

## ***Annual Drinking Water Quality Report for 2015***

Town of Amsterdam

283 Manny Corners Road

Amsterdam, NY 12010

(Public Water Supply Identification Number NY2811730)

### **INTRODUCTION**

To comply with State regulations, the Town of Amsterdam, will be annually issuing a report describing the quality of your drinking water. Last year, your drinking water met all State drinking water health standards. This report is a snapshot 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. Carl J. Rust, Water Superintendent, Town of Amsterdam, 283 Manny Corners Road, Amsterdam, NY 12010; Telephone # (518) 842-7961.* We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 3<sup>rd</sup> Wednesday of each month, 7:00 PM at the *Town Office Building, Telephone (518) 842-7961.*

### **WHERE DOES OUR WATER COME FROM?**

The Town of Amsterdam purchases its water from the City of Amsterdam. The City of Amsterdam's water sources are the Steele Reservoir, Ireland Vly Reservoir and Round Lake Reservoir which are located in Saratoga County, New York. Each of the 3 Reservoirs has its' own characteristics of water quality. This requires different chemical treatment at their Water Treatment Plant depending on which source is being used. Reservoirs are alternated mainly based on weather conditions or raw water quality. The treatment plant enhances the water quality by removing any solids, metals (primarily iron and manganese), color producing compounds or other organic and inorganic compounds. Chemical treatment consists of coagulation with a cationic polymer blended coagulant aid, an inorganic coagulant and flocculating agent, sodium hydroxide, and a cationic filter aid all prior to filtration. Post filtration consists of ultraviolet disinfection, hydrated lime for corrosion control and chlorine for disinfection. There are also five Carbon Contactors to aid in removing precursors that for THMs & HAA5s when chlorine is added for disinfection. The Town of Amsterdam also adds chlorine at the Pump Station interconnect with the City of Amsterdam to prevent bacterial contamination.

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 Town of Amsterdam provides water through 348 service connections to a population of approximately 3,200 people. Our average daily demand is 180,000 gallons. Our single highest day was 182,000 gallons. The total water pumped in 2015 was 65,725,811 gallons

### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

In accordance with State regulations, the Town of Amsterdam 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 1 sample 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.

Unregulated Contaminant Monitoring 3 was conducted during 2013. This is a requirement of the 1996 Safe Drinking Water Act amendments. This monitoring provides a basis for future regulatory action to protect the public health. The number in parentheses refers to the number of analytes measured for a total of 21 analytes. The breakdown of analytes is as follows: volatile organic chemicals (7), synthetic organic compounds (1), metals (6), oxyhalide anion (1) and perfluorinated compounds (6). We have listed those compounds that were detected in the table of Detected Contaminants for Niskayuna. For some parameters there are no associated MCL's for these compounds at this time.

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 New York State Department of Health, Herkimer District Office at (315) 866-6879.

#### **WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table on page 4 our system had no violations. We have learned through our monitoring and testing that some constituents have been detected; however, these compounds were detected below New York State requirements. 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 2015, the New York State Department of Health cited the following violations against the water system:

- ◆ We are required to record our daily chlorine residuals on an Operation Report Form and submit that form to the DOH by the 10<sup>th</sup>-day of the following month. One of our monthly operation reports, was submitted late for which we received a notice of violation. The report was subsequently submitted.

#### **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 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 Town of Amsterdam 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>.

**WATER CONSERVATION TIPS**

The Town of Amsterdam 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

**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.

TOWN OF AMSTERDAM TABLE OF DETECTED CONTAMINANTS Public Water Supply Identification Number NY2811730						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
Turbidity <sup>1</sup> (Highest turbidity sample 5/31/15)	N	0.27 <sup>1</sup>	NTU	N/A	TT=1 NTU	Soil runoff
May 2015		100%			TT= 95% samples < 0.3 NTU	
<b>Inorganic Contaminants (sample data from 2/11/15 unless otherwise noted)</b>						
Barium	N	6.4	ppb	2000	2000	
Chloride	N	8.6	ppm	N/A	250	Naturally occurring or indicative of road salt contamination.
Manganese	N	7.3	ppb	N/A	300	Erosion of natural materials
pH	N	6.86	units		6.5-8.5	
Sodium <sup>2</sup>	N	4.6	ppm	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate	N	4.99	ppm	N/A	250	Geology
Zinc	N	5.9	ppb	N/A	5000	Galvanized pipe; corrosion inhibitor
<b>Stage 2 Disinfection Byproducts (quarterly samples from 2/11/15, 5/12/15, 8/11/15 &amp; 11/6/15 collected at 2 sites)</b>						
Chlorine (average) [ daily samples]	N	0.77	ppm	MRDLG	MRDL	Used in the disinfection and treatment of drinking water
Range		0.24-1.4		N/A	4	
Haloacetic Acids (HAA5) <sup>3</sup>	N	29.6	ppb	N/A	60	By-product of drinking water disinfection
Range of Values for HAA5		ND-53.4				
THM(Total Trihalomethanes)(Average) <sup>3</sup>	N	64.8	ppb	0	80	By-product of drinking water chlorination
Range of values for Total Trihalomethanes		18-77				
Chlorite ( average of 12 samples)	N	0.77	ppb	0.8	1.0	Byproduct of chlorine dioxide used in disinfection
Range of values		ND-0.49				
<b>Total Organic Carbon (monthly samples for 2015 )</b>						
Total Organic Carbon Compliance Ratio	N	1.31-1.58	ppm	NA	TT	Organic material both natural and manmade; Organic pollutants, decaying vegetation.
<b>Unregulated Contaminant Monitoring 3 ( Quarterly samples collected 1/14/13, 4/2/13, 7/22/13 10/1/13)</b>						
Chromium (Total) range all 4 quarters	N	ND-0.4	ppb	100	100	Erosion of natural deposits
Strontium range of values all 4 qtrs.	N	11.7-14.5	ppb	N/A	N/A	Erosion of natural deposits
Vanadium range of values all 4 qtrs.	N	0.6-0.9	ppb	N/A	N/A	Erosion of natural deposits
Chlorate range of values all 4 qtrs.	N	47.3-87.6	ppb	N/A	1000	By-product of drinking water disinfection at treatment plants using Hypochlorite Solutions.
<b>NOTES-</b>						
<p>1. 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. State regulations require that entry point turbidity must always be below 1.0NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although, May 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.</p> <p>2. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets.</p> <p>3. The average is based on a Locational Running Annual Average. The average shown represents the highest LRAA for the 4 quarters in 2015. The highest LRAA for the HAA5s was in the 1<sup>st</sup> quarter of 2015 and THMs was in the 3<sup>rd</sup> quarter of 2015.</p> <p><i>Non-Detects (ND)</i> - laboratory analysis indicates that the constituent is not present.</p> <p><i>Parts per million (ppm) or Milligrams per liter (mg/l)</i> - one part per million corresponds to one minute in two years or a single penny in \$10,000.</p> <p><i>Parts per billion (ppb) or Micrograms per liter</i> - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.</p> <p><i>Nephelometric Turbidity Unit (NTU)</i> - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.</p> <p><i>90<sup>th</sup> Percentile Value</i> - The values reported for lead and copper represent the 90<sup>th</sup> percentile. A percentile is a value on a scale of 100 that indicates the percent.</p> <p><i>Action Level</i> - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.</p> <p><i>Treatment Technique (TT)</i> -A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.</p> <p><i>Maximum Contaminant Level</i> - 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.</p> <p><i>Maximum Contaminant Level Goal</i> - 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.</p> <p><i>Maximum Residual Disinfectant Level (MRDL)</i>. 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.</p> <p><i>Maximum Residual Disinfectant Level Goal (MRDLG)</i>. 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.</p> <p><i>Locational Running Annual Average (LRAA)</i>: The LRAA is calculated by taking the average of the four most recent samples collected at each individual site</p> <p><i>N/A-not applicable</i></p>						