact tank to provide adequate time for the disinfection process to proceed. We also have 68,000 gallon clearwell storage after the water is treated.

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 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.

FACTS AND FIGURES

The Village provides water through approximately 1,300 service connections to a population of approximately 4,500 people. Our average daily demand is 403,831 gallons. Our single highest day was 736,389 gallons. The total water produced in 2014 was 147,227,010 gallons. Currently 95% of the village limits is currently metered and read quarterly. The annual average charge for water within the village limits per household is $4.66 per 1000 gallons. Customers outside the village are billed at 6.99 per 1000 gallons. Sewer is billed at 4.85 per 1000 gallons for a total utility rate of $9.51 per 1000 gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Village of Hoosick Falls routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, haloacetic acids, trihalomethanes and synthetic organic contaminants. In addition, we test 4 samples for coliform bacteria each month. The table presented below depicts which contaminants

were detected in your drinking water. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted. For a listing of the parameters we analyzed that were not detected along with the frequency of testing for compliance with the NYS Sanitary Code, see Appendix A.

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 pose 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 Rensselaer County Health Department (518) 270-2626.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table on page 4, our system had no violations. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2014, the Village of Hoosick Falls 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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Hoosick Falls 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 or at *http://www.epa.gov/safewater/lead*

WHAT IS THE SOURCE WATER ASSESSMENT PROGRAM (SWAP)?

To emphasize the protection of surface and ground water sources used for public drinking water, Congress amended the Safe Drinking Water Act (SDWA) in 1996. The amendments require that New York State Department of Health's Bureau of Public Water Supply Protection is responsible for ensuring that source water assessments are completed for all of New York's public water systems.

A source water assessment provides information on the potential contaminant threats to public drinking water sources:

- each source water assessment will: determine where water used for public drinking water comes from (delineate the source areas)
- Inventory potential sources of contamination that may impact public drinking water sources
- Assess the likelihood of a source water area becoming potential contaminated

A SWAP summary for our water supply is attached to this report.

WATER CONSERVATION TIPS

The Village of Hoosick Falls encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- Only run the dishwasher and clothes washer when there is a full load
- Use water saving showerheads
- Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
- Water gardens and lawn for only a couple of hours after sunset
- Check faucets, pipes and toilets for leaks and repair all leaks promptly

- Take shorter showers

CAPITAL IMPROVEMENTS
During 2014 there were capital improvements were done at the Rogers Avenue Pump Station.

CLOSING
Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. We ask that all our customers help us protect our water sources. Please call our office if you have questions.

Hoosick Falls Village Public Water System
PWSID# NY4100041
Source Water Assessment Summary

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. See section "Are there 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 mentioned before, our water is derived from 3 drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. 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) to the wells, chemical bulk storage, and a hazardous waste site in the assessment area. In addition, the wells are prone to flooding, have detection of halogenated solvents at levels consistent with a high chemical sensitivity, and the overlying soils are not known to provide adequate protection from potential contamination.

While the source water assessment rates our well(s) as being susceptible to microbials, please note that our water is disinfected to ensure that that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the full Source Water Assessment, including a map of the assessment area, is available for review by contacting us at the number provided in this report.

VILLAGE OF HOOSICK FALLS TABLE OF DETECTED CONTAMINANTS
Public Water Supply Identification Number NY4100041

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants (sample data from 6/9/14 unless otherwise noted) ranges represent the lowest and highest levels detected						
Barium	N	153	ppb	2000	2000	Naturally occurring
Chloride	N	78.2	ppm	N/A	250	Geology; Naturally occurring
Copper (samples from 8/21/12-9/20/12) Range of copper concentrations	N	0.64[2] ND-0.88	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Manganese	N	4	ppb	N/A	300	Naturally occurring
pH	N	7.23	units		6.5-8.5	
Sodium[3]	N	45.1	ppm	N/A	N/A	Geology; Road Salt
Sulfate	N	18.5	ppm	N/A	250	Geology;
Microbiological Contaminants						
Turbidity[4] (sample from 3/1/14)	N	0.084	NTU	N/A	TT=5 NTU	Soil runoff
March 2014		95%			TT= % samples < 1.0	
Stage 1 Disinfection Byproducts						
Chlorine (average) [daily samples] Range	N	1.26 0.76-1.66	ppm	MRDLG N/A	MRDL 4	Used in the disinfection and treatment of drinking water
Stage 2 Disinfection Byproducts (samples from 3/10/14, 6/9/14, 9/18/14 &12/16/14)						
Haloacetic Acids [HAA5}average range	N	14.7 2.2-28.1		N/A	60[5]	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) average range	N	21.1 6.3-29.2	ppb	0	80[5]	By-product of drinking water chlorination

NOTES-

1. "EPA has promulgated a drinking water arsenic standard of 10 parts per billion. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's 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."
2. The level presented represents the 90th percentile of 20 test sites. The action level for copper was not exceeded at any of 20 the sites tested.
3. Water containing more than 20 ppm should not be consumed by persons on severely restricted sodium diets
4. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected. The regulations also require that 95% of the turbidity samples collected have measurements below 1.0 NTU. Although, March 2014 was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were well within the acceptable range allowed and did not constitute a treatment technique violation.
5. The average shown represents the highest Locational Running Annual Average (LRAA) at the 3 sites sampled in 2014. The highest HAA5 & TTHM LRAA was in the 3rd quarter of 2014.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
90th Percentile Value- The values reported for lead and copper represent the 90th percentile. 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 and copper values detected at your water system
Action Level - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal The "Goal" (MCLG) is 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
Locational Running Annual Average (LRAA): The LRA is calculated by taking the average of the four most recent samples collected at each individual site
N/A-Not applicable

Appendix A
New York State Sanitary Code Compliance Monitoring Requirements- Compounds Analyzed that were Below Limits of Detection

VILLAGE OF HOOSICK FALLS TEST RESULTS
Public Water Supply Identification Number NY4100051

CONTAMINANT	MONITORING FREQUENCY
Asbestos	Every 9 years; 6/14/11 **Non-Detect**
Antimony	Monitoring requirement is 1 sample every year Sample from 6/9/14 **Non-Detect**
Beryllium	
Cadmium	
Chromium	
Cyanide	
Fluoride	
Mercury	
Nitrate	
Selenium	
Silver	
Thalium	
Color	Monitoring requirement is at State discretion Sample from 6/9/14 **Non-Detect**
Odor	
Zinc	
Iron	

CONTAMINANT	CONTAMINANT	MONITORING FREQUENCY
POC's (Volatile Organic Compounds)		
Benzene	Trans-1,3-Dichloropropene	Monitoring requirement is one sample annually Samples from 4/4/13 Wells 3, 6 & 7 **Non-Detect**
Bromobenzene	Ethylbenzene	
Bromochloromethane	Hexachlorobutadiene	
Bromomethane	Isopropylbenzene	
N-Butylbenzene	p-Isopropyltoluene	
sec-Butylbenzene	Methylene Chloride	
Tert-Butylbenzene	n-Propylbenzene	
Carbon Tetrachloride	Styrene	
Chlorobenzene	1,1,1,2-Tetrachloroethane	
2-Chlorotoluene	1,1,2,2-Tetrachloroethane	
4-Chlorotoluene	Tetrachloroethene	
Dibromethane	Trichloroethene	
1,2-Dichlorobenzene	1,2,3-Trichlorobenzene	
1,3-Dichlorobenzene	1,2,4-Trichlorobenzene	
1,4-Dichlorobenzene	1,1,1-Trichloroethane	
Dichlordifluoromethane*	1,1,2-Trichloroethane	
1,1-Dichloroethane	1,1-Dichloroethane	
1,2 Diichloroethane	Trichlorofluoromethane	
1,1 Dichloroethene	1,2,3-Trichloropropane	
cis-1,2 Dichloroethene	1,2,4-Trimethylbenzene	
Trans-1,2-Dichloroethene	1,3,5-Trimethylbenzene	
1,2 Dichloropropane	m-Xylene	
1,3 Dichloropropane	o- Xylene	
2,2 Dichloropropane	p-Xylene	
1,1 Dichloropropene	Vinyl chloride	
Cis-1,3-Dichloropropene	MTBE	
Total Coliform & E. coli		Monitoring is 4 samples/ month **Non-Detect**
Radiological Parameters		
Gross Alpha-Beta Scan		Monitoring is 1 sample every 6-9 years **Non-Detect**
Radium 226	N/A	

Synthetic Organic Chemicals

Synthetic Organic Chemicals (Group I)		Synthetic Organic Chemicals (Group II)		
Alachlor	Aldicarb	Aldrin	Benzo(a)pyrene	Monitoring requirement is 1 sample every 18 months; Sample from 12/16/14 **Non-Detect** ***State waiver does not require monitoring these compounds**
Aldicarb Sulfoxide	Aldicarb Sulfone	Butachlor	Carbaryl	
Atrazine	Carbofuran	Dalapon	Di(2-ethylhexyl)adipate	
Chlordane	Dibromochloropropane	Di(2-ethylhexyl)pthalate	Dicamba	
2,4-D	Endrin	Dieldrin	Dinoseb	
Ethylene Dibromide	Heptachlor	Diquat*	Endothall*	
Lindane	Methoxyhlor	Glyphosate*	Hexachlorobenzene	
PCB's	Toxaphene	Hexachlorocyclopentadiene	3-Hydroxycarbofuran	
2,4,5-TP (Silvex)		Methomyl	Metolachlor	
		Metribuzin	Oxamyl vydate	
		Pichloram	Propachlor	
		Simazine	2,3,7,8-TCDD (Dioxin)*	