

Village of Arkport
6 Park Avenue, Arkport, New York 14807
Village of Arkport # NY5001204
Town of Hornellsville Water District # 4 PWS # 5030112
2011 Annual Quality Water Report

In accordance with State and Federal health regulations, the Village, as a supplier of potable water to its residents, must annually provide information about the water supply system.

Our water supply is a spring-fed gravity flow system. The springs are located in Reddy Hollow in Dansville and flow via an underground pipeline to the reservoir at the edge of the Village on Oak Hill Street. In the early years of this century, Village water was taken from Limekiln Creek. After the springs were developed in the 1950's, creek water could still be added to the supply if needed. By State regulations, open sources of water can no longer be utilized as potable water without being processed through a highly complex and expensive filtration plant. As a result, a secondary underground source was has been drilled off Henry Street. All testing indicated the quality and quantity meet the standards established by the New York State Department of Health. Engineering studies were completed by MRB Group of Rochester and construction was completed by January of 2002. The new well ties into the current Village water transmission system.

Water from the springs is directed through filtration, liquid chlorination, and UV system before it enters the concrete storage tank that supplies the distribution system. The well is treated with chlorination and UV before entering the distribution system. Daily monitoring and recorded readings are performed. Water samples are taken at various locations and are sent to the Life Science Laboratory for bacterial testing. Our water supply also serves approximately 12 residences in the Town of Hornellsville Water District # 4. At various times of the year, as required by the Department of Health, tests are made to determine the presence, if any, of a multitude of possible contaminants. All tests results this past year met the standards of Part 5 of the New York State Sanitary Code. Pertinent questions regarding our village water supply and systems should be directed to Superintendent Robert Mauro who is in charge of its operation. Village Office telephone 607-295-7346. Copies of all water testing results are on file at the Village Offices and are available, upon request for viewing.

The Source Water Assessment Report will be included in this report when it is received from the NYS Department of Health. Copies of all water testing results are on file at the Village Offices and are available, upon request for viewing.

The village serves approximately 835 residents through approximately 376 service connections in the Village and approximately 25 residents through 12 residents in the Town of Hornellsville WD # 4. Residents are invited to attend the Village Board of Trustees Meeting, held the third Thursday of each month at 6:00 PM at the Village Hall. At such time you may address the Board with your concerns or questions about the safety of our water system.

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 that 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.

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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, 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 Hornell District Office of the NYS Department of Health at 607-324-8371.

The following table lists contaminants that have been detected in the water testing samples taken over the past five years. Although all contaminants were within the normal allowable tolerances, the Village is obligated to make this information know to you. If you have any question regarding the table, please contact the Village Office, Superintendent Robert Mauro (607) 295-7346 or the NYS Department of Health, 107 Broadway, Hornell, N.Y., (607) 324-8371.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<u>Trihalomethanes</u>							
Total Trihalomethanes (Max. Residence Time) Village	N	8/29/11	7.9	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Village –SpringEntry Point	N	6/22/09	8.6				
Hornellsville WD # 4	N	8/17/10	8.1				
<u>Haloacetic Acids</u>							
Total HAA's (Max. Residence Time) Village	N	8/29/11	3.8	ug/l	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms
Hornellsville WD # 4	N	8/17/10	<1.0				
Nitrate Well	N	10/4/11	2.3	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Spring	N	10/4/11	3.0				
Barium - Well Spring	N	6/22/09 12/6/11	Well: .150 Spring: .036	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium - Spring	N	12/6/11	5.5	ug/l	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Asbestos	N	5/4/10	.07	MFL	7	7	Decay of asbestos cement water mains; Erosion of natural deposits.
Total Cyanide	N	12/2/08	13	ug/l	200	200	Discharge from steel/ metal factories; Discharge from plastic and fertilizer factories.

Radium 226 Spring	N	2/5/08	.034	pCi/L	0	Combined – 5	Erosion of natural deposits
Radium 228 Spring		5/6/08	.025				
Radium 226 Well	N	2/5/08	ND	pCi/L	0	Combined – 5	Erosion of natural deposits
Radium 228 Well		5/6/08	.637				
Gross Alpha - Well	N	Quarterly In 2006	Avg: 0.12 Rng: .07-.21	pCi/L	0	15	Erosion of natural deposits
Gross Beta - Well	N	Quarterly In 2006	Avg: 0.533 Rng: .4 - .6	pCi/L	0	50	Decay of natural deposits and man-made emissions.
Lead	N	8/3/10	Avg: 4.03 Range: 2.1-6.0	pCi/L	0	15	Erosion of natural deposits
Copper	N	8/3/10	Avg: 1.57 Range: 1.0 – 2.2	pCi/L	0	50	Decay of natural deposits and man-made emissions.
Copper Entry Point	N	12/10/15	90%: 12.0 Range: *ND – 12.0	ug/l	AL=15	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	N	8/3/10	90%: 0.20 Range: 0.022-0.20	mg/L	AL = 1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Copper Entry Point	N	12/10/15	0.0012	mg/L	AL = 1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Total Organic Contaminants	N	Quarterly	Not Detected	mg/L	TT	N/A	Naturally present in the environment
Turbidity	No	7/19/11	Highest Single Measurement: 0.14	NTU	N/A	TT = < 1 NTU	Soil runoff
Turbidity	No	Daily	Lowest monthly % of samples meeting prfm. Std of .3 NTU: 100%	NTU	N/A	TT=95% of samples ≤ 0.3 NTU	Soil Runoff

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).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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.

Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement (NTU) for the year occurred on July 19. State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. Although July was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

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).

General 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 Arkport 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>.

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 up and you could 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.