



*Presented By*  
Mount Kisco

*Annual*  
WATER  
QUALITY  
REPORT

*Reporting Year 2011*

PWS ID#: 5903437

## Meeting the Challenge

We are once again proud to present our annual water quality report, covering all testing performed between January 1 and December 31, 2011. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies.

## Community Participation

You are invited to participate in our public forum and voice your questions or concerns about your drinking water at a regularly scheduled Village Board of Trustees Meeting. Meetings are generally held every two weeks on Mondays, beginning at 7:30 p.m., at Village Hall, 104 Main Street, Mount Kisco, New York.

## Facts and Figures

Our water system serves approximately 10,000 customers through 2,300 service connections. The total amount of water produced in 2011 was 604 million gallons. The daily average of water treated and pumped into the distribution system is 1.7 million gallons per day. Approximately 85 percent of the total was billed directly to consumers. The balance, or unaccounted water, was used for firefighting, hydrant use, distribution system leaks, and unauthorized use. The Village continues to be vigilant in identifying any loss of water in our system. The community is encouraged to report any unauthorized use, such as an illegal hydrant connection, to the Mount Kisco Police Department immediately. In 2011, the annual water charge per customer was \$804, based on an average household water use of 10,800 cubic feet.

## Substances That Could Be in Water

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.**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the State and the U.S. EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the U.S. FDA's regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

## *Cryptosporidium* in Water

*Cryptosporidium* is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. During 2011, as part of our routine sampling plan, 5 samples were taken bi-weekly, 10 per month, with no positive results. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

## Important Health Information

Some people may be more vulnerable to disease-causing microorganisms or pathogens in drinking water than the general population. Immunocompromised 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 at (800) 426-4791.

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. We are 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 (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Where Does My Water Come From?

The Village of Mount Kisco's primary water source is Byram Lake Reservoir, which is a surface water supply located on Byram Lake Road in the towns of Bedford and North Castle. Water from Byram Lake Reservoir is pumped to the Byram Lake Filtration Plant, a state-of-the-art facility which became operational in 2003, where the water is then disinfected with chlorine, treated for corrosion control, and filtered before entering the distribution system. The Leonard Park Wells, constructed and operational in 2001, supplement the Byram Lake water supply. The well water is disinfected with chlorine, aerated to remove radon, and treated for corrosion control before entering the distribution system. The water filtration plant and wells are operated by United Water.

Please be reminded that what enters a community's separate storm sewer system (catch basins and storm drains) outflows to tributaries which contribute to our drinking water. For more information on our stormwater regulations, please visit our website at [www.mountkisco.org/Pages/MtKiscoNY\\_Engineering/stormwater](http://www.mountkisco.org/Pages/MtKiscoNY_Engineering/stormwater).

The Village needs you to help to ensure that Byram Lake is protected. Please report any dumping, littering, or other illegal activity to the MKPD at (914) 241-1100. Certain fishing activities are permitted at Byram Lake, provided the appropriate permits have been obtained (please contact the Tax Receiver at 914-864-0034 for more information).

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact James Palmer, Village Manager, at (914) 864-0001. You can also call the Westchester County Department of Health at (914) 813-5000. To be informed of water emergencies, please visit the Village of Mount Kisco website and sign up for the Emergency Email Alert System at [www.mountkisco.org](http://www.mountkisco.org), or you may call the Water Quality Information Line at (914) 864-0020 for a recorded message.

## Facility Modification/System Improvements

In 2011, the Village continued its water distribution system improvements with hydrant replacements, the installation of remote-read water meters, and various other improvements. The Village continues to use the services of Chazen Company to monitor water quality at Byram Lake and its tributaries.

## Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

## Water Conservation Tips

You can play a role in conserving water and save yourself money in the process 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. Here are a few tips:

- 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 an invisible toilet leak. 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.

## Non-detected Substances

The following contaminants were tested for but not detected in our water:

Inorganics: Silver, Aluminum, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Cyanide, Chromium, Fluoride, Iron, Mercury, Ammonia as N, Nickel, Nitrite nitrogen as N, Nitrate nitrogen as N, Potable Metal Digestion, Antimony, Selenium, Thallium, Zinc.

Volatile Organic Compounds: Bromoform, Dibromochloromethane, Tetrachloroethane, Trichloroethane, Dichloroethane, Dichloropropene, Trichlorobenzene, Trichloropropane, Trimethylbenzene, Dichlorobenzene, Dichloropropane, Butanone (MEK), Chlorotoluene, Benzane, Bromobenzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, Dichloroethene, Dibromoethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, Methyl isobutyl ketone (MIBK), Methyl tert-butyl ether (MTBE), Methylene Chloride, Nbutylbenzene, N-propylbenzene, Naphthalene, O-xylene, P & M-xylene, Pisopropyltoluene, SEC-butylbenzene, Styrene, TERTbutylbenzene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl chloride.

Synthetic Organics: Dioxin, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 4,4-DDE, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCBs, Propachlor, Toxaphene, 2,4,5-T, 2,4-D, Dalapon, DCPA di-acid, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 2,4-Dinitrotoluene, 2,6-Dinitrolouene, Acetochlor, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl)adipate, Butachlor, EPTC, Hexachlorobenzene, Hexachlorocyclopentadiene, Metoachlor, Metribuzin, Molinate, Simazine, Terbacil, 3-Hydroxycarbofuran, Aldicarb, Aldicard sulfone, Aldicard sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Glyphosate, Endothall, Diquat.

## Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES										
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	Byram Lake			Leonard Park Wells			VIOLATION	TYPICAL SOURCE
			DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH		
Chloride (ppm)	250	NA	3/31/11	64.2	NA	3/31/11	42.5	NA	No	Naturally occurring or indicative of road salt contamination
Manganese (ppb)	300	NA	3/31/11	1.7	NA	3/31/11	47.0	NA	No	Naturally occurring; Indicative of landfill contamination
Sodium <sup>1</sup> (ppm)	(see footnote)	NA	3/31/11	0.0336	NA	3/31/11	17.4	NA	No	Naturally occurring; Road salt; Water softeners; Animal waste
Turbidity <sup>2</sup> (NTU)	TT	NA	3/31/11	0.35	0.35–0.35	3/31/11	0.02	0.02–0.02	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	TT	NA	3/31/11	NA	NA	3/31/11	NA	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	AL	MCLG	DATE SAMPLED	AMOUNT DETECTED (90TH%TILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Lead (ppb)	15	0	7/31/08	3	ND–8.2	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits

OTHER SUBSTANCES						
SUBSTANCE (UNIT OF MEASURE)	Byram Lake			Leonard Park Wells		
	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Calcium (ppm)	3/31/11	2.09	NA	3/31/11	4.46	NA
Hardness (ppm)	3/31/11	74	NA	3/31/11	160	NA
Ortho Phosphorus (ppm)	3/31/11	0.393	NA	3/31/11	1.07	NA
Total Phosphorus (ppm)	3/31/11	1.24	NA	3/31/11	0.0348	NA

<sup>1</sup>Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

<sup>2</sup>Turbidity is a measure of the cloudiness of the water. It is tested because it is a good indicator of the effectiveness of the filtration system. Our highest single turbidity measurement for the year occurred as indicated in the table above. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95 percent of the turbidity samples collected have measurements below 0.3 NTU. (Note that TT is dependent upon filtration method: conventional, 0.3 NTU; slow sand, 1.0 NTU; or diatomaceous earth filtration, 1.0 NTU.) Although the month as indicated in the date column above was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

## Definitions

**90th percentile:** The levels reported for lead and copper represent the 90th percentile of the total number of 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 percent of the lead and copper values detected at your water system.

**AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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 contaminants.

**NA:** Not applicable.

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.