

Annual Drinking Water Quality Report for 2014
Hampton Manor Water District
225 Columbia Turnpike, East Greenbush, NY 12061
Public Water Supply Identification Number NY4100037

INTRODUCTION

To comply with State regulations, Hampton Manor Water District 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. We are very pleased to provide you with this year's Annual Water Quality Report. Last year, we conducted tests for over 80 contaminants. We detected 1 of those contaminants at a level higher than the State allows. As we told you at the time, our water temporarily exceeded a drinking water standard and we modified our treatment process to rectify this problem. This report is 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 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. Tom Kennedy, Water Foreman, Town of East Greenbush, Hampton Manor Water District #4, 69 Gilligan Road, East Greenbush, NY 12061; Telephone (518) 477-6103.* We want our valued customers to be informed about their water service. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. They are held on the 3rd Wednesday of each month, 7:00 PM at the *Town Hall, 225 Columbia Turnpike, East Greenbush, NY 12061; Telephone (518) 477-4775.*

WHERE DOES OUR WATER COME FROM?

Hampton Manor Water District #4 draws its water from a ground water source. Groundwater or well water is stored below the surface of the earth in deep, porous rocks called "aquifers." Groundwater is purified naturally as it filters through layers of soil, clay, rock and sand. This process, known as "percolation" takes years to complete. As a result, groundwater requires less treatment than surface water. We pump this groundwater out through our wells. The Water District is served by two drilled wells located on Hampton and Pinehurst Avenues. Well "A" consists of a drilled well 110-feet deep with a 12-inch casing. It has a yield of 600 gallons/minute. Well "B" consists of a drilled well 100 feet deep with a 6 inch casing. Pumping capacity for Well "B" is approximately 250 gallons per minute. Chlorine is added to the water, which is used for disinfection to protect against contamination from harmful bacteria and other organisms. We also add a liquid ortho-polyphosphate sequestering agent for corrosion control and to minimize any water discoloration from iron and manganese. We have two storage tanks located on Hudson Avenue. The Low Tank has a capacity of 60,000 gallons while the High Tank has a storage capacity of 140,000 gallons in order to meet consumer demand and to provide adequate fire protection.

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The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were 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 of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well's contributing area and the likelihood that the contamination can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The State Health Departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs. A copy of the full Source Water Assessment, including a map of the assessment area is available for review by contacting the Rensselaer County Health Department at the number provided in this report.

FACTS AND FIGURES

The Hampton Manor Water District #4 provides water through 671 service connections to a population of approximately 2,440 people. Our average daily demand is 111,000 gallons. Our single highest day was 239,000 gallons. The total water produced in 2014 was 40,450,000 gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. In addition, we test 2 samples for coliform bacteria monthly. 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 Rensselaer County Health department at (518) 270-2626.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had 1 violation. We exceeded the MCL for iron. The state does allow higher levels if there is no adverse effect such as increased color or discoloration of plumbing fixtures. When iron and manganese are both present the state allows an MCL of 500 ppb for the sum of both if there are no problems such as discoloration and staining of plumbing fixtures. The Hampton Manor Water District #4 has been found to be in violation of the New York State Sanitary Code Drinking Water Regulations and the National Primary Drinking Water Regulations. The violation results from exceeding the MCL for iron.. We are providing public notice to our customers with this Annual Report. We are required to provide the following information: Iron has no health effects. At 1000 ug/l a substantial number of people will note the bitter astringent taste of iron. Also, at this concentration, it imparts a brownish color to laundered clothing and stains plumbing fixtures with a characteristic rust color. Staining can result at levels of 50 ug/l, lower than those detectable to taste buds. Therefore, the MCL of 300 ug/l represents a reasonable compromise as adverse aesthetic effects are minimized at this level. Many multivitamins may contain 3000 or 4000 ug/l of iron per capsule. We have installed a water softener to reduce the iron and manganese concentration in the wells.

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. 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 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) or at <http://www.epa.gov/safewater>.

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 Hampton Manor Water District 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?

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.
- ◆ If applicable, 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.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. 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.

**TABLE OF DETECTED CONTAMINANTS
HAMPTON MANOR WATER DISTRICT #4 PWS ID# NY4100037**

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source of Contamination
Inorganic Contaminants							
Barium	Well A Well B	N	2/9/10	278 214	ppb	2000	Erosion of natural deposits
Chloride	Well A Well B	N	2/9/10	170 152	ppm	N/A	Naturally occurring or indicative of road salt contamination
Copper		N	6/22/13- 7/17/13	1.08 ¹ 0.12-1.36	ppm	1.3	Corrosion of household plumbing systems; erosion of natural deposits;
Range of values						AL=1.3	
Iron ²	Well A (avg) range	Y	Quarterly	482 459-540	ppb	N/A	Naturally occurring
Iron ²	Well B (avg) range	Y		580 422-915			
Lead ³		N	6/22/13- 7/17/13	3 ND-5	ppb	0	Corrosion of household plumbing systems; erosion of natural deposits;
Range of values						15	
Manganese ²	Well A (avg) range	N	Quarterly ²	193 188-195	ppb	N/A	Naturally occurring
Manganese ²	Well B (avg) range	N		216 209-229			Naturally occurring
Nickel	Well A	N	2/9/10	3.4	ppb	N/A	Naturally occurring
Sodium ⁴	Well A Well B	N	2/9/10	41.2 28.3	ppm	N/A	Naturally occurring; road salt; Water softener; Animal waste
Sulfate	Well A Well B	N	2/9/10	59 54	ppm	N/A	Naturally occurring
Zinc	Well A Well B	N	2/9/10	30 30	ppb	N/A	Galvanized pipe; corrosion inhibitor
Disinfection Byproducts (samples quarterly from 1/29/14, 5/1/14, 7/8/14 & 10/16/14)							
Chlorine Residual (average) Range	N	Daily	0.23 0.2-0.4	ppm	MRDLG	MRDL	Used in the treatment and disinfection of drinking water
					N/A	4	
Total Trihalomethanes (TTHM) Range of values	N	Quarterly ⁵	7.9 ND-14.2	ppb	0	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5) Range of values	N	Quarterly ⁵	2.1 ND-1.7	ppb	N/A	60	By-product of drinking water chlorination
Notes:							
1 - The level presented represents the 90th percentile of the 10 samples collected. The action level for copper was exceeded at 1 of the 10 sites tested.							
2 - Quarterly samples were collected 5/9/12, 7/25/12, 9/10/12 & 11/13/12. The MCL of 300 ppb was exceeded on both wells each quarter.							
3 - The level presented represents the 90th percentile of the 5 samples collected. The number represents the average of the two highest levels detected. The action level for lead was not exceeded at any of the 5 sites tested.							
4 - Water containing more than 20 mg/l should not be consumed by persons on a severely restricted sodium diet.							
5 - Quarterly samples were collected at 2 sites on 1/29/14, 5/1/14, 7/8/14 & 10/16/14. The average shown is the highest LRAA for the THM & HAA5 at 4 Star Travel.							
Glossary							
<i>Non-Detects (ND)</i> - laboratory analysis indicates that the constituent is not present.							
<i>Action Level</i> - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.							
<i>90th Percentile Value</i> - The values reported for lead and copper represent the 90 th 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 90 th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.							
<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.							
<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.							
<i>Picocuries per liter (pCi/L)</i> - picocuries per liter is a measure of the radioactivity in water.							
<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.							
<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.							
<i>Maximum Residual Disinfectant Level</i> (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.							
<i>Maximum Residual Disinfectant Level Goal</i> (MRDLG): 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							
<i>N/A-Not applicable</i>							

Sample ID	Date Colle...	Water Supply	Total Halo...	Sample Location
JH1400532	1/29/2014	Hampton Manor WD	1.6	Stage 2 4 Star Travel, 271 Columbia Tpk
JH1400534	1/29/2014	Hampton Manor WD	1.1	Stage 2 109 Pinehurst Ave, faucet
JH1402687	5/1/2014	Hampton Manor WD	1.5	Stage 2 109 Pinehurst Ave, faucet
JH1402689	5/1/2014	Hampton Manor WD	1.7	Stage 2 4 Star Travel, 271 Columbia Tpk
JH1404484	7/8/2014	Hampton Manor WD	1.7	Stage 2 109 Pinehurst Ave, faucet
JH1404486	7/8/2014	Hampton Manor WD	2.1	Stage 2 4 Star Travel, 271 Columbia Tpk
JH1407410	10/16/2014	Hampton Manor WD	<6.00	Stage 2 4 Star Travel, 271 Columbia Tpk
JH1407412	10/16/2014	Hampton Manor WD	<6.00	Stage 2 109 Pinehurst Ave, faucet

DATE COLLE...	SAMPLE ID #	SUPPLY CODE	SAMPLE LOCATION	TOTAL TRIH...	PUBLIC WATE
1/29/2014	JH1400531	0820	Stage 2 4 Star Travel, 271	6.4	Hampton Man
1/29/2014	JH1400533	0820	Stage 2 109 Pinehurst Ave, faucet	5.9	Hampton Man
5/1/2014	JH1402686	0820	Stage 2 109 Pinehurst Ave, faucet	5.8	Hampton Man
5/1/2014	JH1402688	0820	Stage 2 4 Star Travel, 271	7.1	Hampton Man
7/8/2014	JH1404483	0820	Stage 2 109 Pinehurst Ave, faucet	11.7	Hampton Man
7/8/2014	JH1404485	0820	Stage 2 4 Star Travel, 271	14.2	Hampton Man
10/16/2014	JH1407409	0820	Stage 2 4 Star Travel, 271	<4.0	Hampton Man
10/16/2014	JH1407411	0820	Stage 2 109 Pinehurst Ave, faucet	5.9	Hampton Man