

Annual Drinking Water Quality Report for 2014
Town of Chenango
1529 NY RT 12
Binghamton, N.Y. 13901
Public Water Supply ID# NY0301653

INTRODUCTION

To comply with State regulations, the Town of Chenango will issue an annual 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, your tap water met all State drinking water health standards. 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 your drinking water, please contact the Town of Chenango Water Department at 648-4809 ext #7. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The Town Board holds work session every 2nd and 4th Wednesday at 4:00 P.M. Please call 648-4809 ext #6 ahead of time to reserve a time period to address the board. They also meet at 7:00 P.M. on the 1st Monday of the month for regular board meetings.

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 natural-occurring minerals, and in some cases, radioactive material, and also picks 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.

The Town of Chenango has eight groundwater wells throughout the town. Listed below are the well names and locations.

1. Northgate well
2. Route 12A well
3. Maplewood well
4. Applewood well (Emergency source)
5. Chenango Heights
6. Run Acres well
7. Pennview well
8. Cherry Lane well (Emergency source)

Both the Applewood and Cherry Lane wells are considered emergency sources and cannot be used without Health Department approval. Under normal conditions the Northgate well pumps water simultaneously to the Hillside Drive (150,000 gal.) and Savitch Road (412,000 gal.) storage tanks, the Route 12A well pumps to the Hospital Hill tank (500,000 gal.) and the Poplar Hill tank (218,600), the Maplewood well pumps to the Maplewood tank (212,000 gal.), the Chenango Heights well pumps to the

Chenango Heights tank (86,000 gal.), the Pennview well pumps to a hydro-pneumatic tank (2,000 gal.), and the Run Acres well pumps to a hydro-pneumatic tank (1,000 gal.). The Northgate and 12A wells are interconnected and each is capable of supplying the other water. It's not uncommon that customers in these districts have more than one source of water during the course of a year. Customers in the Maplewood District receive water from the Maplewood well.

Water from all source wells meets or exceeds New York State Part 5 standards for drinking water. Raw water from the Pennview well has an elevated iron content which is treated by filtration through Iron Removal Media, and it is also treated with soda ash to reduce lead and copper leaching. Water from the Maplewood and Applewood wells is treated with a polyphosphate compound to reduce lead and copper leaching. Water from all the town wells is disinfected using chlorine for microbiological control. During 2014, none of our systems experienced any water restrictions.

FACTS AND FIGURES

Our water system serves 9,550 people through 2667 service accounts. The total water produced in 2014 was 50,501,554 cu ft (377,751,626 gal.). The daily average of water treated and pumped into the distribution system was 138,360 cu ft (1,034,936 gal.) In 2014, water customers were charged \$ 11.77 for the first 1,000 cu ft of water used and \$1.57 for each additional 100 cu ft.

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, disinfection by products, 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 Broome County Health Department at (607-778-2887).

TABLE OF CONTAMINANTS

Contaminant	Violation Yes/No	Date of Sample	Well Name	Level Detected Avg/Max (Range)	Unit Measurement	MCLG	Regulatory Limit MCL,TTorAL	Likely Source of Contamination
Barium	No	Jul-12	Pennview	1.27	mg/l	2 mg/l	2 mg/l	Discharge of drilling wastes ; Discharge from metal refineries;Erosion of natural deposits.
		Aug-12	Applewood	0.057				
		Oct-12	Northgate	0.064				
		Aug-12	Chen. Hgts	0.092				
		Aug-12	Maplewood	0.05				
Sodium	No	Nov-14	Northgate	27.9	mg/l	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal wastes.
		Nov-14	Run Acres	44.7				
		Nov-14	Maplewood	56.9				
		Nov-14	Pennview	95.5				
		Nov-14	Route 12A	63.6				
Sulfate	No	Nov-09	Route 12A	21.4	mg/l	250 mg/l	N/A	Naturally occurring
		Nov-09	Maplewood	14.0				
		Nov-09	Run Acres	14.5				
		Nov-09	Chen. Hgts	8.7				
		Nov-09	Northgate	15.7				
Lead	No	Aug-13	Northgate	*2.6 (ND - 3.5)	ug/l	0	AL=15 ug/l	Corrosion of household plumbing system; Erosion of natural deposits
		Aug-13	Route 12A	* 4.5 (1.1 - 8.3)				
		Aug-13	Chen. Hgts	* 3.4 (0.5 -5.9)				
		Aug-13	Run Acres	* 3.0 (0.8 - 3.2)				
		Sep-14	Maplewood	* 1.3 (ND - 1.3)				
		Sep-14	Pennview	*5.6 (4.0 - 5.6)				
Copper	No	Sep-14	Maplewood	* 0.204 (0.052-0.140)	mg/l	1.3 mg/l	AL=1.3 mg/l	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives
		Sep-14	Pennview	*0.427 (0.112 -0.553)				
		Aug-13	Northgate	*0.119 (0.046-0.157)				
		Aug-13	Route 12A	*0.110 (0.039-0.213)				
		Aug-13	Chen. Hgts.	*0.0965 (0.0295-0.12)				
		Aug-13	Run Acres	*0.18 (0.080-0.20)				

Radioactive Contaminants

Contaminant	Violation Yes/No	Date of Sample	Well Name	Level Detected Avg/Max (Range)	Unit Measurement	MCLG	Regulatory Limit MCL,TTorAL	Likely Source of Contamination
Gross Alpha	No	Sep-13	Route 12A	0.09	pCi/l	15	0	Erosion of natural deposits.
		Sep-13	Northgate	0.58				
Radium-226	No	Sep-13	Route 12A	0.29	pCi/l	5	0	Erosion of natural deposits.
		Sep-13	Northgate	0.12				
Radium-228	No	Sep-13	Route 12A	0.32	pCi/l	5	0	Erosion of natural deposits.
		Sep-13	Northgate	0.19				
Disinfection by products								
** Total Haloacetic Acids	No	Aug-13	Maplewood	1.2	ug/l	n/a	60	By-product of drinking water chlorination.
			Pennview	4.3				
			Route 12A	1.3				
*** Total Trihalomethanes	No	Aug-13	Route 12A	38.9	ug/l	n/a	80	By-product of drinking water chlorination.
			Maplewood	1.42				
			Pennview	28.9				
			Northgate	8.58				
			Run Acres	9.38				

Notes:

* - The level presented represents the 90th percentile of the sites tested. A percentile is a value on a scale of 100 that indicates the percent of distribution that is equal 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 this case, the required samples were collected at your water system and the 90th percentile was marked with an asterisk.

** - This level represents the total of the following contaminants: Monochloroacetic Acid, Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Dibromoacetic Acid.

*** - This level represents the total of the following contaminants: chloroform, bromodichloromethane dibromochloromethane, bromoform.

As a result of an optimization report, other parameters are monitored in the Maplewood District. During 2014, 24 samples were collected and the results are compiled below.

MAPLEWOOD WELL			
Parameter	High Level (mg/l)	Low Level (mg/l)	Mean (mg/l)
Alkalinity as (CaCO3)	216	192	204
Specific Conductance	780	698	739
Calcium Hardness as (CaCO3)	270	194	232
Orthophosphate as (PO4)	0.807	0.06	0.434
PH	7.95	6.85	7.40

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 drinking water disinfectant below which there is known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

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.

Action Level (AL): The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

pCi/l: Picocuries per liter is a measure of the radioactivity in water

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the New York State requirements.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATION

During 2014, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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).

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;
- ◆ 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 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.

SYSTEM IMPROVEMENTS

The distribution system is periodically surveyed for leaks by town personnel; with the use of leak detection equipment.