

Annual Drinking Water Quality Report for 2012

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 issues the Annual Drinking Water Quality Report that describes 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. 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. 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	Level Detected (Avg/Max) (Range)	Date of Sample	Unit of Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic							
Nitrate	No	1.70	7/24/12	Mg/l	10	MCL=10	Erosion of natural deposits.
Sodium	No	29.8	12/14/12	Mg/l	n/a	No Regulatory Limit, See Note (1)	Naturally occurring
Barium	No	0.046	12/14/12	Mg/l	2	MCL=2	Erosion of natural deposits.
Chloride	No	48	12/14/12	Mg/l	n/a	MCL=250	Naturally occurring or indicative of road salt contamination.
Sulfate	No	17	12/14/12	Mg/l	n/a	MCL=250	Naturally occurring
Lead	No	6	9/20/11	Ug/l	0	AL=15	Erosion of natural deposits or indication of lead pipes.
Copper	No	0.181	9/20/11	Mg/l	1.3	AL=1.3	Erosion of natural deposits.
Zinc	No	0.028	12/14/12	Mg/l	n/a	MCL=5	Naturally occurring
Disinfection Byproducts							
Total Trihalomethanes (TTHM's)	No	<4.0	12/14/12	Ug/l	n/a	80	By-product of drinking water chlorination needed to kill harmful organisms.

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

(1) 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.

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 2012, our system was in compliance with applicable State drinking water operating and monitoring 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?

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.

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.

SYSTEM IMPROVEMENTS

The Village has conducted a water system evaluation, which identified multiple improvements that are needed to improve the Village's water system. The improvements are needed to address infrastructure that is over 80 years old and upgrade the water supply wells. In 2012, the Village received funding from USDA Rural Development to rehabilitate the seven existing wells, add a backup generator, and multiple improvements to the control and monitoring of the wells. Additionally, the funding will allow the Village to replace all of the customer water meters. Replacing the water meters will allow for accurate flow readings which will provide equity for the customers.

Construction of Phase I of these improvements will occur in the first quarter of 2013.

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 conserve water and protect our water sources (aquifer).