

1. **INTRODUCTION**

To comply with United States (US) Navy (Navy) policies, Naval Support Facility (NSF) Saratoga Springs provides an annual report (Consumer Confidence Report [CCR]) describing the quality of the drinking water supplied to the installation for consumption and use by all Navy personnel, visitors, and contractors that have access to installation facilities and services. The goal of this report is to provide information on where the water comes from and the results of water quality tests performed in 2024. Test results for samples collected showed that the water at NSF Saratoga Springs met all state and federal drinking water health standards in 2024; however, not all required samples were collected (monthly total coliform samples were not collected in June).

2. **CITY OF SARATOGA SPRINGS CONSUMER CONFIDENCE REPORT INFORMATION**

NSF Saratoga Springs receives water from the City of Saratoga Springs (City). Excerpts (edited for clarity) from the City 2024 CCR are provided in this section. This report can also be accessed via the following weblink: https://www.saratoga-springs.org/179/Annual-Drinking-Water-Quality-Report

WHERE DOES THE CITY OF SARATOGA SPRINGS' 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 can pick up substances resulting from the presence of animals or human activities. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants. To ensure that tap water is safe to drink, New York State (NYS) and the US Environmental Protection Agency (EPA) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems (PWSs). The NYS Department of Health (NYSDOH) and US Food and Drug Administration's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The City receives surface water from the Loughberry Lake watershed and groundwater from the Geyser Crest subdivision (located at the intersection of Hathorn Boulevard and Quevic Drive). Water is also pumped into Loughberry Lake from Bog Meadow Brook (located near Ingersoll Road) and three Bog Meadow groundwater wells during the high-demand summer months to help maintain the lake level. During 2024, the City's system did not experience any restriction of its water sources.

The Loughberry Lake source is treated conventionally at the Excelsior Avenue Treatment Plant with flocculation, sedimentation, and filtration. It is disinfected with a combination of ultraviolet light and sodium hypochlorite (NaOCl) application. Fluoride is added to attain the optimal level of fluoride in the finished water to aid in preventing tooth decay. Phosphate is added for corrosion control. The Geyser Crest wells are disinfected with NaOCl, and fluoride is added as well. Although all the water systems are interconnected, Loughberry Lake is the primary source and supplies most of the City. The Geyser Crest wells supply the Geyser Crest subdivision and a portion of the southwest section of the City. NSF Saratoga Springs receives a mixture of water from both treated sources, with the majority supplied by Geyser Crest.

SOURCE WATER ASSESSMENTS

The NYSDOH has completed source water assessments for the Bog Meadow Brook, Geyser Crest subdivision, and Loughberry Lake watershed systems based on available information. Possible and actual threats to these drinking water sources were evaluated. The assessments include a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the environment. 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 "Are There Contaminants in the City of Saratoga Springs' Drinking Water?" on the following page for a list of the contaminants that have been detected, if any. The assessments provide resource managers with additional information for protecting source waters into the future.



The <u>Bog Meadow Brook</u> assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of row crops in the assessment area results in a medium susceptibility to pesticides, and there is reason to believe that land cover data may overestimate the percentage of pastures in the assessment area. No permitted discharges were found in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, including mines. Finally, it should be noted that relatively high flow velocities make river drinking water supplies highly sensitive to existing and new sources of microbial contamination.

The <u>Geyser Crest</u> subdivision assessment rated this water source as having an elevated susceptibility to microbial contaminants, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of the wells to a permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by NYS and/or the federal government), a hazardous waste site, and residential land use in the assessment area. In addition, the wells draw from fractured bedrock, and the overlying soils may not provide adequate protection from potential contamination. While the assessment rates the City's wells as being susceptible to microbial contaminants, please note that the water is disinfected to ensure that the finished water delivered meets NYS' drinking water standards for microbial contamination.

The <u>Loughberry Lake</u> watershed assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of pastures in the assessment area results in a medium potential for protozoa contamination, and the amount of residential land in the assessment area results in an elevated potential for microbial contamination. A single non-sanitary wastewater discharge is unlikely to contribute to contamination. There are no noteworthy contamination threats associated with other discrete contaminant sources. Finally, it should be noted that hydrologic characteristics (e.g., basin shape, flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination.

The NYSDOH will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, and planning and education programs. A copy of the assessment can be obtained by contacting the City.

ARE THERE CONTAMINANTS IN THE CITY OF SARATOGA SPRINGS' DRINKING WATER?

As NYS regulations require, the City routinely tests its drinking water for numerous contaminants. These contaminants include total coliform bacteria, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes (TTHM), five haloacetic acids (HAA5), radiological aspects, and synthetic organic compounds. The table presented on the following page depicts which compounds were detected in the City's drinking water for 2024 (or most recent testing, as noted by the date[s] of sample). NYS allows the City 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, are more than 1 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 NYSDOH Glens Falls State District office at (518) 793-3893.

DEFINITIONS/ABBREVIATIONS:

% - Percent

< - Less than

= - Equals

 \pm - Plus or minus

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow **DPW** - Department of Public Works

HA - Health advisory

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.

Micrograms per liter ($\mu g/L$) - Corresponds to one part of liquid in one billion parts of liquid (parts per billion [ppb])

Milligrams per liter (mg/L) - Corresponds to one part of liquid in one million parts of liquid (parts per million [ppm])



DEFINITIONS/ABBREVIATIONS (CONTINUED):

N/A - Not applicable

Nanograms per liter (ng/L) - Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion [ppt])

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

Non-Detect (ND) - Laboratory analysis indicates that the constituent is not present.

pCi/L - Picocuries per liter

 ${\bf TON}$ - Threshold Odor Number

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

Table of Detected Contaminants – Loughberry Lake Watershed									
Contaminant	Violation?	Date(s) of Sample	Average Level Detected ¹ (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source(s) of Contamination		
Microbiological Contaminants									
Turbidity ²	No	7/24/2024 2024	0.244 100% < 0.3	NTU	N/A	TT = 1 95% < 0.3	Soil runoff		
Inorganic Contaminants									
Alkalinity, Total (raw water)	No	Monthly 2024	129.6 (1 - 160)	mg/L	N/A	N/A	Naturally occurring		
Barium	No	11/19/2024	0.0392	mg/L	2	MCL = 2	Discharges of drilling wastes; discharges from metal refineries; erosion of natural deposits		
Color	No	11/19/2024	2	color units	N/A	N/A (Secondary MCL = 15)	Large quantities of organic chemicals; inadequate treatment; high disinfectant demand and the potential for production of excess amounts of disinfection byproducts (e.g., TTHM); the presence of metals such as copper, iron, and manganese; natural color may be caused by decaying leaves, plants, and soil organic matter		
Copper	No	7/20/2024 - 7/28/2024	0.068 ³ (ND - 0.100)	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Chloride	No	11/19/2024	135	mg/L	N/A	N/A (Secondary MCL = 250)	Naturally occurring or indicative of road salt contamination		
Fluoride	No	11/19/2024	0.65	mg/L	N/A	MCL = 2.2	Erosion of natural deposits; water additive that promotes strong teeth; discharges from fertilizer and aluminum factories		
Lead	No	7/20/2024 - 7/28/2024	3.4 ³ (ND - 4.4)	μg/L	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits		
Nickel	No	11/19/2024	0.0051	mg/L	N/A	N/A	Naturally occurring		
Nitrate	No	11/19/2024	0.61	mg/L	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Odor	No	11/19/2024	4	TON	N/A	N/A (Secondary $MCL = 3)^4$	Organic or inorganic pollutants originating from municipal and industrial waste discharges; natural sources		
Organic Carbon, Total	No	Monthly 2024	2.6 (1.8 - 3.5)	mg/L	N/A	N/A	Naturally occurring		
Sodium	No	11/19/2024	76	mg/L	N/A	See note ⁵	Naturally occurring; road salt; water softeners; animal waste		
Sulfate	No	11/19/2024	17.7	mg/L	N/A	MCL = 250	Naturally occurring		



Table of Detected Contaminants – Loughberry Lake Watershed (continued)									
Contaminant	Violation?	Date(s) of Sample	Average Level Detected ¹ (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source(s) of Contamination		
Organic Contaminants									
Perfluorooctanoic Acid (PFOA)	No	3/14/2024	1.8	ng/L	N/A	MCL = 10	Released into the environment from widespread use in commercial and industrial applications		
	r		Radi	ological Cor	ntaminant	ts			
Gross Alpha Activity (including radium- 226, excluding radon and uranium)	No	12/6/2022	0.792 ± 1.02	pCi/L	0	MCL = 15	Erosion of natural deposits		
			Stage 2	Disinfection	n Byprodu	ıcts			
HAA5	No	Quarterly 2024	Denny's 31.775° (25.5 - 31.9) Hilton Garden Inn 26.625° (12.6 - 31.1) DPW Garage 27.525° (15.5 - 34.1) Stewart's Shops 31.6° (17.8 - 33.4)	μg/L	N/A	MCL = 60	Byproduct of drinking water disinfection needed to kill harmful organisms		
TTHM	No	Quarterly 2024	Denny's 56.525° (31.1 - 78.2) <u>Hilton</u> Garden Inn 53° (38 - 61) DPW Garage 55.25° (35 - 53.7) <u>Stewart's</u> Shops 54.725° (30.9 - 59 7)	μg/L	N/A	MCL = 80	Byproduct of drinking water chlorination needed to kill harmful organisms; formed when source water contains large amounts of organic matter		



NOTES:

- 1. Results presented for turbidity, copper, lead, HAA5, & TTHM are not averages (see following footnotes).
- 2. Turbidity is a measure of the cloudiness of the water. The City tests for it because it is a good indicator of the effectiveness of the Excelsior Avenue Treatment Plant filtration system. The highest single turbidity measurement (0.244 NTU) for the year occurred on 24 July 2024. NYSDOH regulations require that turbidity must always be below 1 NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU. In 2024, 100% of the City's turbidity measurements met that requirement.
- 3. The level presented represents the 90th percentile of the sites tested. A percentile is a value on a scale of 100 that indicates the % 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 in the water system. In this case, 31 samples were collected from the City's water system in 2024, and the 90th percentile values were 0.068 mg/L for copper and 3.4 µg/L for lead. The ALs for copper and lead were not exceeded at any of the sites tested.
- 4. Although odor exceeded its secondary MCL, this is a non-enforceable standard that serves as a guideline for aesthetic considerations. It is not considered to present a risk to human health.
- 5. 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.
- 6. Compliance for TTHM and HAA5 MCLs is based on a locational running annual average (LRAA), computed quarterly, of quarterly averages of all samples. The highest LRAA for 2024 is shown for each sample site. The highest LRAA for HAA5 occurred during the 1st quarter for all sites tested. The highest LRAA for TTHM occurred during the 1st quarter for the City DPW garage, 2nd quarter for Denny's and Stewart's Shops, and 3rd quarter for the Hilton Garden Inn.

Table of Detected Contaminants – Geyser Crest Subdivision									
Contaminant	Violation?	Date(s) of Sample	Average Level Detected ¹ (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source(s) of Contamination		
			Inorgan	ic Contamina	ants				
Color	No	11/20/2024	2	color units	N/A	N/A (Secondary MCL = 15)	Large quantities of organic chemicals; inadequate treatment; high disinfectant demand and the potential for production of excess amounts of disinfection byproducts (e.g., TTHM); the presence of metals such as copper, iron, and manganese; natural color may be caused by decaying leaves, plants, and soil organic matter		
Copper	No	7/20/2024 - 7/28/2024	0.094 ² (ND - 0.100)	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Chloride	No	11/20/2024	192	mg/L	N/A	N/A (Secondary MCL = 250)	Naturally occurring or indicative of road salt contamination		
Fluoride	No	12/8/2020	0.661	mg/L	N/A	MCL = 2.2	Erosion of natural deposits; water additive that promotes strong teeth; discharges from fertilizer and aluminum factories		
Lead	No	7/20/2024 - 7/28/2024	3 ² (ND - 3.7)	μg/L	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits		
Nitrate	No	11/20/2024	0.64	mg/L	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Sodium	No	11/20/2024	98	mg/L	N/A	See note ³	Naturally occurring; road salt; water softeners; animal waste		
Sulfate	No	11/20/2024	33.3	mg/L	N/A	MCL = 250	Naturally occurring		



Table of Detected Contaminants – Geyser Crest Subdivision (continued)								
Contaminant	Violation?	Date(s) of Sample	Average Level Detected ¹ (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source(s) of Contamination	
Radiological Contaminants								
Combined radium-226 and 228	No	8/25/2022	0.838	pCi/L	0	MCL = 5	Erosion of natural deposits	
Gross Alpha Activity (including radium-226, excluding radon and	No	8/25/2022	0.49 ± 1.21	pCi/L	0	MCL = 15	Erosion of natural deposits	
uranium)		12/6/2022	0 ± 1.06					
Uranium	No	8/25/2022	1.01 ± 0.02	μg/L	0	MCL = 30	Erosion of natural deposits	
Disinfection Byproducts								
ТТНМ	No	7/16/2024	5.9	μg/L	N/A	MCL = 80	Byproduct of drinking water chlorination needed to kill harmful organisms; formed when source water contains large amounts of organic matter	

NOTES:

- 1. Results presented for copper and lead are not averages (see following footnotes).
- 2. The level presented represents the 90th percentile of the 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 lead and copper values detected in the water system. In this case, 21 samples were collected from the City's water system in 2021, and the 90th percentile value was 0.094 mg/L for copper and 3 µg/L for lead. The ALs for copper and lead were not exceeded at any of the sites tested.
- 3. 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.

UNREGULATED CONTAMINANTS

The following charts contain the results of testing for a series of unregulated contaminants. Unregulated contaminants are those that do not yet have a drinking water standard set by NYS or the EPA. The purpose of monitoring these contaminants is to help the EPA decide whether the contaminants should have a standard.

Table of Detected Perfluoroalkyl Substances – Loughberry Lake Watershed									
Contaminant	Violation?	Date of Sample	Level(s) Detected	Unit of Measure	MCLG or HA Level ^{1 2}				
Perfluorobutanesulfonic Acid	No	3/14/2024	1.8	ng/L	2000				
Perfluorohexanoic Acid	No	3/14/2024	1.8	ng/L	N/A				
Perfluorobutanoic Acid	No	3/14/2024	3.3 2.1 (BMPS ³)	ng/L	N/A				
Perfluoropentanoic Acid	No	3/14/2024	2.0 1.8 (BMPS ³)	ng/L	N/A				

NOTES:

- 1. EPA HA levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. HA levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.
- 2. All perfluoroalkyl substances, except for PFOA and perfluorooctanesulfonic acid (PFOS), are considered unspecified organic contaminants, which have an MCL of 0.05 mg/L (ppm).
- 3. Sample collected from Bog Meadow Pump Station (instead of Excelsior Avenue Treatment Plant).

WHAT DOES THIS INFORMATION MEAN?

The City's water system had no MCL violations in 2024. Through testing, some contaminants have been detected; however, these contaminants were detected below the levels allowed by NYS.



IS THE CITY OF SARATOGA SPRINGS' WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2024, the City's water system was in compliance with applicable NYS and federal drinking water operating, monitoring, and reporting requirements.

INFORMATION ABOUT LEAD IN DRINKING WATER AND ITS EFFECT ON CHILDREN

Lead can cause serious health problems, especially for pregnant women, infants (both formula-fed and breastfed) and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in home plumbing components. Since lead levels may vary over time, lead exposure is possible even when tap sampling results do not detect lead at one point in time. Customers can protect themselves by identifying and removing lead materials within home plumbing and take steps to reduce risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Instructions provided with the filter should be followed to ensure the filter is used properly. Only cold water should be used for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, pipes should be flushed for several minutes. This can be done by running the tap, taking a shower, or doing laundry or a load of dishes. If a customer has a lead service line (LSL) or galvanized requiring replacement service line, they may need to flush their pipes for a longer period. If customers are concerned about lead in their water and wish to have it tested, contact Brett Johnson, Chief Water Treatment Plant Operator, at (518) 587-3550, extension 2472, or waterplant@saratogasprings.org. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

INFORMATION ON LEAD SERVICE LINE INVENTORY

An LSL is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. The line may be owned by the water system, property owner, or both. An LSL inventory includes both potable and non-potable lines within a system. In accordance with the federal Lead and Copper Rule Revisions, the City has prepared an LSL inventory and made it publicly accessible by physical copy available at the DPW offices (City Hall, 474 Broadway Suite 12, Saratoga Springs, New York 12866-1960). The NYSDOH's summary of LSL inventories webpage can be found at:

https://health.ny.gov/environmental/water/drinking/service line/.

INFORMATION ON FLUORIDE ADDITION

The City's water system is one of many drinking water systems in NYS that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the Centers for Disease Control and Prevention (CDC), fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in its water provides optimal dental protection, the City monitors fluoride levels daily to make sure it is maintained at a target level of 0.7 mg/L. During 2024, the City's monitoring showed daily fluoride levels for its two treatment plants were within 0.3 mg/L of the target level as recommended by the NYSDOH. None of the monitoring results showed fluoride at levels that approached the 2.2 mg/L MCL for fluoride.

INFORMATION ON PERFLUORINATED COMPOUNDS AND 1,4-DIOXANE

NYS has adopted the first national drinking water standard for 1,4-dioxane along with one of the lowest MCLs for PFOA and PFOS. PWSs in NYS are required to test for PFOA, PFOS, and 1,4-dioxane. PFOA and PFOS have MCLs of 10 ng/L each, while 1,4-dioxane has an MCL of 1.0 µg/L. The City has completed four quarters of sampling for the Loughberry Lake Watershed and Geyser Crest. The data shows compliance with these MCLs. The PFOA data presented in the previous table of detected contaminants for the Loughberry Lake Watershed shows the highest level detected in 2024 (all other results for PFOA, PFOS, and 1,4-dioxane in 2024 were ND).

COMPOSITE FILTER MONITORING INFORMATION

The highest single composite turbidity measurement for the year was 0.244 NTU on 24 July 2024. Regulations require that 95% of turbidity samples collected have a measurement below 0.3 NTU. In 2024, 100% of measurements met that requirement.



DO CUSTOMERS NEED TO TAKE SPECIAL PRECAUTIONS?

Although the City's drinking water met or exceeded NYS and federal regulations, some people may be more vulnerable to diseasecausing microorganisms or pathogens in drinking water than the general population. Immunocompromised persons (e.g., persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with human immunodeficiency virus/acquired immunodeficiency syndrome or other immune system disorders, some elderly, infants) can be particularly at risk from infections. These people should seek advice from their healthcare 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 EPA's Safe Drinking Water Hotline at (800) 426-4791.



3. NAVAL SUPPORT FACILITY SARATOGA SPRINGS WATER SYSTEM INFORMATION

This section presents information specific to the NSF Saratoga Springs water system. All CCRs/water quality assessment reports are available for public review on the Commander, Navy Region Mid-Atlantic website (<u>https://cnrma.cnic.navy.mil/Operations-and-Management/Environmental-Support/Drinking-Water-Quality-Information/</u>).

CONTACT INFORMATION

If you have any questions about this CCR or concerns regarding your drinking water, please contact Richard Massad, Naval Submarine Base New London (SUBASENLON) Public Works (PW) Environmental Division (EV) Drinking Water Program Manager, at (860) 694-5140 or <u>richard.a.massad.civ@us.navy.mil</u> or Daniel Lewis, NSF Saratoga Springs PW Director, at (518) 886-0200, extension 102, or <u>daniel.c.lewis1.civ@us.navy.mil</u>.

INSTALLATION WATER SYSTEM DESCRIPTION

NSF Saratoga Springs receives its drinking water from the City of Saratoga Springs. Water enters the installation through a buried interconnection along Buff Road on the west side of the installation behind Building 117 (Commissary).

Once water enters the NSF Saratoga Springs system, it is distributed to facilities through underground pipes that are owned/operated by the Navy. It is important to note that there is no onsite water treatment at the installation. Water supplied by the City is merely distributed to Navy facilities where it is consumed or used. For this reason, the installation system is classified as a consecutive PWS that is part of the overall City water distribution system and is exempt from regulation by the NYSDOH. Conversely, the City's system is a PWS regulated by the NYSDOH as it supplies water and is responsible for water source protection and treatment. In addition, the Navy requires drinking water at the installation to be routinely tested, ensuring that personnel and visitors are provided with similar water quality as consumers of City water that are not located on the installation. Navy policy also requires the installation to monitor its own water distribution systems for contaminants that could be contributed downstream of its interconnection to the City's distribution system.

NOTE: Finished water is not provided for consumptive use at the offsite Morale, Welfare, and Recreation Facility located in the nearby town of Milton. There is also no sampling plan developed for that site. Consequently, this CCR does not apply to that site.

2024 INSTALLATION WATER QUALITY MONITORING PROGRAM

Water quality sampling plans were developed for NSF Saratoga Springs in 2018 to meet Navy water quality monitoring requirements for consumers using Navy-owned water distribution systems. The sampling plans require that one representative bacteriological sample be taken every month and one representative sample be taken every year and analyzed for disinfection byproducts (TTHM and HAA5). This sampling is performed through the PW Director with oversight provided by the SUBASENLON PW EV in Groton, Connecticut. Sampling and analysis are performed by a local and certified laboratory contractor, Adirondack Environmental Services, Inc.

The NSF Saratoga Springs water quality monitoring program includes the following parameters:

Bacteriological Monitoring:

Total coliform monitoring is performed to verify that water is free of bacteria as it travels through the NSF Saratoga Springs water distribution system and disinfectant residuals decline. Total coliforms are not pathogenic, but their presence could indicate the potential for pathogenic bacteria. If total coliforms are detected, monitoring for Escherichia coli (E. coli) is required to determine whether these pathogenic bacteria are present.

There were no total coliforms detections in the monthly bacteriological samples taken at NSF Saratoga Springs for 2024. The representative samples were taken at either Building 101 (Command Administration) or 104 (Family Service Center Office). No sample was collected for June due to funding delays.



Disinfectants and Disinfection Byproducts Monitoring:

TTHM and HAA5 can form because of disinfection treatment performed by the City at their treatment plants. As water sits in pipes, the disinfection chemicals can react with organic matter already in the water, which causes these byproducts to develop. Monitoring is needed to ensure that these levels do not become too high as water travels through the distribution system.

A representative sample was taken at Building 104 on 6 August 2024 and analyzed for TTHM and HAA5; however, this sample was not collected from the designated routine sampling location (Building 103).

Total residual chlorine (TRC) monitoring is performed at the same time as total coliform sampling, as the residual disinfectant level in the water is directly tied to the potential for the presence of total coliforms. An added benefit of residual disinfectant monitoring is that if levels are too low, flushing can be performed to maintain an adequate disinfectant for the prevention of bacteriological contamination. A detectable residual disinfectant was measured during each of the monthly total coliform sampling events for 2024 except in June (no sample was collected) and October (result was ND).

Monitoring Summary:

The following table summarizes the results of testing performed at NSF Saratoga Springs in 2024 for bacteria and disinfectants and disinfection byproducts.

NSF Saratoga Springs – Regulated Contaminants										
Bacteriological										
Parameter	Units	Detection Le	MCL	MCLG	Met Standard?1	Major Source in Drinking Water				
Total Coliforms	P/A	Absent	N/A	0	See note ²	Naturally present in the environment				
E. coli	P/A	N/A ³	See note ⁴	0	N/A ³	Human and animal fecal waste				
Disinfectants and Disinfection Byproducts										
		Detection Le	MCL	MCLG						
Parameter	Units	Annual Result or Highest RAA	Range	or MRDL ⁵	or MRDLG ⁶	Met Standard?1	Major Source in Drinking Water			
TTHM	μg/L	53.6	N/A	80	N/A	See note ⁷	Byproduct of drinking water chlorination			
HAA5	μg/L	<6.0 (ND)	N/A	60	N/A	See note ⁷	Byproduct of drinking water chlorination			
TRC	mg/L	0.36	ND (<0.02) - 0.96	4	4	See note ²	Drinking water disinfectant			

NOTES:

1. Indicates whether the drinking water monitoring results meet the associated Safe Drinking Water Act water quality standards.

- 2. The monitoring program requires 1 total coliform sample (and corresponding TRC sample) each month; however, no sample was collected in June. For the remaining 11 samples, none were positive for total coliforms, and all TRC results were below the MRDL.
- 3. Testing for *E. coli* is only required after a total coliform-positive (TC+) routine sample.
- 4. Effective 1 April 2016, the Revised Total Coliform Rule established *E. coli* MCL violations for the following sample result combinations: (i) a TC+ repeat sample following an *E. coli*-positive (EC+) routine sample, (ii) any missing repeat samples following an EC+ routine sample, (iii) an EC+ repeat sample following an EC+ routine sample, (iv) an EC+ repeat sample following a TC+ routine sample, or (v) a TC+ repeat sample with no *E. coli* analysis following a TC+ routine sample.
- 5. Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant (e.g., TRC) allowed in drinking water.
- 6. Maximum Residual Disinfectant Level Goal (MRDLG) The level of a drinking water disinfectant (e.g., TRC) 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.
- 7. The annual TTHM and HAA5 sample was collected from an alternative location (Building 104) not identified in the system monitoring plan.