Annual Drinking Water Quality Report for 2014
Village of Castleton-on-Hudson
P.O. Box 126
Castleton-on-Hudson
(Public Water Supply ID# 4100035)

APRIL 2015

INTRODUCTION

To comply with State regulations, the Village of Castleton-on-Hudson, 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. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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. On May 20th a boil water advisory was issued due to a water main break. After tests showed that there was no harmful bacteria in the water the boil water advisory order was lifted.

If you have any questions about this report or concerning your drinking water, please contact John Shortsleeve, the Water Superintendent at 732-2752. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the second Monday of the month at 7:00PM at the Village Hall at 85 South Main Street.

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.

Our water system serves approximately 2,000 people through 730 service connections. Our average daily demand is 120,000 gallons the single highest day was 248,000 gallons. The average quarterly charge for water to our customers is $52.00. Our water source is groundwater drawn from four individual drilled wells which are located east of the Village in the Town of Schodack. The water is pumped to a storage tank at the water works where the water is disinfected with sodium hypochlorite and tested prior to distribution. The treated water is then pumped to the storage tower on Maple Hill Road which provides pressure to the distribution system.

SOURCE WATER ASSESSMENT:

The NYS Department of Health 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 state 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 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 in the future.

As mentioned before, our water is derived from four drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial and commercial facilities that discharge wastewater into the environment and are regulated by the State and/or Federal Government) to the wells and low intensity residential activities in the assessment area. In addition, the wells draw from an unconfined aquifer of high hydraulic conductivity and the overlying soils are not known to provide adequate protection from potential contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting Rensselaer County Health Department.

While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

Any and all questions about this summary should be addressed to Rensselaer County Health Department at 518-270-2626.

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, inorganic compounds, nitrate, nitrite, lead and copper, primary inorganic chemicals, secondary inorganic chemicals, principal organic chemicals, total trihalomethanes, haloacetic acids, radiological and synthetic organic chemicals. 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 270-2626.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
INORGANICS							
Arsenic	No	05-14	2.1	ug/l	N/A	10	Erosion of natural deposits. Runoff from orchards.
Barium	No	05/14	0.182	mg/l	2.0	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride	No	05/14	84.4	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Copper	No	09/14	0.176* 0.0277 to 0.326	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	No	05-14	20	ug/l	200	200	Discharge from steel/metal factories and discharge from plastic and fertilizer factories.
Manganese	No	05-14	23.2	ug/l	N/A	300	Naturally occurring.
Nitrate (as Nitrogen)	No	05-14	0.589	mg/l	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks, erosion of natural deposits
Sodium	No	05/14	42.9	mg/l	N/A	N/A	Naturally occurring.
Sulfate	No	05/14	20.2	mg/l	N/A	250	Naturally occurring.
Lead	No	09-14	<0.001* <0.001 to 0.002	mg/l	0	0.015	Corrosion of household plumbing systems; erosion of natural deposits
Zinc	No	05-14	0.02936	mg/l	N/A	5	Naturally occurring. Mining waste.
DISINFECTION BYPRODUCTS							
TTHM	No	02-14 04-14 07-14 10-14	3.9-13.9	ug/l	N/A	80	Byproduct of disinfection.
HAA	No	02-14 04-14 07-14 10-14	1.0-2.0	ug/l	N/A	60	Byproduct of disinfection.

Notes:

* – The level presented represents the 90th percentile of the 10 sites tested. 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 copper or lead values detected at your water system. In this case, ten samples were collected at your water system and the 90th percentile value was the second highest value (0.176 mg/l for copper) and (<0.001 mg/l for lead). The action level for copper or lead was not exceeded at any of the sites tested.

Definitions:

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.
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 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.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
Nephelometric Turbidity Unit (NTU): A measure of the clarity of 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).
Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).
Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).
Picocuries per liter (pCi/L): A measure of the radioactivity in water.
Millirems per year (mrem/yr): A measure of radiation absorbed by the body.
Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

According to State regulations, the Village of Castleton Water System routinely monitors your drinking water for various contaminants. Your water is tested for nitrate, nitrite, lead and copper, radiological, primary inorganic chemicals, secondary inorganic chemicals, disinfection byproducts, principal organic chemicals, and synthetic organic chemicals. Additionally, your water is tested for coliform bacteria two times a month. The contaminants detected in your drinking water are included in the Table of Detected Contaminants.

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 level allowed by the State. For sodium levels it should be noted that water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Village of Castleton 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

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).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present 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.

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 may disrupt the water flow to 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. During the past year the Village repaired 12 underground water leaks and flushed the distribution system twice. The Village installed a new interconnection with the Town of Schodack water system. The Village of Castleton-on-Hudson works around the clock to provide top quality water to every tap. 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.