Quality Water Report – 2019
VILLAGE OF CASTORLAND
Public Water System ID# 2402359
Prepared by Derek Mellnitz

We are very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is two driven wells located off Elm Street. One well is 197' deep and the second well is 210' deep. The average number of gallons used by the approximate 300 residents of the Village of Castorland is 22,073 gallons per day. After the water comes out of the well system, chlorine is added to protect you against microbial contaminants. No fluoride is added to the water. We are pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact **Derek Mellnitz at PO Box 104, Castorland NY 13620, Telephone: 315-608-0521.** We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled trustees meetings. They are held on the second Tuesday of each month at 7:00 p.m. at the DPW/Village Office building at 5185 State Route 410, Castorland NY 13620. You may also obtain more information about contaminants and potential health effects by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or by contacting N.S. Department of Health at 1-315-785-2277.

The Village of Castorland routinely monitors for constituents in your drinking water according to Federal and State laws. We test your drinking water for 11 inorganic compounds, nitrite, 61 volatile organic compounds, and 70 synthetic organic compounds. The synthetic organic compounds tested below the standardized qualifiers. In addition, we test the water for coliform bacteria once a month and chlorine once a day. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. The table presented below depicts which compounds were detected in your drinking water for the period of January 1st to December 31st, 2019.

AWQR SWAP SUMMARY

The NYS DOH has evaluated this public water supplies susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this public water supply. This public water supply provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

The Village was informed in March of 2020 that the monthly operating reports for 2019 were not received in a timely manner by they DOH and that operating reports had not yet been received, and that the certification of the annual report was not provided by September 1st, 2019 as required. These violations as well as failing to collect Nitrate, Fluoride & Disinfection Byproduct samples in 2019 resulted in a total of 16 notices of violation. Corrective actions have been taken for these infractions and we will do better going forward.

The source water assessment has rated these wells as having a medium-high susceptibility to microbials, nitrates, pesticides/herbicides, and petroleum products. These ratings are due primarily to the close proximity of currently permitted and former discharge facilities (industrial/commercial facilities that discharge wastewater into the environment), and associated agricultural activity in the assessment area.

A copy of the assessment can be obtained by contacting the supplier of water.

Definitions:
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - (mandatory language) TheAMaximum Allowed (MCL) is the highest level of a contaminant

that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - (mandatory language) The Goal (MCLG) is 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.

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.

Picocuries per liter (pCi/L) is a unit for measuring radioactive concentrations. The curie (Ci) unit is the activity of 1 gram of pure radium 226. Pico is a scientific notation term which means 1*10

As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.
MCL=s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

TEST RESULTS						
Contaminant	**Violation Y/N**	**Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Inorganic Contaminants						
1. Barium	No 08/16/17	.115	ppm	2	2	Discharge from drilling waste, discharge from metal refineries and erosion from natural deposits.
2. Fluoride **	No 12/10/18	2.5	ppm	N/A	2.2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
3. Nitrate (as Nitrogen)	No 09/06/18	4.1	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
4. Sodium	No 11/9/10	54	Ppm	N/A	See Health Effects	Naturally occupancy; Road Salt; Water Softeners; Animal Waste.
Disinfection By Products Total Trihalomethanes	No 08/01/17	7	ppb	N/A	80	By Product of drinking water chlorination
Total Haloecetic Acid Concentration	No 08/01/17	2	Ppb	N/A	60	By Product of drinking water chlorination
Chloride	No 11/10/09	90.5	Ppm	N/A	250	Indicative of road salt infiltration or naturally occurring.
Sulfate (as SO4)	No 11/10/09	22.7	Ppm	N/A	250	Naturally Occurring.
Iron	No 11/10/09	36	Ppb	N/A	300	Naturally Occurring.
Manganese	No 11/10/09	10	Ppb	N/A	300	Naturally Occurring.
Zinc	No 11/10/09	.24	Ppm	N/A	5	Naturally Occurring.
Tin	No 11/10/09	18	Ppb	N/A	5000	Naturally Occurring.

Calcium	No 11/10/09	60	Ppb	N/A	N/A	Indicative of road salt infiltration or naturally occurring.
Magnesium	No 11/10/09	10	Ppb	N/A	300	Naturally Occurring.
Strontiam	No 11/10/09	840	Ppb	N/A		Naturally Occurring.
Potassium	No 11/10/09	2	Ppm	N/A		Naturally Occurring.
Molyboenum	No 11/10/09	6	Ppb	N/A		Naturally Occurring.
Copper	No 08/03/17	.008	Ppm	1.3		Corrosion of household plumbing systems; Erosion of natural deposits: leaching from wood preservatives.
Gross Alpha	No 08/17/17	0.88	Pci/l	N/A	5	Naturally Occurring.
Radium-226	No 08/17/17	0.43	Pci/l	N/A	N/A	Naturally Occurring.
Radium-228	No 08/17/17	0.62	Pci/L	N/A	N/A	Naturally Occurring.

Notes: * None of the 5 sites analyzed for copper had levels detected above the Action Level.
** **This level varies from year to year and the Health Department is aware of this situation.**

In 2017 we collected and analyzed 5 samples for lead. The action level for lead was not exceeded at any of the sites tested. 90th percentile lead - 0.0014 ppm.

In 2017 we collected and analyzed 5 samples for copper. The action level for copper was not exceeded at any of the sites tested. 90th percentile for copper - 0.1292 ppm.

Health Effects

Barium - Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Fluoride - Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Nitrate - Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

We at the Village of Castorland work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children=s future.

Sodium - 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.

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