

Annual Drinking Water Quality Report for 2011
Village of Red Hook
7467 South Broadway, Red Hook, NY 12571
(Public Water Supply ID#1302775)

INTRODUCTION

To comply with State regulations, **The Village of Red Hook** 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.

If you have any questions about this report or concerning your drinking water, please contact **Wendy Coon or Arvine Coon, III, water operators at 758-8727**. 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 first Monday of the month at the Village Hall at 7:30 pm.

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 over 2,730 people through 827 service connections. Our water source is from seven (7) active drilled wells that draw from an underground aquifer which is located off Firehouse Lane. The water is then disinfected with sodium hypochlorite within the pump house facility to inactivate microbiological contaminants prior to distribution.

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, total trihalomethanes, haloacetic acids, radiological 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 the data, though representative, is 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 Dutchess County Health Department at 486-3404.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
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Inorganic

Nitrate	No	12/21/11	0.79	mg/l	10	MCL=10	Erosion of natural deposits.
Sodium	No	2/12/09	28.2	mg/l	n/a	See footnote	Naturally occurring.
Barium	No	2/12/09	0.045	mg/l	2	MCL=2	Erosion of natural deposits.
Chloride	No	2/12/09	51	mg/l	n/a	MCL = 250	Naturally occurring or indicative of road salt contamination.
Sulfate	No	2/12/09	19	mg/l	n/a	MCL = 250	Naturally occurring.
Lead	No	9/20/11	6	ug/l	0	AL = 15	Erosion of natural deposits.
Copper	No	9/20/11	.181	mg/l	1.3	AL = 1.3	Erosion of natural deposits.
Zinc	No	2/12/09	.01	mg/l	n/a	MCL = 5	Naturally occurring.

Disinfection Byproducts

Total Trihalomethanes (TTHM's)	No	9/3/10	1.3	ug/l	n/a	80	By-product of drinking water chlorination needed to kill harmful organisms.
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Radioactive Contaminants

Gross Alpha	No	7/26/10	0.2	pCi/L	0	MCL = 15	Erosion of natural deposits.
Gross Beta	No	7/26/10	2.3	pCi/L	0	MCL = 4	Decay of natural deposits and man-made emissions.
Combined Radium – 226 and 228	No	7/26/10	0.11	pCi/L	0	MCL = 5	Erosion of natural deposits.
Uranium	No	7/26/10	1.2	pCi/L	0	MCL = 30	Erosion of natural deposits.

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.

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.

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).

Picocuries per liter (pCi/L): 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 level allowed by the State.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2011, our system was in compliance with applicable State drinking water operating and monitoring requirements. We did receive a violation in 2011 for not supplying the certification form to the Health Department in a timely manner.

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?

Our current water wells were rated at production values upon drilling. The Dutchess County Health Department is concerned about the continued ability of those wells to produce at the same volume as when they were drilled. They are directing us to install monitoring meters and run tests to confirm well capacities which is an added cost. The village has run tests for new well areas and is in mid-process of grant applications for major system upgrades. The village maintains daily demand logs and we are pumping less water now than a few years ago which we feel is a combination of repairing below ground

leaks and customer awareness. In the interim, it is important to conserve water since it is one of our most valuable resources and we need to satisfy the DC Health Department.

- ◆ 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.

SYSTEM IMPROVEMENTS

As noted earlier, the Dutchess County Health Department has directed the village to better support and update our well capacities. The village finances its Water Department from user fees and any increased costs to purchase more metering and installation of systems to monitor flow will have to be included in the water budget, items which are not included now. We have already explored more source options and submitted a detailed grant request to do major upgrades and are working with the Health Department to cost effectively improve our supply capacity.

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.