Annual Drinking Water Quality Report for 2013

Town of Stillwater, New York 881 Hudson Ave., Stillwater, New York12170 (Public Water Supply ID# 4517534, 4530198, 4530040 & NY4530219)

INTRODUCTION

To comply with State regulations, the Town of Stillwater 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 Total Coliform bacteria, lead and copper and disinfection byproducts. Water Districts #1, #4, and #5 each had disinfection byproducts at a level higher than the State allows and Water District #1 exceeded the Action Level for lead in drinking water. The Town is currently investigating methods to reduce disinfection byproduct within its system. 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 Mark Minick, Superintendent of Highways, Town of Stillwater, 1 Lansing Road, Stillwater, New York 12170, Phone: (518) 664-4611. 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 meetings are held on first and third Thursday evenings of each month at 7:00 p.m. in the Town Government Complex, located at 881 Hudson Ave., Stillwater, NY 12170.

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.

TOWN OF STILLWATER WATER DISTRICT #1

The Town of Stillwater Water District #1 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, receiving drinking water through one of two inter-municipal system connections with adjacent municipalities. The primary supply for Water District #1 is the interconnection with the Village of Stillwater water system. An interconnection also exists with the City of Mechanicville system, however, the capacity of the City of Mechanicville system is reported to be limited and the Town typically does not utilize this connection. The Town of Stillwater Water District #1 usually purchases its supply of drinking water from the Village of Stillwater. As of 2012, the Village substantially completed an improvements project to connect its distribution system to the Saratoga County Water Authority (SCWA) system. The Village currently receives water from the SCWA. The Town and Village have an agreement whereby the

Water District #1 agrees to purchase water from the Village for domestic and commercial use as long as the Village has adequate supply.

DISTRICT #1 FACTS AND FIGURES

The Town of Stillwater Water District #1 system serves approximately 1,566 customers through 522 service connections. In 2013, Water District #1 customers purchased a total of 32,287,500 gallons. The daily average amount of water used by Water District #1 customers in 2013 was approximately 88,500 gallons per day (GPD). The maximum day production of 169,200 gallons occurred on May 15, 2013. In 2013, water customers within the District #1 paid \$8.37 per thousand gallons of water.

As identified above, the water source for the Village of Stillwater is the SCWA system. As of the date of this publication, the Village is utilizing the SCWA as its sole water source.

TOWN OF STILLWATER WATER DISTRICT #3

The Town of Stillwater Water District #3 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, purchasing its regular supply of drinking water from the City of Mechanicville.

The City of Mechanicville operates a surface water filtration plant, which is fed by two reservoirs. The Mechanicville Reservoir, located in the Luther Woods, is the primary source of raw water. The Terminal Reservoir, located approximately one mile from the Water Treatment Plant, is the secondary raw water source. The Water Treatment Plant is a conventional treatment facility utilizing the processes of coagulation using poly-aluminum chloride; sedimentation; rapid sand filtration; and post chlorination.

DISTRICT #3 FACTS AND FIGURES

The Town of Stillwater Water District #3 system serves approximately 624 customers through approximately 208 service connections. Usage for Water District #3 and Water District #4 is measured in combination and is further described below. In 2013, water customers within District #3 paid \$7.25 per thousand gallons of water.

TOWN OF STILLWATER WATER DISTRICT #4

The Town of Stillwater Water District #4 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, purchases its regular supply of drinking water from the City of Mechanicville.

DISTRICT #4 FACTS AND FIGURES

The Town of Stillwater Water District #4 system serves approximately 321 customers through 107 service connections. As stated above, usage by Water District #3 and Water District #4 is measured in combination. In 2013, the Water Districts purchased a total of 16,902,600 gallons. The daily average amount of water used by the Water Districts' customers in 2013 was approximately 46,300 gallons per day (GPD). The maximum day production of 101,500 gallons occurred on May 19, 2013. In 2013, water customers within the Water District #4 paid \$7.25 per thousand gallons of water.

TOWN OF STILLWATER WATER DISTRICT #5

The Town of Stillwater Water District #5 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, purchases its regular supply of drinking water from the Village of Stillwater.

DISTRICT #5 FACTS AND FIGURES

The Town of Stillwater Water District #5 system serves approximately 40 customers through 12 service connections. In 2013, Water District #5 customers purchased a total of 644,600 gallons. The daily average amount of water used by Water District #5 customers in 2013 was approximately 1,770 gallons per day (GPD). In 2013, water customers within Water District #5 paid \$8.37 per thousand gallons of water.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

Stillwater Water District staff is responsible for testing the water in the distribution system. The water is tested for Total Coliform bacteria, lead and copper and disinfection byproducts and once every 9 years for asbestos. Source water monitoring is completed by the Saratoga County Water Authority and the City of Mechanicville. The water sources are tested for inorganic compounds, volatile and semi volatile organic compounds, synthetic organic compounds, PCBs, nitrate, and radiologicals. The tables presented below summarize the test results from the distribution systems. The Table of Detected Contaminants for the Village of Stillwater and the City of Mechanicville are also included below.

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 New York State Department of Health (518) 793-3893.

Table of Detected Contaminants Stillwater WD #1 - NY4517534									
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination		
Total Coliform Bacteria	No	N/A	none	N/A	0	Systems with less than 40 samples per month-two or more samples positive for Total Coliform represents an MCL violation	Naturally present in the environment.		
Stage 1 Disinfectio	n Byproducts								
Total Trihalomethanes (TTHMs)	Yes	Quarterly 1 st , 2 nd , and 3 rd Quarter- 2013	134.45 ¹ 56.7-183.1 ²	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.		
Haloacetic Acids (HAA5)	No	Quarterly 1 st , 2 nd , and 3 rd Quarter- 2013	58.98 ¹ 48-108 ²	ug/L	N/A	MCL=60	By-product of drinking water chlorination.		
Stage 2 Disinfectio	n Byproducts	2							
Total Trihalomethanes (TTHMs)	N/A ²	<u>Quarterly</u> Nov. 2013	96.9 ²	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.		
Haloacetic Acids (HAA5)	N/A ²	Quarterly Nov. 2013	43.1 ²	ug/L	N/A	MCL=60	By-product of drinking water chlorination.		
Inorganic Compou	Inorganic Compounds								
Lead	Yes	6/11/2013	22 ³ (ND-57)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.		
Copper	No	6/11/2013	.350 ³ (ND-0.374)	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.		

^{1.} Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2013 Running Annual Average was calculated using data collected during the 1st Quarter 2013, the 4th Quarter 2012, the 3rd Quarter 2012 and the 2nd Quarter 2012. During 2013, the highest running annual average for HAA5s occurred during the 3rd Quarter of 2013 and the highest running annual average for TTHMs occurred during the 2nd Quarter of 2013 (58.98 ug/l for HAA5s and 134.45 ug/l for TTHMs). The running annual average for TTHMs exceeded the MCL during the 1st, 2nd, and 3rdQuarters of 2013. The levels presented are the range of Stage 1 TTHM and HAA5 sample results from 2013.

^{2.} Stage 2 Disinfection Byproducts monitoring began in November of 2013; therefore only one sample is reported. Due to a change in regulations, compliance will not be determined until 4 quarters of samples are received.

^{3.} The level presented represents the 90th percentile of the sites tested. A percentile is a value on a scale of 1 to 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 copper values detected at

your water system. During June 2013, 20 samples were collected for lead and copper analysis. Copper was not detected above the action level at any of the sites tested during the sampling round, however;.

lead was detected above the action level in 2013. A violation was issued by the New York State Department of Health for the action level exceedance.

Table of Detected Contaminants Stillwater WD #3 - NY4530198								
Contaminant	Violation Yes/No	Date(s) of Sample	Level Detected (Maximum) (Range)	Unit of Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination	
Total Coliform Bacteria	No	N/A	none	N/A	0	Systems with less than 40 samples per month-two or more samples positive for	Naturally present in the environment.	
Inorganic Contaminar	nts							
Copper	No	6/5/13	$0.065^{\ 1} \\ 0.005 - 0.076^{\ 2}$	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.	
Lead	No	6/5/13	. 5 ¹ ND-1 ²	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.	
Disinfection Byproduc	ets ³							
Total Trihalomethanes (TTHMs)	No	Quarterly 1 st, 2 nd , and 3 rd Quarter- 2013	56.08 ³ 29.2-55.5	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.	
Haloacetic Acids (HAA5)	No	Quarter 1st, 2nd, and 3rd Quarter- 2013	57.9 ³ 27.6-44.9 ⁴	ug/L	N/A	MCL=60	By-product of drinking water chlorination.	
Stage 2 Disinfection B	yproducts ⁵							
Total Trihalomethanes (TTHMs)	N/A ⁵	Quarterly Nov. 2013	34.6 ⁵	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.	
Haloacetic Acids (HAA5)	N/A ⁵	Quarterly Nov. 2013	35.1 ⁵	ug/L	N/A	MCL=60	By-product of drinking water chlorination.	

- 1. The level presented represents the 90th percentile of the sites tested. A percentile is a value on a scale of 1 to 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. During June 2013, 5 samples were collected for lead and copper analysis. The 90th percentile value, which is presented above, was the average of the two highest sample results. Lead and copper were not detected above the action level at any of the sites tested during the June sampling rounds.
- 2. The levels presented are the range of the samples collected.
- 3. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2013 Running Annual Average was calculated using data collected during the 1st Quarter 2013, the 4th Quarter 2012, the 3rd Quarter 2012 and the 2nd Quarter 2012. During 2013, the highest running annual average for HAA5s occurred during the 1st Quarter of 2013 and the highest running annual average for TTHMs occurred during the 1st Quarter of 2013 (57.9 ug/l for HAA5s and 56.08 ug/l for TTHMs). The running annual averages for TTHMs and HAA5s did not exceed the MCL during 2013.
- 4. The levels presented are the range of TTHM and HAA5 sample results collected during 2013.
- 5. Stage 2 Disinfection Byproducts monitoring began in November of 2013; therefore only one sample is reported. Due to a change in regulations, compliance will not be determined until 4 quarters of samples are received.

Table of Detected Contaminants Stillwater WD #4 - 4530040									
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination		
Total Coliform Bacteria	No	N/A	none	N/A	0	Systems with less than 40 samples per month-two or	Naturally present in the environment.		
Inorganic Conta	aminants								
Copper	No	6/5/13	0.435 ¹ 0.106-0.727 ²	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.		
Lead	No	6/5/13	1.5 ¹ ND-2 ²	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.		
Disinfection By	Disinfection Byproducts								
TTHMs	No	Quarterly 1 st , 2 nd , and 3 rd Quarter- 2013	66.83 ³ 36.9-81.2 ⁴	ug/L	N/A	MCL=80	By-product of drinking water chlorination.		
HAA5s	Yes	Quarterly 1 st , 2 nd , and 3 rd Quarter- 2013	64.00 ³ 31.7-59.6 ⁴	ug/L	N/A	MCL=60	By-product of drinking water chlorination.		
Stage 2 Disinfec	tion Byprodu	icts ⁵							
Total Trihalomethan es (TTHMs)	N/A ⁵	Quarterly Nov. 2013	40.35	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.		
Haloacetic Acids (HAA5)	N/A ⁵	Quarterly Nov. 2013	45.2 ⁵	ug/L	N/A	MCL=60	By-product of drinking water chlorination.		

The level presented represents the 90th percentile of the sites tested. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. During June 2013, 5 samples were collected for lead and copper analysis. The 90th percentile value, which is presented above, was the average of the two highest sample results. Lead and copper were not detected above the action level at any of the sites tested during the June sampling round.

The levels presented are the range of the samples collected.

Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2013 Running Annual Average was calculated using data collected during the 1st Quarter 2013, the 4th Quarter 2012, the 3rd Quarter 2012 and the 2nd Quarter 2012. During 2013, the highest running annual average for TTHMs occurred during the 1st Quarter of 2013 and 4A-S5 occurred during the 1st Quarter of 2013 (66.83 ug/l for TTHMs and 64.00 ug/l for HAA5s). The running annual average for TTHMs did not exceed the MCL during 2013. The running annual average for HAA5s exceeded the MCL during the 1st and 2nd Quarters of 2013.

The levels presented are the range of TTHM and HAA5 sample results collected during 2013.

Stage 2 Disinfection Byproducts monitoring began in November of 2013; therefore only one sample is reported. Due to a change in regulations, compliance will not be determined until 4 quarters of samples are received.

Table of Detected Contaminants Stillwater WD #5 - NY4530219										
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination			
Total Coliform Bacteria	No	N/A	none	N/A 0		Systems with less than 40 samples per month-two or more samples positive for Total Coliform represents an MCL violation	Naturally present in the environment.			
Inorganic Compo	ounds									
Copper	No	6/18/13	0.357 ¹ 0.005-0.387 ²	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.			
Lead	No	6/18/13	10 ¹ ND-14 ²	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.			
Disinfection Bypi	roducts									
TTHMs	Yes	Quarterly 1st, 2nd, and 3rd Quarter- 2013	135.75 ³ 72.6-182.9 ⁴	ug/L	N/A	MCL=80	By-product of drinking water chlorination.			
HAA5s	Yes	Quarterly 1 st , 2 nd , and 3 rd Quarter- 2013	66.25 ³ 47-90 ⁴	ug/L	N/A	MCL=60	By-product of drinking water chlorination.			
Stage 2 Disinfecti	on Byproduc	ts ⁵								
Total Trihalomethanes (TTHMs)	N/A ⁵	Quarterly Nov. 2013	71.9 ⁵	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.			
Haloacetic Acids (HAA5)	N/A ⁵	Quarterly Nov. 2013	47 ⁵	ug/L	N/A	MCL=60	By-product of drinking water chlorination.			

The level presented represents the 90th percentile of the sites tested. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. During June 2013, 5 samples were collected for lead and copper analysis. The 90th percentile value, which is presented above, was the average of the two highest sample results. Lead and copper were not detected above the action level at any of the sites tested during the June sampling round.

The levels presented are the range of the samples collected.

Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly Quarter 2013, the 4th Quarter 2012, the 3rd Quarter 2012 and the 2nd Quarter 2012. During 2013, the highest running annual average for TTHMs occurred during the 2nd Quarter 2013 and HAA5s occurred during the 3rd Quarter 2013 (135.75 ug/l for TTHMs and 66.25 ug/l for HAA5s). The running annual average for TTHMs exceeded the MCL during the 1st, 2nd, and 3rd Quarters of 2013. The running annual average for HAA5s exceeded the MCL during the 2nd and 3rd Quarters of 2013.

4. The levels presented are the range of TTHM and HAA5 sample results collected during 2013.

Stage 2 Disinfection Byproducts monitoring began in November of 2013; therefore only one sample is reported. Due to a change in 5. regulations, compliance will not be determined until 4 quarters of samples are received.

Table of Detected Contaminants Village of Stillwater – NY4500171									
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure- ment	MCL G	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination		
Turbidity ¹	No	Daily	0.015	NTU	N/A	5 NTU	Soil Run Off		
Inorganic compou	inds			<u>'</u>	,				
Barium	No	6/29/11	0.011	mg/l	2	2 (MCL)	Discharge of drilling waste; Discharge from metal refines; Erosion of natural deposits		
Radiologicals									
Radium 228	No	Sampled quarterly in 2008	2.1 (Average) (0.7-4.0)	pCi/L	0	5 (MCL)	Erosion of natural deposits.		

	Table of Detected Contaminants Saratoga County Water Authority								
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination		
Turbidity (Highest Result) Entry Point	No	7/3/13(0800)	0.88	NTU	N/A	TT-1.0	Soil Run Off		
Transmission System	No	(Aug Monthly avg.)	0.571	NTU		TT-5.0			
Total Organic Carbon (TOC)	No	Raw Average Treated Average	4.2 mg/l 1 mg/l	mg/l	N/A	N/A	Naturally present in the environment		
Inorganic compo	Inorganic compounds								
Nitrate	No	1/22/2013	0.18	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.		
Manganese	No	1/22/2013	12	ug/l	N/A	300	Naturally occurring; Indicative of landfill contamination.		
Sodium	No	1/22/2013	8.44	mg/l	N/A	270	Naturally occurring; Road salt; Water softeners; Animal waste.		
Zinc	No	1/22/2013	21	ug/l	N/A	5000	Naturally occurring; Mining waste.		
Chloride	No	1/22/2013	10.8	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.		
Sulfate	No	1/22/2013	3.8	mg/l	N/A	250	Naturally occurring.		
Barium	No	1/22/2013	6	ug/l	2	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.		

CITY OF MECHANICVILLE TABLE OF DETECTED CONTAMINANTS

Public Water Supply Identification Number NY4500166

Contaminant	Violation	Level	Unit	MCLG	MCL	Likely Source of Contamination			
Contaminant	Y/N	Detected	Measurement	WICLG	WICL	Likely Source of Contamination			
Microbiological Contaminants									
Turbidity 1 (sample from 6/19/13)		0.12^{1}			TT=1 NTU				
	N		NTU	N/A		Soil runoff			
		100%			TT=95% samples				
					< 0.3				
Inorganic Contaminants (samples from 2/21/13 unless	Inorganic Contaminants (samples from 2/21/13 unless otherwise noted)								
Chloride	N	24	ppm	N/A	250	Naturally occurring or indicative of road salt			
						contamination.			
Manganese	N	20	ppb	N/A	300	Geology; Naturally occuring			
Nickel	N	1	ppb	N/A	100	Discharge from steel/metal factories			
Odor	N	1	units	0	3	Natural sources			
pH	N	7.4	units		6.5-8.5				
Sodium ²	N	12.6	ppm	N/A	N/A	Geology; Road Salt			
Sulfate	N	13	ppm	N/A	250	Geology			
Total Organic Carbon ³ (monthly samples from 2012)									
Raw Water	N	2.3-8.6				Organic material both natural and man made;			
			ppm	NA	TT	Organic pollutants, decaying vegetation.			
Treated Water		1.5-3.8							

FOOTNOTES-

- 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. Distribution system turbidity performed 5 times a week with 4.67 NTU being highest level detected and 0.30 NTU being the average level detected.
- 2. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets.
- 3. The Interim Enhanced Surface Water Treatment Rule (IESWTR) requires monitoring of raw and finished water Total Organic Carbon (TOC). Depending on the raw water alkalinity value, proper water treatment should remove between 15% to 50% of the raw water TOC thus reducing the amount of disinfection byproducts produced.

Glossary *Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

90th Percentile Values. The values reported for lead and copper represent the 90th percentile. 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.

Action Level - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

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

Maximum Contaminant Level - 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.

Maximum Contaminant Level Goal 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.

Running Annual Average (RAA): The RAA is calculated each quarter by taking the average of the four most recent samples collected.

N/A-Not applicable

Definitions:

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

<u>Action Level (AL)</u>: 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.

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).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables, our system had several MCL violations, which means that our water exceeded a drinking water standard. Haloacetic Acids (HAA5s) are a by-product of drinking water disinfection needed to kill harmful organisms. Some people who drink water containing HAA5s in excess of the MCL over many years may have an increased risk of getting cancer. Total Trihalomethanes (TTHMs) are also a by-product of drinking water chlorination. TTHMs are formed when source water contains large amounts of organic matter. Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. The Town is currently investigating methods to reduce HAA5s and TTHMs in its distribution system.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2013, Stillwater WDs #1, #4, and #5 violated the level of disinfection byproducts allowed by the State in the system and WD #1 exceeded the Action Level for lead in drinking water. As previously indicated, the Town is currently investigating methods to reduce the disinfection byproducts and lead in its distribution system.

Trihalomethanes are a group of chemicals that includes chloroform, bromodichloromethane, and chlorodibromomethane. Trihalomethanes are formed in drinking water during treatment by chlorine, which is the most commonly used disinfectant in New York State. Chlorine reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of trihalomethanes formed in drinking water during disinfection can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies suggest that people who drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor. The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels

over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

Haloacetic acids are a group of chemicals that includes mono-, di- and trichloroacetic acids and mono- and dibromoacetic acids. Haloacetic acids are formed in drinking water during treatment by chlorine, which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of haloacetic acids in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (possibly including haloacetic acids) is associated with an increased risk for certain types of cancer. However, how long and how frequently people actually drank the water as well as how much haloacetic acids the water contained is not known for certain. Therefore, we do not know for sure if the observed increased risk for cancer is due to haloacetic acids, other disinfection by-products, or some other factor. The individual haloacetic acids dichloroacetic acid and trichloroacetic acid cause cancer in laboratory animals exposed to high levels over their lifetimes. Dichloroacetic acid and trichloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney and nervous system and on their ability to bear healthy offspring. Chemicals that cause effects in animals after high levels of exposure may pose a risk to humans exposed to similar or lower levels over long periods of time.

03/08

The City of Mechanicville was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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.

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 Stillwater 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.

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; 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 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.

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. The costs of these improvements may be reflected in the rate structure. 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. Please call our office if you have questions.