Annual Drinking Water Quality Report for 2021 Village of Fair Haven PO Box 614, 14523 Cayuga Street Fair Haven, NY13064 Public Water Supply ID#0501717

INTRODUCTION

To comply with State regulations, Village of Fair Haven, 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 Mr. Roger Granatiero at 315-947-5725 or the Village Clerk's Office at 315-947-5112. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the 2^{nd} Monday of the month at the Village Hall on Cayuga Street at 7:00p.m.

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

Our water system serves approximated 2350 people through 816 service connections. Our water source is groundwater drawn from two groundwater wells which are located in the Town of Sterling. The water is drawn from these wells and is chlorinated prior to distribution.

The NYS DOH has completed a source water assessment for this system, based in available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment included 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 for the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived primarily from 2 drilled wells. The source water assessment has rated these wells as having a high susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of a permitted discharge facility (a commercial facility that discharges wastewater into the environment and is regulated by the state government); and animal pastures in relation to the wells. In addition, the wells draw from an unconfined aquifer with high hydraulic conductivity. Please note that, while the source water assessment rates our well as being susceptible to microbials, our water is disinfected to ensure that the finished water delivered into your home meets the New York State drinking water standards for microbial contamination.

County and State health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and educational programs. A copy of the assessment is available for review for calling the Cayuga County Health Department at 315-253-1405.

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, turbidity, 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, are 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 (800-426-4791) or the Cayuga County Health Department at 315-253-1405.

		Table of Det	ected Contamina	nts			
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure- ment	MCLG	Regulatory limit (MCL, TT or AL)	Likely Source of Contamination
Nitrate	NO	10/6/2021	1.62, 1.95	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	NO	10/06/2021	0.185	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Total Trihalomethanes (TTHMs-chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	NO	08/04/2021	9.96 Range 6.0 – 13.9	ug/L	N/A	MCL=80	By products of drinking water chlorination needed to kill harmful organisms. TTHMS are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids (Bromoacetic, Chloroacetic, Dibromoacetic, Dichloroacetic, Trichloroacetic)	NO	08/04/2021	.65 Range 0.0 – 1.3	ug/l	N/A	MCL=60	By products of drinking water chlorination needed to kill harmful organisms.
Total Trihalomethanes (TTHMs-chloroform, bromodichloromethane, dibromochloromethane, and bromoform (Sterling)	NO	08/04/2021	27.9	ug/L	N/A	MCL=80	By products of drinking water chlorination needed to kill harmful organisms. TTHMS are formed when source water contains large amounts
	NO	0/2 0/1 0/11 6/21 6/22	9.61	/T	0	AT -15	of organic matter.
Lead	NO	8/2,8/1, 8/11,6/21, 6/22, 6/18/21	2.6 ¹ Range <1-4.1	ug/L	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (Sterling)	NO	7/18/2021	10 ³ Range <1-8.6	ug/L	0	AL=15	Corrosion of household plumbing systems: Erosion of natural deposits
Copper	NO	8/2,8/1,8/11,,6/21,6/22,6/18/21	0.13 ² Range 0.023-0.15	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Copper (Sterling)	NO	7/18/2021	0.59 ⁴ Range 0.001-0.95	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Sodium	NO	12/4/2019	4.16,5.01	mg/L	N/A	N/A	Naturally occurring
Gross Alpha activity	NO	01/18/2019	0.2	pCi/L	0	15	Erosion of natural deposits
Combined Radium -226 and Radium-228	NO	01/21/2019 01/17/2019	0.777	pCi/L	0	5	Erosion of natural deposits
Asbestos Chrysotile	NO	10/28/2020	2	MFL ³	N/A	N/A	Decay of asbestos cement water mains; Erosion of natural deposits
Samples below collected from Well #1 by the United States Geological Survey							
Carbon Dioxide	NO	12/06/2017	3.2-3.5	mg/L	N/A	N/A	Naturally occurring.
Nitrogen Gas	NO	12/06/2017	20.52-20.55	mg/L	N/A	N/A	Naturally occurring.
Dissolved Oxygen	NO	12/06/2017	7.3-7.4	mg/L	N/A	N/A	Naturally occurring.
Argon	NO	12/06/2017	0.7540 - 0.7630	m mg/L	N/A	N/A	Naturally occurring.
Calcium	NO	12/06/2017	47.1	mg/L	N/A	N/A	Naturally occurring.
Magnesium	NO	12/06/2017	12.3	mg/L	N/A	N/A	Naturally occurring.
Potassium	NO	12/06/2017	1.01	mg/L	N/A	N/A	Naturally occurring.

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Sodium	NO	12/06/17	4.23	m mg/L	N/A	N/A	Naturally occurring; road salt; water softeners; animal
Chloride	NO	12/06/2017	6.51	mg/L	N/A	250	waste. Naturally occurring or indicative of road salt contamination.
Fluoride	NO	12/06/2017	0.05	mg/L	N/A	2.2	Erosion of natural deposits; discharge from fertilizer and aluminum factories.
Silica	NO	12/06/2017	9.98	mg/L	N/A	N/A	Naturally occurring.
Sulfate	NO	12/06/2017	9.18	mg/L	N/A	250	Naturally occurring.
Hardness	NO	12/06/2017	168	mg/L	N/A	N/A	Naturally occurring.
Nitrate and Nitrite	NO	12/06/2017	1.93	mg/L	10	10	Runoff from fertilizer
							use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Arsenic	NO	12/06/2017	0.1	ug/L	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	NO	12/06/2017	161	ug/L	2000	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Boron	NO	12/06/2017	12	ug/L	N/A	N/A	Naturally occurring.
Copper	NO	12/06/2017	1.4	ug/L	1300	AL=1300	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead	NO	12/06/2017	0.25	ug/L	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits.
Lithium	NO	12/06/2017	2.2	ug/L	N/A	N/A	Naturally occurring.
Molybdenum	NO	12/06/2017	0.09	ug/L	N/A	N/A	Naturally occurring.
Selenium	NO	12/06/2017	0.1	ug/L	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines.
Strontium	NO	12/06/2017	142	ug/L	N/A	N/A	Naturally occurring.
Thallium	NO	12/06/2017	0.04	ug/L	0.5	2	Leaching from ore- processing sites; discharge from electronics, glass, and drug factories.
Zinc	NO	12/06/2017	3	ug/L	N/A	5000	Naturally occurring;
Uranium	NO	12/06/2017	0.133	ug/L	0	30	mining waste. Erosion of natural
Beta Radioactivity	NO	12/06/2017	1.7	pCi/L	N/A	N/A	deposits. Erosion of natural
Radon-2224	NO	12/06/2017	430	pCi/L	N/A	N/A	deposits. Erosion of natural
Atrazine	NO	12/06/2017	7.85	ng/L	3000	3000	deposits. Runoff from herbicide
Simazine	NO	12/06/2017	(Estimated)	ng/L	4000	4000	used on row crops. Herbicide runoff
2-Chloro-4-	NO	12/06/2017	22.9		N/A		
2-Chloro-4- isopropylamino-6-amino-s- triazine (Deethyl Atrazine) 2-Hydroxy-4-	NO	12/06/2017	1.39	ng/L	N/A N/A	50,000	Degradation byproduct of the herbicide atrazine. Degradation byproduct
isopropylamino-6-amino-s- triazine	110	12/00/2017	1.39	m ng/L	1V/A	30,000	of the herbicide atrazine.
Fluometuron	NO	12/06/2017	14.3	ng/L	N/A	50,000	Fluometuron is an anthropogenic compound used as a pre-emergence and post-emergence herbicide. It may be released to the environment during its production and will be released during its application to agricultural fields.

Metolachlor sulfonic acid	NO	12/06/2017	859	ng/L	N/A	50,000	Metolachlor sulfonic
							acid is a degradation
							product of pesticides.

Notes:

- 1- The level presented represents the $90^{\rm th}$ percentile of the 10 samples collected. The action level for lead was not exceeded at any of the 10 sites tested.
- 2— The level presented represents the 90th percentile of the 10 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, 10 samples were collected at your water system and the 90th percentile value was the second highest value detected 0.0.13 mg/l. The action level for copper was not exceeded at any of the sites tested.
- 3- Please note as bestos fibers longer than $10\ \mathrm{microns}$ were not detected.
- 4-The USEPA has proposed a two-part standard for radon in drinking water: 300 pCi/L for areas that do not implement a mitigation program to address radon in indoor air, and 4000 pCi/L for areas like ours that do implement a radon mitigation program in indoor air.

The following list is of contaminants that were analyzed for, but not detected in the water supply.

Aldicarb Sulfoxide, Aldicarb Sulfone, Oxamyl (Vydate), Methomyl (Lannate), 3-Hydroxy Carbofuran, Aldicarb (Temik), Propoxur (Baygon), Carbofuran, Carbaryl (Sevin), Methiocarb, Pentachlorophenol, 2,4,5-TP (Silvex), 2,4,5-T, 2,4-DB, Dinoseb, Picloram, Acifluorfen, Simazine, Atrazine, Metribuzin, Alachlor (Lasso), Metolachlor (Dual), Butachlor, Hexachlorocyclopentadiene (C-56), Hexachlorobenzene, HCH, Alpha, HCH, Gamma (Lindane), HCH, Beta, HCH, Delta, Heptachlor, Aldrin, Heptachlor epoxide, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoxychlor, Mirex, Toxaphene, Chlordane, technical, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, 1,2-Dibromoethane (EDB), 1,2,3-Trichloropropane, Dibromo-3-chloropropane, Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, Methylene Chloride, trans-1,2-Dichloroethene, Methyl-t-Butyl-Ether, 1,1-Dichloroethane, Methyl Ethyl Ketone, cis-1,2-Dichloroethene, Bromochloromethane, Chloroform, 2,2-Dichloropropane, 1,2-Dichloroethane, 1,1,1-Trichloroethane, 1,1-Dichloropropene, Carbon Tetrachloride, Benzene, Dibromomethane, 1,2-Dichloropropane, Trichloroethene, Bromodichloromethane, cis-1,3-Dichloropropene, Methyl Isobutyl Ketone, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Toluene, 1,3-Dichloropropane, Tetrachloroethene, 1,1,1,2-Tetrachloroethane, Chlorobenzene, Ethylbenzene, m/p-Xylene, Styrene, 1,1,2,2-Tetrachloroethane, o-Xylene, 1,2,3-Trichloropropane, Isopropylbenzene, Bromobenzene, n-Propylbenzene, 2-Chlorotoluene, 4-Chlorotoluene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, p-Cymene, 1,2-Dichlorobenzene, n-Butylbenzene, 1,2,4-Trichlorobenzene, Naphthalene, Hexachlorobutadiene (C-46), 1,2,3-Trichlorobenzene, Fluoride, Free, Beryllium, Chromium, Nickel, Arsenic, Selenium, Cadmium, Antimony, Thallium, Lead, Mercury, Cyanide, Perfluorooctanoic Acid (PFOA), Perfluorooctanesulfonic Acid (PFOS), 1,4-dioxane.

Definitions:

<u>Maximum Contaminant Level(MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible. <u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

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

 $\underline{\textit{Non-Detects}}$ (ND): Laboratory analysis indicates that the constituent is not present.

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

<u>Micrograms per liter (ug/l)</u>: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).

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

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

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.

If present, elevated levels of lead can cause elevated health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at our home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Village of Fair Haven 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2021, 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 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).

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 all our customers help us protect our water sources, which are the heart of our community. Please call our office at 315-947-5112 if you have questions.