

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 materials. 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 and the FDA's Regulations establish limits for contaminants in bottled wa-

## WHERE DOES OUR WATER COME FROM ?

This report provides 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 State standards. If you have any questions about this report or concerning questions relating to your drinking water, contact Robert DiScenza, Chief Plant Operator or Randy Gardiner, Laboratory Director, 843-3009. We want you to be informed about your drinking water.

To comply with State Regulations, the Amsterdam Water Treatment Plant annually issues 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 100 contaminants. Currently we are in compliance with all state and federal quality regulations.

## INTRODUCTION



# 2014 Annual Report for 2013



## Drinking Water Quality

250 Brookside Avenue  
Amsterdam, New York 12010  
Public Water Supply ID#2800136

# AMSTERDAM WATER TREATMENT PLANT

Our water system serves approximately 18,600 people through 6,000 service connections within the City limits. In 2013, the City delivered on average 100,000 gallons per day to the Town of Amsterdam water district and 150,000 gallons per day to the Town of Florida water district serving their industrial & residential needs. The total water produced in 2013 was 2,094,360,000 gallons. The daily average of water treated and put into the distribution system was 5,630,000 gallons per day. Our highest single day was 6,200,000 gallons. The amount of water delivered was 2,094,360,000 gallons. This water was used for domestic and industrial use, to flush

## FACTS AND FIGURES

ter, which must provide the same protection for public health. Our water source is surface water drawn from a combination of 3 City owned Reservoirs located approximately 13 miles from the City. During 2013, our system did not experience any restrictions of our water source. Each of the three reservoirs has its own characteristics of water quality. This requires different chemical treatment at the 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 our raw water by removing any solids, metals (primarily iron and manganese), color producing compounds or other organic and inorganic compounds. At the Treatment Plant, we continuously monitor the clarity and disinfectant levels to ensure the bacteriological safety of the water. 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 treatment consists of Ultraviolet disinfection, Hydrated Lime for PH adjustment a blended Phosphate for corrosion control and chlorine for disinfection detection.

PRESORTED  
STANDARD  
US POSTAGE PAID  
AMSTERDAM, NY  
PERMIT #103

### Current Resident

- Ann M. Thane, Mayor
- Common Council
- Edward Russo
- Ronald Barone
- Valerie Beekman
- Diane Hatzembuhler
- Richard Leggiero

**AMSTERDAM WATER TREATMENT PLANT**  
250 Brookside Avenue  
Amsterdam, New York 12010

As the State Regulations require, we routinely test your drinking water for numerous contaminants. Bacteriological and total coliform testing is performed a minimum of 20 times per month and routine physical and chemical testing is performed everyday, as often as every four hours. Turbidity and chlorine residual monitoring is performed automated in-line measuring devices.

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## ARE THERE CONTAMINANTS IN OUR DRINKING WATER ?

As the State Regulations require, we routinely test your drinking water for numerous contaminants. Bacteriological and total coliform testing is performed a minimum of 20 times per month and routine physical and chemical testing is performed everyday, as often as every four hours. Turbidity and chlorine residual monitoring is performed automated in-line measuring devices.

## CLOSING

The City is proud to report that there were no Trihalomethane violations, Turbidity Level or Lead and Copper exceedance for 2013. This is an indication of the dedication and experiences of the staff and management at the Water Treatment Facility, which involves countless hours of hands on operation.

On behalf of myself, the operators and staff we thank you for allowing us to continue to provide you with a safe quality water this year. We ask that all our customers help us protect our water sources, which are the heart of the community.

The Amsterdam Water Treatment Plant and Source of Supply personnel are professionally skilled, and receive on going training to be licensed with the New York State Department of Health.

Through the continued support of Mayor Ann Thane, Water Chairman Richard Leggiero, and the members of the Common Council, we will continue to do our best by providing you with a safe quality drinking water this year and years to follow. The City of Amsterdam Water Treatment Plant delivered safe water in 2013. We continually strive to improve our water quality by improving our treatment processes and by implementing water system improvement projects. This water supply statement is being prepared for our customers in accordance with New York State Public Health Law. Please share this information with all other people who drink this water, those who may not have received this notice directly. Example: tenants, patients, schools and businesses.



Please call our office at 843-3009 if you have any questions.  
**Robert DiScenza, Chief Plant Operator**

## WHAT DOES THIS INFORMATION MEAN ?

We have learned through our testing that some contaminants have been detected. However these contaminants were detected below the level allowed by state and federal regulations.

By sampling we continue to monitor the water quality. All tests current indicate no presence of Coliform Bacteria in any of the distribution samples tested. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

## IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS ?

During 2013, our system was in compliance with all applicable State drinking water operating, monitoring and reporting requirements such as: Treatment Techniques, Filtration and Disinfection, Lead and Copper Control requirements, monitoring our drinking Water, Reporting any Violations

If you have any questions, please contact: Robert DiScenza @ 843-3009 or the New York State Department of Health, Herkimer District Office @ 315-866-6879.

## 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 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.
- 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 plan 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 house for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it 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.

- Commercial properties with water meters can 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.

## SYSTEM IMPROVEMENTS

In 2013 we completed replacement of failed backwash waste pump used to remove process waste water to the sanitary sewer. Along with this project, sludge buildup was removed from the backwash waste tank which will increase tank capacity and improve energy efficiency of the waste pumps.

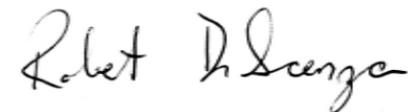
Distribution pump #1 was rebuilt after over a decade of service which provided increased pumping capacity.

A coagulant charge analyzer was purchased and has helped manage changes in raw water quality. The analyzer provides information to operators who make decisions to adjust chemical feed rates, which has helped to maintain optimal treatment.

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.

Near future Capital Improvement projects which need to be addressed are the refurbishment of the Brookside Avenue and Tecler water tanks for esthetics. Ongoing improvement to the Distribution System and its dead end areas will improve water quality.

**Please call our office at 843-3009 if you have any questions.**



**Robert DiScenza, Chief Plant Operator**

### TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	Regulatory Limit (MCL, AL, TT)	MCLG	Likely Source of Contamination
<b>MICROBIOLOGICAL CONTAMINANTS</b>							
Turbidity <sup>1</sup> Filtration TT-0.3	No	Continuous	.02 - .48 range 98.9%-100% range	NTU	TT	TT=95% of Samples -0.3 NTU	Soil Run-off
Total Coliform	No	Monthly	< 1	NA	MCL = 2 or more positive samples	0	Naturally present in the environment
Distribution System Turbidity	No	Every 4 hours	.18 - 1.01 range .3 - Average	NTU	5.0 (MCL)		Turbidity can interfere with disinfection and provide a medium of microbial growth.
<b>ORGANIC AND INORGANIC CONTAMINANTS</b>							
Copper <sup>2</sup>	No	6/2013	.024 Average Range = < .02-.09	mg/l	1.3 (AL)	1.3	Corrosion of household plumbing systems, Erosion of natural deposits; Leaching from wood preservatives.
Lead <sup>3</sup>		6/2013	.002 Average Range = < .001-.011	ug/l	.015 (AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits.
Total Organic Carbon	No	Monthly	Compliance Ratio 1.31 - 1.47	-	TT	Compliance Ratio ≥ 1	Naturally present in environment
<b>UNREGULATED CONTAMINANT RULE 3</b>							
Chlorate	No	7/22/2013	45.4	mg/L	N/A	N/A	By-product of water additive used to control microbes
Strontium	No	7/22/2013	15.1	mg/L	N/A	N/A	Naturally present in environment
Vanadium	No	4/22/2013	.5	mg/L	N/A	N/A	Naturally present in environment
<b>DISINFECTION BY PRODUCTS</b>							
Total Trihalomethanes <sup>5</sup>	No	Quarterly Samples	40.4 rolling Annual Average Range 26 - 53	ug/l	80 ug/l	N/A	By-products of drinking water chlorination. TTHM's are formed when source water contains large amounts of organic mater.
Total Haloacetic Acids <sup>5</sup>	No	Quarterly Samples	19.5 rolling Quarterly Average Range 15-24	ug/l	60 ug/1	N/A	By-products of drinking water chlorination
Chlorine Dioxide	No	Daily Samples	Range .03 - .19	mg/l	0.80 (MCL)	0.80 (MRDLG)	Water additive used to control microbes
Chlorite	No	Quarterly Samples	Range <.02 - .28	mg/l	Average of three distribution system resamples exceeds 1.0 mg/l	0.80 (MCLG)	By-product of water additive used to control microbes.
Free Chlorine Residual Distribution System Entry	No	Continuous	.47 - 1.23 range	mg/1	4		Used in disinfection of drinking water.

#### Notes:

1 - 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 was .27 NTU on 3/26/2013. State regulations require that 95% of the turbidity samples collected have measurements below 0.30 NTU.

2 - The level presented represents 90th percentile of the 30 sites tested. The action level for copper was not exceeded in 2013.

3 - The level presented represents of the 90th percentile of the 30 samples collected. The action level for lead did not exceed in 2013.

4 - The State considers 50 pCi / 1 to be the level of concern for beta particles.

5 - The level presented represents the annual quarterly average calculated from the samples collected.

#### Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible. Maximum Contaminant Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. Maximum Residual Disinfective Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectant to control microbial contamination. Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of the 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).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.