

Annual Drinking Water Quality Report

Reporting Year 2007

Village of Castleton-on-Hudson

P.O. Box 126

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(Public Water Supply ID # 4100035)

May 2008

INTRODUCTION:

To comply with State regulations, the Village of Castleton-on-Hudson, 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 70 contaminants and only found 2 of those contaminants at a level higher than the State allows. These contaminants (Iron & Manganese) were from a sample drawn from the "Brickyard Line" which has serviced only six homes along Van Hoesen Road for the past 14 months and is scheduled for permanent closure this year. The water in that line temporarily exceeded a drinking water standard and we rectified the problem by flushing that water main. 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 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 and fourth Monday's of the month at 7:30 PM at the Village Hall located 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 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 source is located east of the Village in the Town of Schodack and currently consists of four individual wells. From these wells the water is pumped to a storage tank at the water works where the water is chlorinated 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. We also have a surface water source which can be placed in service during an emergency. Our water system serves approximately 1955 people through 677 service connections.

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, volatile organic compounds, metals and synthetic organic compounds. The following table 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 270-2674.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Barium	No	08/06	0.23	mg/l	2.0	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride	No	08/06	68	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Copper	No	10/05	0.063* 0.020 to 0.085	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Manganese	Yes	08/07 To 12/07	0.02 To 2.72	mg/l	N/A	0.3	Naturally occurring; erosion of natural deposits.
Iron	Yes	08/07 to 12/07	0.05 To 2.32	mg/l	N/A	0.3	Naturally occurring.
Nitrate (as Nitrogen)	No	05/07 □	0.6	mg/l	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks, erosion of natural deposits
Sodium	No	08/06	39.2	mg/l	N/A	N/A	Naturally occurring.
Sulfate	No	08/06	21	mg/l	N/A	250	Naturally occurring.
TTHM	No	10/05	1.5	ug/l	N/A	80	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 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 (0.063 mg/l). The action level for copper 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.

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.

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?

The table shows that our system uncovered some problems this year. High iron and manganese levels were detected on the old Brickyard line. The duration of the violation was for one day. 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 may stain plumbing fixtures. Many multivitamins may contain 3000 or 4000 micrograms of iron per capsule. The Food and Nutrition Board of the National Research Council determined an estimated safe and adequate daily dietary intake of manganese to be 2000 to 5000 micrograms for adults. However, many peoples diets lead them to consume even higher amounts of manganese, especially those who consume high amounts of vegetables or are vegetarian. The infant population is of greatest concern. It would be better if the drinking water were not used to make infant formula since it already contains iron and manganese. We have corrected this problem by continually flushing the Brickyard line. 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

As mentioned earlier, the Village of Castleton-on-Hudson had one violation for exceeding the maximum contaminant level for iron and manganese on the Brickyard line in July of 2007. Otherwise, our system 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).

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 NYSDOH.

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 NYSDOH at 518-402-7712.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

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

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. These improvements are sometimes reflected as rate structure adjustments. During the past year the Village replaced hydrants, repaired several underground water leaks, flushed the distribution system twice, discontinued the use of the Brickyard water line into the Village and connected the south side of the Village to the higher pressured north side. The Village is planning to replace the water mains on Green Avenue this year and rate adjustments may be necessary in order to address these improvements.

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 is the heart of our community, our way of life and our children's future. Please call our office if you have questions.