

## **ANNUAL DRINKING WATER QUALITY REPORT FOR 2015**

### **INTRODUCTION**

To comply with State regulations, the Pocantico Water District No. 1 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 David A. Smyth, P.E., Interim Superintendent, Town of Mount Pleasant Water and Sewer Department, at 831-1062. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The Town Board of the Town of Mount Pleasant serves as the Board of Commissioners for the Pocantico Water District No. 1. The Board meets on the second and fourth Tuesday of each month in Town Hall at 8:30 pm. Please feel free to participate in these meetings.

### **WHERE DOES OUR WATER COME FROM?**

In general, the sources of drinking water (both tap 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 329 people through 94 service connections. Our water is drawn from four lakes that are located behind the water filtration facility. The filtration facility is located at 591 Bedford Road. The lakes have a combined storage volume of approximately 62 million gallons. The District also has an interconnection with the Village of Sleepy Hollow.

The filtration facility consists of an upflow media contact clarifier, which acts as a roughing filter, followed by a mixed media polishing filter. Filter water is then chlorinated before entering the pump clearwell, where it resides for a period of time to provide chlorine contact time. Prior to entering the distribution system sodium hydroxide and a blended phosphate chemical is added to inhibit corrosion of household plumbing. As mentioned before, our water is derived from four lakes.

The NYS DOH 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, if any. The source water assessments provide resource managers with additional information for protecting source waters in the future.

The source water assessment on the four Pocantico Lakes found an elevated susceptibility to contamination for this source of drinking water. The amount of pasture in the assessment area results in a medium potential for protozoa contamination. A single non-sanitary wastewater discharge found in the assessment area is an unlikely water quality risk, because it is associated with the drinking water filter plant.

A copy of the assessment, including map of the assessment area can be obtained by contacting our office.

### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, your drinking water is routinely tested for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. In 2015, the District was not in violation of any maximum contaminant level (MCL) for TTHM, microbial, organic or inorganic contaminants.

It should be noted that all drinking water, including bottled 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 Westchester County Department of Health at 813-5000.

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 a year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity (Note 1)	No	03/15	1.90 NTU (0.45 / 0.60) (0.60 – 1.90)	NTU	n/a	TT=<5.0 NTU	Soil runoff.
<b>Inorganic Contaminants</b>							
Copper	No	06/2013	.293 (Note 2) (.160-.304)	mg/l	1.3	AL= 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	No	06/2013	2.25 (Note 3) (<LOQ – 2.4)	ug/l	15	AL= 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Barium	No	10/15	.0192	mg/l	0	MCL=2.0	Erosion of natural deposits.
Calcium	No	10/15	8120	ug/l	0	MCL= N/A	Erosion of natural deposits.
Chloride	No	10/15	11.8	mg/l	0	MCL= 250	Naturally occurring or indicative of road salt contamination.
Cyanide	No	10/15	0.009	mg/l	0	MCL= .20	Discharge from plastic and fertilizers.
Fluoride (by ISE)	No	10/15	0.12	mg/l	0	MCL = 2.2	Erosion of natural deposits.
Hardness	No	10/15	30 mg/l as CaCO <sub>3</sub>	mg/l	0	MCL= N/A	Erosion of natural deposits.
Magnesium	No	10/15	2300	ug/l	0	MCL= N/A	Naturally occurring.
Manganese	No	10/15	65	ug/l	0	MCL= 300	Naturally occurring.
Nickel	No	10/15	0.77	ug/l	0	MCL= N/A	Erosion of natural deposits.
Sodium	No	10/15	8.80	mg/l	0	MCL= N/A	Naturally occurring; Road salt; Animal waste
Sulfate	No	10/15	8.14	mg/l	0	MCL= 250	Naturally occurring.
Zinc	No	10/15	8.1	ug/l	0	MCL= 5000	Naturally occurring.
<b>Radiological Contaminants</b>							
Gross Alpha (Including radium-226 but excluding radon and uranium)	No	2010	0.33 (+/- 0.025)	pCi/L	n/a	MCL = 15	Erosion of natural deposits.
Beta particles and photon activity from man-made radionuclides	No	2010	2.26 (+/- 0.34)	pCi/L	n/a	MCL = 50 (Note 4)	Decay of natural deposits and man-made emissions.
Combined radium-226 and 228	No	2010	0.44 (+/- 0.39)	pCi/L	n/a	MCL = 5	Erosion of natural deposits.
<b>Disinfection Byproducts</b>							
Total Trihalomethanes (TTHMs)	No	2015	68.98 (Note 5) (62.2 – 68.98)	ug/l	n/a	MCL= 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (HAAs)	No	2015	56.0 (Note 5) (47.5 – 56.0)	ug/l	n/a	MCL= 60	By-product of drinking water chlorination needed to kill harmful organisms.

**Notes:**

- 1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred in March (1.9 NTU). State regulations require that turbidity must always be below 5.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.5 NTU. Although March 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.
- 2 – The level presented represents the 90th 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, five samples were collected at your water system and the 90th percentile value was the average of the two highest values value (0.293 mg/l). The action level for copper is 1.3 mg/l. The action level for copper was not exceeded at any of the sites tested.
- 3 – The level presented represents the 90th percentile of the 5 sites tested. In this case, five samples were collected at your water system and the 90th percentile value was the average of the two highest values (2.25ug/l). The action level for lead is 15ug/l. The action level for lead was not exceeded at any of the sites tested.
- 4 – The State considers 50 pCi/L to be the level of concern for beta particles.
- 5 - This level represents the annual quarterly average calculated from data collected.

**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.

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

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

**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.

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**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).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion – ppt).

**Picograms per liter (pg/l):** Corresponds to one part of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

**Millirems per year (mrem/yr):** A measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL):** A measure of the presence of asbestos fibers that are longer than 10 micrometers.

**<LOQ:** Less than the Limit of Quantitation

**n/a:** not applicable, **TTHM:** (total trihalomethane) means the sum of the concentration of trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform).

In addition to the detected contaminants listed above, the following twelve (12) inorganic contaminants were sampled for but not detected: antimony, arsenic, beryllium, cadmium, chromium, iron, mercury, nitrate, nitrite, selenium, silver, and thallium. Also, the following one hundred and one (101) organic contaminants were sampled for but not detected: 2,3,7,8-TCDD (Dioxin), 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, Butachlor, Metolachlor, Metribuzin, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCB's, Propachlor, Toxaphene, 2,4,5-T, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, THM-Bromodichloromethane, THM-Bromoform, THM-Dibromochloromethane, 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-Dichloroethene, 1,1-dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2 dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2-butanone(MEK), 2-chlorotoluene, 4-chlorotoluene, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chlorethane, Chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloropropene, Dibromomethane, Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, Methyl iso-butyl ketone (MIBK), Methyl tert-butyl ether (MTBE), Methylene Chloride, N-butylbenzene, N-propylbenzene, Naphthalene, O-xylene, P & M-xylene, P-isopropyltoluene, SEC-butylbenzene, Styrene, TERT-butylbenzene, Tetrachloroethene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl chloride, Alachlor, Atrazine, Benzo(a)pyrene, Bis(2-Ethylhexyl)adipate, Hexachlorobenzene, Hexachlorocyclopentadiene, Simazine, 3-Hydroxycarbofuran, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Glyphosate, Endothall and Diquat. The following two (2) Radionuclides were also sampled for, but not detected: Tritium and Strontium 90.

## **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 2015, 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 contaminants 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## **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.
- ✓ Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances, and 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. 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 our customers help us protect our water sources, which are the heart of our community. All consumers are urged to report any suspicious activity observed in the vicinity of water system facilities to the Mount Pleasant Police at 769-1941. Please call our office if you have questions.

Contacts for more information:

Town of Mount Pleasant Water and Sewer Dept., 831-1062  
Westchester County Dept. of Health, 813-5000  
New York State Dept. of Health, (518) 402-7713  
PWS NO. 5903472  
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**NEW YORK STATE DEPARTMENT OF HEALTH**  
**BUREAU OF PUBLIC WATER SUPPLY PROTECTION**

**CRYPTOSPORIDIOSIS AND GIARDIASIS BACKGROUND INFORMATION**

**What are Cryptosporidiosis and Giardiasis?**

Cryptosporidiosis (crip-toe-spo-RID-i-o-sis) and giardiasis (gee-AR-di-a-sis) are intestinal illnesses caused by parasites which are too small to be seen by the naked eye.

**Who gets Cryptosporidiosis and Giardiasis?**

Anyone can get Cryptosporidiosis and giardiasis. In people who are otherwise healthy, the illnesses usually last less than two weeks. Cryptosporidiosis can be very serious for people with weak immune systems (high risk individuals) - for example, chemotherapy, dialysis or transplant patients, and people with Crohn's disease or HIV infection.

**How are they spread?**

People get cryptosporidiosis or giardiasis by swallowing water or food that has been contaminated with the parasite. Direct contact with feces from infected people or animals can also cause illness. It can be spread any time basic hygiene breaks down.

**What are the symptoms?**

For cryptosporidiosis, symptoms usually appear from 1 to 12 days after infection, with an average of 7 days. The most common sign is watery diarrhea. There may also be cramps, fever, nausea, vomiting, and loss of appetite. Symptoms of giardiasis occur from 5 to 25 days after exposure but usually within 10 days. The main symptom is mild or severe diarrhea. Fever is rarely present. In both illnesses, some people who get infected may not get sick.

**How are these infections diagnosed?**

These infections are diagnosed by looking at a stool sample under a microscope. Looking for Giardia is part of a routine lab test called an "O&P" (Ova and Parasites) test. However, Cryptosporidium is not a routine part of this test. Unless your doctor requests it, Cryptosporidium may be missed.

**Can Giardiasis and Cryptosporidiosis be treated?**

Giardia can be treated with anti-parasitic drugs. However, there is no specific treatment for cryptosporidiosis. For some patients, antibiotics may help. Anti-Diarrhea drugs which reduce the motion of the intestines may provide temporary improvement, but oral liquids or intravenous fluids may be necessary.

**Should an infected person be excluded from work or school?**

Generally, it is not necessary. Casual contact is unlikely to transmit the disease. Special precautions may be needed by food handlers or children enrolled in day care settings. Consult your local health department for advice in such instances.

**NEW YORK STATE DEPARTMENT OF HEALTH FACT SHEET**

**CRYPTOSPORIDIOSIS**

(crip-toe-spor-id-i-o-sis)

Information for People with Weakened Immune Systems

**What Is Cryptosporidiosis?**

Cryptosporidiosis is an intestinal illness caused by a microscopic parasite called Cryptosporidium.

**Is Cryptosporidiosis a New Disease?**

Although Cryptosporidium is not new, it was not recognized as a cause of human disease until 1976. Cryptosporidiosis was added to the list of reportable diseases in New York State in February 1994.

**How Common Is Cryptosporidiosis?**

The number of Cryptosporidiosis cases that occur each year is not yet well documented. Since the disease has recently been added to the list of reportable diseases, state and county health departments are now beginning to record the number and location of identified cases so that public health control measures can be developed. In 1994, 302 cases were reported to the New York State Department of Health. However, more cases may have occurred that were not detected, either because the Cryptosporidium stool test many not have been requested by the health care provider or the laboratory may have failed to use the necessary tests to identify it.

**What Are The Symptoms of Cryptosporidiosis?**

The most common symptom is diarrhea, which is usually watery. It is often accompanied by abdominal cramping. Nausea, vomiting, fever, headache and loss of appetite may also occur. Some people infected with Cryptosporidium may not become ill.

**Who is Susceptible To Cryptosporidiosis And How Long Does The Illness Last?**

All people are presumed susceptible to infection with Cryptosporidium. In healthy individuals with normal immune systems, signs and symptoms generally persist for two weeks or less. However, immunocompromised persons (those with weak immune systems) may have severe and long lasting illness. Some examples of immunocompromised people are those receiving cancer chemotherapy, kidney dialysis, steroid therapy, and people with HIV/AIDS and patients with Crohn's disease.

**How Long After Exposure Do Symptoms Appear?**

The incubation period may range from 1 to 12 days with an average of 7 days.

**Should Immunocompromised Persons Take Extra Precautions To Minimize Their Risk of Cryptosporidiosis?**

Because cryptosporidiosis can be a severe disease in immunocompromised persons, such individuals should discuss the need for extra precautions with their health care provider to minimize their risk of infection. Keep in mind that contaminated drinking water is only one of a number of ways in which cryptosporidiosis can be acquired. Here are some suggested steps:

- Wash hands thoroughly after changing diapers or whenever fecal soiling occurs.
- Avoid sexual practices that may result in hand or mouth exposure to feces, such as oral/anal contact (rimming).
- Avoid direct exposure to cattle and other farm animals. If exposure cannot be avoided, wash your hands thoroughly immediately thereafter.
- Avoid swallowing water when swimming, especially in lakes, ponds or rivers. There has been one documented case of cryptosporidium transmitted to a number of people who swam in a recreational wave pool and apparently swallowed the water.
- Thoroughly wash all fruits and vegetables. Avoid drinking unpasteurized apple cider, as there has been a documented incident of cryptosporidium transmitted through fresh cider made from apples gathered in a field in which cows were grazing.

If an outbreak of waterborne Cryptosporidium is identified (none has been to date in New York), immuno compromised patients should carefully and consistently comply with all public advisories and notices issued by the local or state health department.

**The four items listed below may help immunocompromised patients and their health care providers decide whether to take extra routine precautions with drinking water under normal, non-outbreak conditions:**

- Boiling water for at least one minute with a rolling boil will kill Cryptosporidium.
- Properly drilled and maintained wells, which utilize underground water, are generally protected from surface contamination and are unlikely to contain Cryptosporidium cysts.
- Unless it is distilled or pasteurized, bottled water may not be any safer than tap water. Those bottling companies using properly designed and operated ground water sources have a very low likelihood of producing water containing Cryptosporidium cysts. Those companies using surface water sources have the same risk of being cryptosporidium free. Bottled water sold in New York must also include on the label whether the water comes from a well, spring or municipal source. A list of bottled waters certified for sale in New York along with their sources can be obtained from the New York State Department of Health at 1-800-458-1158.
- During an outbreak of cryptosporidiosis in Milwaukee in 1993, one study showed that less diarrhea occurred in homes using water filters with a pore size less than two microns, as compared to others using filters with large pore sizes. If home water filters are used, follow the manufacturers instructions supplied with the unit. The instructions will provide information on filter maintenance needed to prevent clogging and ensure proper filtration. Filters should be certified by the National Sanitation Foundation (NSF) or an equivalent testing agency for cyst removal.