

Annual Drinking Water Quality Report for 2021

Village of Andover

35 E Greenwood St, Andover, NY 14806

(Public Water Supply ID# 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. Last year, we conducted tests for over 80 contaminants. We detected 6 of those contaminants, with nothing matching the State Action Level. No violations occurred.

If you have any questions about this report or concerning your drinking water, please contact the Department of Public Works, at (585) 610-8671 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 number of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The water source is at least four naturally occurring springs located southwest of the Village in the Town of Andover. The springs produce about 123,301 gallons per day average. Our secondary source consists of a single well, located in the Village, 230 ft. deep that produces about 110 gallons per minute. The water from the springs and the well is disinfected with gaseous chlorine before entering the distribution system, any water not distributed immediately to our customers is then stored in a 225,000-gallon Natgun concrete reservoir or in our 316,000-gallon glass-lined Aqua store Tank. We currently use Aqua-Pure Z3 corrosion control agent, which is introduced just prior to chlorination at the spring site. The purpose of Aqua-Pure Z3 is to control levels of lead and copper in your drinking water, to prohibit discoloration of the water, and to coat the interior surfaces of the water mains.

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.

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. That being said; the well is run frequently and the water is tested routinely 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 2021 from the springs and well was 53,233,000 gallons. The daily average of water treated and pumped into the distribution system was 145,800 gallons. Our highest single day was 193,000 gallons, recorded on November 28, 2021. The amount of water delivered to customers was about 41,057,000 gallons. Our storage tanks overflowed approximately 12,176,000 gallons of water in 2021. The overflow is metered at the Aquastore glass-lined storage tank, and estimated at the Natgun concrete storage tank. Customer charges \$4.50 per 1,000 gallons of water used with a base charge of \$18.00 per month increasing to \$5.00 per 1,000 gallons of water and a base charge of \$20.00 starting June 1, 2021 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 & E. coli bacteria, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, total 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 without causing an unacceptable possibility of adverse health effects.

Maximum Residual Disinfectant Level goal (MRDL): The level of drinking water disinfectant below which there is no known or expected risk of health.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT,AL, or MFL)	Likely Source of Contamination
Barium	No	12/02/2020	.0288	mg/L	2	2	Discharge from drilling wastes
Chromium	No	8/19/2020	1.5	Ug/L	100	100	Discharge from steel & pulp mills. Erosion from natural deposits.
Nitrate	No	8/19/2020	.65	mg/L	10	10	Run off from fertilizer use. Leaching from septic tanks; sewage. Erosion from natural deposits.
Combined Radium 226 & 228	No	4/22/2020	1.66	PCi/L	0	5	Erosion from natural deposits.
Fluoride	No	11/2/2017	.3	mg/L	NA	2.2	Erosion from natural deposits; water additive that promotes strong teeth. Discharge from fertilizer and aluminum factories.
Beta particle & Photon Activity from manmade radionuclides	No	11/1/2017	.82 +/- .56	PCi/L	0	50 (FN1)	Erosion from natural deposits and manmade emissions.
Carbaryl (FN2)	No	11/1/2017	1.0	Ug/L	NA	50	May be present from application of crop insecticides.
Total Trihalomethanes	No	7/19/2017	3.3	Ug/L	NA	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Total Haloacetic Acids	No	7/19/2017	2.6	Ug/L	NA	60	By-product of drinking waters disinfection needed to kill harmful organisms.
Lead	No	11/17/2020	1.3 (FN3)	Ug/L	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	No	11/17/2020 6/9/2020	.88 1.3 (FN4)	mg/L	1.3	AL=1.3	Corrosion of HH plumbing systems. Erosion from natural deposits. Leaching from wood preservatives.

Foot Notes

1. The State considers 50 pCi/l to be the level of concern for beta particles.
2. Unspecified Organic contaminant classification as defined in 10 NYCRR Part 5.
3. The level presented represents 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 lead values detected at your water system. In this case, 20 samples were collected at your water system and the 90th percentile value was the 1.3 ug/l. The action level for lead was not exceeded at any of the sites tested.
4. The level presented represents the 90th percentile of the 20 samples collected. The action level for copper was matched at one of the 20 sites tested. Follow up protocol, including water quality parameter testing and evaluating the water system's corrosion control program, was implemented to resolve this issue.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS

While not a violation, the first sample set submitted for copper analysis did not reach the NYSDOH's Action Level limit, with a 90th percentile at 1.1 mg/L. 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. We are actively monitoring implementation of the corrosion control program and sample results were lower during submittal in December 2021.

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 firefighting 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, and 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. B&L, 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.