

Annual Drinking Water Quality Report for 2021

St. Regis Mohawk Tribe

Public Water Supply ID # 1617071

Introduction:

The St. Regis Mohawk Tribe will annually provide the community of Akwesasne, a report of the drinking water quality to your home or business to comply with federal regulations. The purpose of this report is to raise your understanding of drinking water and the need to protect and conserve the drinking water sources. Last year, your tap water met / exceeded drinking water health standards. We continue to assess and improve our operations to ensure that we continue to provide drinking water that meets and exceeds health based standards. Details are provided below in the "Table of Regulated Detectable Contaminants" and in the "Notes" following the table.

What's in the Source Water?

Your drinking water comes from the surface water of the St. Lawrence River.

The sources of drinking water are surface waters such as; streams, rivers, lakes, or ground water from wells that tap underground aquifers. 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 from human activity.

A Source Water Protection Plan has been developed to help establish a way to protect any source of contamination to the river from upstream sources.

How does the water get to my home?

Water is pumped from the St. Lawrence River to the water treatment plant on Garrow Road. The water goes through treatment by dual-sand filtration, Powdered Activated Carbon (PAC), chlorination, and Ultraviolet (UV) Disinfection. The treated water is then stored in a clearwell, pumped to the 500,000 Gallon water tower on McGee Road where it is gravity fed to your faucets. It is also stored on Rt. 37 for fire protection by way of booster pumps.

The system currently supplies water to residents and visitors of Akwesasne.

The Treatment plant is a Dual – Sand filtration system and uses Sodium Hypochlorite and UV for disinfection as well as Poly Aluminum Chloride, a coagulant, to remove organic material from raw water before it enters the treatment plant. The plant has the capability of producing 1.4 million gallons of treated water per day.

We presently have 1000 connections and produced an average of 443,000 gallons of water per day in 2021 with the highest production of water during the month of June at 521,666 gallons/ month and a total of 161,659,000 gallons.

HOW CAN I GET THIS CHLORINE TASTE AND SMELL OUT OF MY WATER?

The water is treated with Chlorine before it leaves the plant to protect public health and prevent microbiological organisms from growing. You can place a carbon filter (i.e. Brita) on you faucet to remove the chlorine taste or allow a pitcher of it to sit on the counter before refrigerating. The facility has undergone an upgrade to extend the raw water intake 112 ft. also an aerating mixing system in the elevated tank on McGee Road, to provide water of greater quality and reduces chemical use.

To ensure that tap water is safe to drink, the Environmental Protection Agency provides guidance and prescribes regulations that limit the amount of certain substances in water provided by public water systems.

All 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. More information about contaminants and potential health effects can be obtained by calling the SRMT Environment Division or the Environmental Protection Agency Safe Drinking Water Hotline (1-800-426-4791).

Do I Need to Take Special Precautions?

Some people may be more vulnerable to certain 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 and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Outreach Office at the clinic and at the EPA Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. SRMT 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. Informational on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/ead>."

Regulated Detected Chemical Parameters

Contaminant	Violation Yes/No	Date of Sample	Level Detected (range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT,AL)	Likely Source of Contamination
Inorganics							
Nitrate (as Nitrogen)	No	2/10/22	0.32	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride	No	2/10/22	<0.1	mg/L	4.0	MCL=2.2 NYSDOH standard	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium	No	2/10/22	.02	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Lead (1)	No	September 2021	<0.0017	mg/l	0	AL = .015 mg/l	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (2)	No	September 2021	0.08 (.0023- .15)	mg/l	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits

Microbiological Contaminants

Total Coliform	No	Monthly (6 / mo.)	0	Negative positive or	0	One positive monthly allowed	Naturally present in Environment
Fecal Coliform and E.Coli	No	Monthly (6 / mo.)	0	Negative positive or	0	None	Human and Animal waste

Turbidity

Turbidity 3	No	2021	0.034 (Average)	NTU	N/A	1 NTU Maximum allowed	Soil Runoff Stormwater
Turbidity 3	No	Daily 2021	95% < 0.3	NTU	N/A	0.3 - 95% of samples -TT	

Disinfection By-Products

Total Trihalomethanes (TTHM)- 4)	no	August See Note	57 38 50 50 19-wtp	ug/L	N/A	80	Byproduct of drinking water chlorination
WTP-water treatment plant							
Haloacetic Acids (HAA5) * (4)	no	August See Note	11 14 12 10 7.5 wtp	ug/L	N/A	60	Byproduct of drinking water disinfection
WTP – Water treatment plant							

Other Detected Contaminants			
Contaminant	Level Detected	Unit Measurement	Guideline
Semi Volatile Organic Chemicals & PCB's	Non detect Non detect	mg/l ug/l	See # 5

NOTES:

N/A - means not applicable

1 – The level presented represents the 90th percentile of the 20 sites sampled. The minimum # of lead samples required was 20. There was no Lead Action level exceedance, since the 90th percentile was below the Action Level of 0.015mg/l. Sampling will continue in 2022.

2 – The level presented represents the 90th percentile of the 20 sites sampled. The minimum # of copper samples required was 20. There was no Copper Action Level exceedance, since the 90th percentile was below the Action Level of 1.3 mg/l.

3 – Turbidity is a measure of the cloudiness of the water. We test turbidity because it is a good indicator of the effectiveness of our filtration system. We did not have any violations of turbidity in 2021.

4 – This level represents the annual sampling event at 5 sites. Routine flushing and disinfection management and reduction in chlorine use has kept the by – products in check.

5 – Organic chemical sampling was done on November 4, 2021. EPA method 524.2 POC's, Vinyl Chloride, and MTBE, SOC's group II. **PCB's have been sampled in 2021 and have also been Non Detect <0.05 ug/l. (PPB)**

DEFINITIONS:

Maximum Contaminant Level Goal (MCLG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL):

The highest level allowed in drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.

Action Level (AL):

The level that, if exceeded, triggers a treatment or other requirement that a water system must follow.

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

Health Effects Language:

Turbidity: Turbidity is a measurement of the cloudiness of the water. It has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth.

Turbidity violation of standards for more than 4 hours may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total Coliform Bacteria- Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Fecal coliform- Fecal coliforms and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely - compromised immune systems.

Lead- Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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 homes plumbing. Additional information is available from the SRMT Health Services or the Safe Drinking Water Hotline (800-426-4791).

