

Annual Drinking Water Quality Report for 2017
Village of Andover
35 E Greenwood St, Andover, NY 14806
(Public Water Supply ID# NY 02-00311)

INTRODUCTION

To comply with State regulations, the Village of Andover, 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. The first round of sampling in 2017 exceeded the Action Level for Copper, but the second one did not. More sampling will be done to ensure that the treatment is achieving the goal of making the water less corrosive. The "Action" taken for these higher levels = increased the amount of Aqua-Pure introduced at the spring site, based on the Manufacturer's recommendation. This action with several adjustments has been successful, the 20 additional samples done in December of 2017 were all below "Action Limits". The Engineer's at KHEOPS did not assist or review our Aqua-Pure procedure as part of the new PER described below. These same 20 sites will be re-sampled in 2017 and if all pass again reduced monitoring can be requested. There was also 1 Total Coliform test that was "Not In Compliance" and as directed by the Allegany County Department of Health there was an additional 8 Samples taken, all were "In Compliance" and no further action was needed

If you have any questions about this report or concerning your drinking water, please contact the Department of Public Works, at (607) 478-8452 or (607) 478-8455. 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 Second Tuesday of each month at 6:00pm at the Village Office located at 35 East Greenwood St, Andover, NY 14806.

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 source is at least four naturally occurring springs located southwest of the Village in the Town of Andover. The springs produce about 122,000 gallons per day average. Our secondary source consists of a single well, 230 ft deep that produces about 110 gallons per minute. The well is located in the Village of Andover. The water from the springs and the well is disinfected with gaseous chlorine before entering the distribution system, any water not consumed by our customers is then stored in a 225,000 gallon Natgun concrete reservoir or in our 316,000 gallon glass-lined Aquastore Tank. We currently use AquaPure Z3 corrosion control agent. It is introduced just prior to chlorination at the spring site. The purpose of AquaPure is to control levels of lead and copper in your drinking water and to prohibit discoloration of the water as well as to coat the interior surfaces of the water mains reducing tuberculation.

SOURCE WATER ASSESSMENT

The New York State Department of Health has completed a Source Water Assessment for the Village water system, based on available information. Possible and actual threats to the source of drinking water for our system have been 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 potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. Please refer to the section titled "Are There Contaminants In Our Drinking Water?" for a list of the contaminants for which the water has been tested and for the test results.

The Source Water Assessment rates the well as having very high susceptibility to contamination from enteric bacteria, and high susceptibility to contamination from protozoa, petroleum products, industrial solvents, and other industrial contaminants. These ratings are primarily due to the close proximity of the well to three (3) New York State Department of Environmental Conservation (NYSDEC) permitted discharge facilities (large industrial/commercial septic systems) that discharge wastewater into the environment below the surface of the ground, and to one oil/gas well. Also, the fact that the well draws water from an unconfined aquifer contributes to the very high and high susceptibility ratings indicated above. Our drilled well is primarily used for an emergency; for instance, when the natural springs located on Indian Creek cannot produce enough water for the Village. Also, the water from the well is tested on an annual basis and meets the New York State Department of Health's Drinking Water requirements.

FACTS AND FIGURES

Our water system serves a population of about 1085 customers through 440 service connections. The total water produced in 2017 from the springs and well was 44,581,000 gallons. The daily average of water treated and pumped into the distribution system was 122,000 gallons. Our highest single day was 190,000 gallons, recorded on May 21, 2017. The amount of water delivered to customers was about 36 million gallons. Our storage tanks overflowed approximately 5.3 million gallons of water in 2017. The overflow is metered at the Aquastore glass-lined storage tank, and estimated at the Natgun concrete storage tank. Customer charges for 2017 stayed at \$4.00 per 1,000 gallons of water used with a base charge of \$18.00 per month.

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, escherichia coliform, inorganic compounds, nitrate, nitrite, 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.

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 Allegany County Health Department at (716) 268-9250.

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

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.

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.

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 the radioactivity in water.

Millionths of Fiber per liter (MFL): Corresponds to a millionths of fiber per liter.

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.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, AL, or MFL)	Likely Source of Contamination
*Copper –20 Sites	Yes 4 sites	06/7/17	1.7	mg/L	1.3	1.3	Corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood

*Copper – 20 Sites	no 2 sites	12/20/17	1.0	mg/L	1.3	1.3	preservatives.
*Lead – 20 Sites	No	06/7/17	0.0014	mg/l	0.015	0.015	Corrosion of household plumbing systems and erosion of natural deposits.
*Lead – 20 Sites	No	12/20/17	0.0014	mg/L	0.015	0.015	
Barium (Springs)	no	11/1/17	28.2	Ug/l	2000	2000	Discharge of drilling waste, discharge of metal refineries, Erosion of natural deposits
Barium (wells)	no	11/2/17	243	Ug/L	2000	2000	
Trihalomethanes	no	7/19/17	3.3	Ug/L	N/A	80	Drinking water Disinfection needed to kill harmful organism
Haloacetic Acid	no	7/19/17	2.6	Ug/L	N/A	60	Drinking water Disinfection needed to kill harmful organism

*The level presented represents the 90th percentile of the 20 sites tested during each round of sampling. 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. In these cases, 20 samples were collected at your water system and the 90th percentile value was the third highest value. The levels of lead detected during the first round of sampling was 0.0013 to 0.0026 mg/l. The action level for lead was not exceeded at any of the sites tested. The levels of copper detected in those samples was 0.073 to 2.4 mg/l. Four samples exceeded the action level. The levels of lead detected during the second round of sampling was 0.0014 to 0.0025 mg/l. The action level for lead was not exceeded at any of the sites tested. The levels of copper detected was 0.063 to 2.4 mg/l. The action level was exceeded at two sites.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS

The Village of Andover was in violation of State lead and copper control requirements for Copper and was required to install corrosion control treatment equipment in 2002. This equipment has been installed and monitoring tests are currently being taken. Therefore, we must include the following statement in this report: "Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

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 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 about 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 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. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

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. KHEOPS, formerly TVGA, has issued a new Preliminary Engineering Report (PER) in an effort to complete the water system upgrades that were previously started in the Village and to address concerns from the Allegany County Department of Health. There are several corrections that have to be made in the PER and it will be used, and is required, for the Applications for funding resources needed to complete the water system upgrades and improvements. Some costs of these improvements may be reflected in the rate structure and further 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.