

Annual Drinking Water Quality Report for 2022

Olivet Management

Town of Dover NY

(Public Water Supply ID # 13116987)

Introduction

To comply with State regulations, Olivet Management will be annually issuing a report describing the quality of your drinking water for the period January 1, 2022 – December 31, 2022. 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, we conducted tests for many different contaminants listed in the table that follows.

We detected some of those contaminants (listed below), and only found 1 secondary contaminants (manganese) to exceed regulatory limits due to unoccupied/unused buildings and due to a very large water system having to serve a very small population. Many different processes have been implemented, such as a regular flushing of the distribution system, and upgrades to the water treatment and distribution system so that the drinking water can meet NYS Department of Health Drinking Water Standards.

Moving forward as the property is now in the development stage and water is a vital component to the wellbeing of all, the facility management has and continues the task of improving the treatment facility, along with continual monitoring of the contaminants and water quality and implementing programs for regular flushing.

As mentioned above, 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 your drinking water, please contact the Cemco Water & Wastewater Specialists, contracted operators, at 845-878-9711. We want you to be informed about your drinking water.

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 and the FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source serves approximately ten service connections currently serving an estimated 199 people. Our water source is a surface water source that is located at the top of the facility property above the water treatment plant known as the reservoir supply. The water is, filtered from by use of conventional sand filtration and disinfected using sodium hypo chlorite prior to distribution. The reservoir as a surface water source is well protected as no development or runoff is in the immediate vicinity of the source and supply, it is our goal to keep this water source well protected from any contamination.

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 bacteria, 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 our data, though representative, maybe 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 at 800-426-4791, or the Dutchess County Health Department at 845-486-3400, or by viewing the EPA drinking water website, www.epa.gov/safewater, and the New York State Health Department website, www.health.state.ny.us.

Inorganic Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit	Likely Source of Contamination
Barium	No	04/20/22	0.014	Mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chloride	No	04/20/22	46.1	Mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Nitrate	No	01/12/22	0.07	mg/L	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Iron	No	05/15/22	0.014	mg/L	.3	MCL = .3	Naturally occurring
Sulfate	No	04/20/22	5.1	Mg/l	NA	250	Naturally occurring.
Zinc	No	04/20/22	0.654	mg/L	N/A	MCL = 5	Naturally occurring; Mining waste
Sodium	No	04/20/22	11.0	mg/L	See health effects	N/A	Naturally occurring; Road salt; Water softeners; Animal Waste

Copper	No	04/06/22	90 th percentile 0.255 Range (0.084 – 0.345)	mg/L	1.3	AL =1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
	No	07/27/22	90 th Percentile 0.545 Range (0.040 – 0.670)				
Lead	No	04/06/22	90 th percentile 0.0015 Range (0.0010-0.0020)	mg/L	0.015	mg/L=0.015	Corrosion of household plumbing systems; Erosion of natural deposits
	No	07/27/22	90 th Percentile 0.0034 Range (0.0010 - .0057)				
Manganese	No	05/15/22	0.022	mg/L	N/A	MCL = .3	Naturally occurring; Indicative of landfill contamination

Disinfection By-products

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit	Likely Source of Contamination
Total Trihalomethanes (TTHMs- chloroform, bromo- dichloromethane, dibromochloro-methane, and bromoform)	No	1 st quarter	46.00	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.
	No	2 nd quarter	30.80				
	No	3 rd quarter	61.23				
	No	4 th quarter	45.20				
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	No	1 st quarter	40.8	ug/L	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
	No	2 nd quarter	24.0				
	No	3 rd quarter	47.9				
	Yes	4 th quarter	46.0				

Radiological Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit	Likely Source of Contamination
Gross Alpha	No	10/16/19	ND	pci/L	0	15 ⁽¹⁰⁾	Erosion of natural deposits.
Gross Beta	No	10/16/19	ND	pci/L	0	4 ⁽⁶⁾	Decay of natural deposits and man-made emissions.
Combined Radium 226 and 228	No	06/19/19	ND	pci/L	0	5 ⁽¹⁰⁾	Erosion of natural deposits.
		10/16/19	ND				
Uranium	No	10/16/19	<0.0010	Ug/L	0	30 ⁽¹⁰⁾	Erosion of natural deposits.

PFOA/PFAS/DIXOANE							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit	Likely Source of Contamination
Perfluorooctanoic acid (PFOA)	No	03/17/22 – 12/13/22	Range (ND – 0.990)	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane sulfonic acid (PFOS)	No	03/17/22 – 12/13/22	Range ND	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications.
1,4-Dioxane	No	03/17/22 – 12/13/22	Range (ND – 0.50)	ug/L	N/A	MCL = 1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.

Footnotes:

1. Picocuries per liter (pCi/L) – is a measure of the radioactivity in water.
2. A MCL violation occurs when the annual composite of four quarterly samples or the average of the analysis or the average of the analysis of four quarterly samples exceeds the MCL.
3. Halocetic Acids (mono-, di-, and trichloroacetic acid, and mono- and di- bromoacetic acid) Some people who drink water containing haloacetic acids in excess of the MCL over many years may have increased risk of getting cancer
4. Total Trihalomethanes (TTHM's – chloroform, bromodichloromethane, dibromochloromethane, and bromoform) Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems in their lives.
5. Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production of steel or other products. Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is some evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles and trembling of the hands) and children (learning and behavior). The results of these studies only suggest an effect because the possible influences of other factors were not adequately assessed. There is supporting evidence that manganese causes nervous system effects in humans from occupational studies of workers exposed to high levels of manganese in air, but the relevance of these studies to long term drinking water exposure is less clear because the exposures were quite elevated and by inhalation, not by ingestion.

Manganese	Q1 – 2022	Q2 – 2022	Q3 – 2022	Q4 – 2022
Entry Point	01/12/22 – 0.049	04/20/22– 0.023	07/20/22 – 0.024	10/19/22 – 0.067

6. Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called "iron overload") and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron's effects on the taste, odor and color of the water.

Iron	Q1 – 2022	Q2 – 2022	Q3 – 2022	Q4 – 2022
Entry Point	01/12/22 – 0.058	04/20/22 – 0.012	07/20/22 – 0.058	10/19/22 – 0.073

***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 be used for drinking by people on moderately restricted sodium diets.

Definitions:

Avg: Average

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

Locational Running Annual Average (LRAA): Method used to calculate Trihalomethane and Haloacetic Acid levels for reporting for the Stage 2 Disinfection Byproduct rule ("DBR Stage 2"), the average of results for 4 consecutive quarters.

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

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.

Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million – ppm).

Millirems per year (mrem/yr): A measure of radiation absorbed by the body. If Beta particles are detected at or below 50 pCi/L, they are reported in pCi/L, not mrem/yr; the State considers 50 pCi/L to be the level of concern for beta particles.

Micrograms per liter (ug/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion – ppb).

N/A: Not Applicable

ND: Not Detected

Picocuries per Liter (pCi/L): A measure of radioactivity in water.

90th Percentile Value: The values reported for lead and copper represent the 90th percentile. 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 lead and copper values detected at your water system.

TON (Threshold Odor Number): The greatest dilution of sample with odor-free water yielding a definitely perceptible odor.

Do I Need To Take Special Precautions?

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).

What Does This Information Mean?

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected at levels below the level allowed by the State except for manganese and Haloacetic Acids. HAA's were detected in higher levels during the 4th quarter due to the inability to provide ample hydrant flushing during the coldest time of the year. We were able to correct this issue by increasing our flushing program and have seen all samples prior to be within state limits. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. We are required to provide information on lead in drinking water, even though we had no detections at or above the Action Level of 15 ug/L (0.015 mg/L). Therefore, please read the following information on lead: "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. Soundview Loop is 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>."

Health Effects of Manganese

Manganese is a common element in rocks, soil, water, plants, and animals. Manganese occurs naturally in water after dissolving from rocks and soil. Contamination of drinking water may occur if manganese gets into surface or groundwater after dissolving from rocks and soil. It may also occur if manganese gets into surface or groundwater after improper waste disposal in landfills or by facilities using manganese in the production level of steel or other products.

Manganese is an essential nutrient that is necessary to maintain good health. However, exposure to too much manganese can cause adverse health effects. There is strong evidence from human studies that occupational exposures to manganese in air can cause a serious nervous system disease in adults. This disease shares some of the signs and symptoms of Parkinson's Disease. There is weaker evidence from human studies that long-term exposure to manganese in drinking water is associated with nervous system effects in adults (e.g., weakness, stiff muscles, and trembling of hands) and children (learning and behavior). These data are only suggestive of an effect because the possible influences of other factors were not adequately assessed in the studies. Chemicals that cause adverse health effects in humans after high levels of exposure may pose a risk of adverse health effects in humans exposed to lower levels over long periods of time.

Conclusion

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.