

*Annual Drinking Water Quality Report for 2012*  
**Denver Water District**  
*Town of Roxbury*  
*P.O. Box 189*  
*Roxbury, New York 12474*  
*Public Water Supply ID #1205399*

## **INTRODUCTION**

To comply with State regulations, [Denver 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. [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 **the Denver Water District Operator, Philip Nikolaus, at (518) 231-2381**. 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 each month at the Town Hall, starting at 7:30 p.m.

## **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 [360 people through 122 service connections](#). Our water source consists of five rock wells ranging from 300 to 400 feet deep, a 100,000-gallon steel water storage tank and approximately 2.5 miles of two, four, six, and 8-inch distribution mains. The wells are used on an alternating basis, with two operating on one day and three the next day. Prior to distribution, the water is [disinfected with sodium hypochlorite](#), and zinc orthophosphate is added for corrosion control. The average daily water consumption is approximately 11,000 gallons per day, and all services are metered.

## 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](#), [lead and copper](#), [volatile organic compounds](#), [synthetic organic compounds](#) and [radiological pollutants](#). 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 Oneonta District Health Department at (607) 432-3911.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contamination
<b>Radioactive Contaminants</b>							
Combined radium – 226 and 228	No	4/25/08 9/25/08	0.15 ± 0.78 -0.65 – 0.98	pCi/L	0	15	Erosion of natural deposits.
Gross alpha activity	No	4/25/08 9/25/08	6.72 ± 1.36 4.67 – 8.77	pCi/L	0	15	Erosion of natural deposits.
<b>Inorganics –Nitrate</b>							
Nitrate	No	11/1/12	0.3	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Inorganics</b>							
Copper	No	07/2012	0.118	mg/l	1.3	1.3 <b>See footnote (2)</b>	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead	No	07/2012	0.003	mg/l	0	15 <b>See footnote (2)</b>	Corrosion of household plumbing systems, erosion of natural deposits.
Arsenic	No	10/07/10	<0.003	ug/l	N/A	50	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes.
Barium	No	10/07/10	0.071	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Sodium	No	10/07/10	20.7	ug/l	0	15 <b>See footnote (1)</b>	Naturally occurring; Road salt; Water softeners; Animal waste.
Sulfate	No	10/07/10	7.3	mg/l	N/A	250	Naturally occurring.
<b>Disinfection By-products</b>							

Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	9/2/2010	0.0182	mg/l	N/A	100	By-product of drinking water chlorination needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids (mono-di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	No	9/2/2010	<0.0010	mg/l	N/A	100	By-product of drinking water chlorination needed to kill harmful organisms.

**Notes:**

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 of moderately restricted sodium diets.

2 - The level presented represents the 90<sup>th</sup> percentile of the 5 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper or lead values detected at your water system. In this case, for copper testing, 5 samples were collected at your water system and the 90<sup>th</sup> percentile value was 0.118 mg/l. For lead testing, 5 samples were collected and the 90<sup>th</sup> percentile value was less than 1 ug/l. Therefore, the action levels for lead and copper **were not** exceeded.

**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.

**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.

**NYSDOH SOURCE WATER ASSESSMENT**

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to the drinking water sources 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. While nitrates (and other inorganic contaminants) were detected in our water, 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. The nitrate levels in our sources are not considered high in comparison with other sources in this area. See section “Are there contaminants in our drinking water?” for a list of the contaminants that have been detected. As mentioned before, our water is derived from five drilled wells. The source water assessment has rated these wells as having no or low susceptibility to any contamination. No significant sources of contamination were identified within the assessment area. The wells draw from a confined aquifer that likely provides adequate protection from potential contamination. 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. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted below.

## **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2012, 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 and future 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.

## **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.

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