Annual Drinking Water Quality Report for 2020
Village of Harriman
1 Church Street
Harriman, New York 10926
(Public Water Supply ID# 3503531)

INTRODUCTION

To comply with State and Federal regulations, the Village of Harriman, Department of Public Works (DPW) annually issues a report describing the quality of your drinking water. The purpose of this report is to increase your understanding of drinking water and your 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 our system's water quality for this past year. 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 **Ron Krzywicki of the Water Department at (845) 783-0762**. We want you to be informed about your drinking water.

WHERE DOES OUR WATER COME FROM?

In general, customary 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 the naturally occurring minerals and, in some cases, radioactive material, and can pick up substances as a result of the presence of animals and of 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 Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in the water provided by public water systems. The State Health Department's and the Food and Drug Administration's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 5,000 people through approximately 850 service connections. Our water source is groundwater drawn from seven groundwater wells. The raw water drawn from the North Main, Mary Harriman #1A, Lizda #2, OR7, HBP #1, HBP #3, and River Road wells is treated with liquid chlorine for disinfection prior to distribution. The Lizda #2, and HBP #3 wells are also treated with Orthophosphate for iron and manganese control before entering the distribution system.

SOURCE WATER ASSESSMENT PROGRAM (SWAP) SUMMARY

The New York State Department of Health has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination, and on 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 "Table of Detected Contaminants" for a listing of 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 from drilled groundwater wells. The source water assessment has rated these wells as having a medium to very high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the proximity of NPDES- and SPDES-permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the low-intensity residential activity that are located in the assessment area. In addition, the wells draw from a confined aquifer with the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment does rate our wells as being susceptible to microbials and industrial organic compounds, please note that our water is disinfected and tested frequently to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Orange County Health Department at (845) 231-2331.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As State regulations require, we routinely test your drinking water for numerous contaminants. Among the contaminants we test for are: total coliform, inorganic compounds, nitrate, nitrite, lead, copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. Table 1 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 at (800) 426-4791 or the Orange County Health Department (OCHD) at (845) 291-2331.

Table 1 Detected Contaminants							
Contaminant	**Viola-tion** Yes/No	**Latest Date / # of Samples**	**Level Detected** (Average) (low to high)	**Unit Meas ure-ment**	**MCLG**	**Regulatory Limit,MCL** (or TT or AL)	**Likely Source of Contamination**
Barium	No	6/20 (Every 3 Yrs)	Avg.=90 (30 to 150)	ug/L	2,000	2,000	Erosion of natural deposits
Chloride	No	10/20 (Quarterly)	Avg.=165 (140 to 190)	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination
Combined Radium (226 & 228)	No	10/20 (Quarterly)	Avg.=1.94 (1.02 to 4.77)	pCi/L	0	5	Erosion of natural deposits
Copper[2]	No	6/18 (Every 3 Yrs)	90th=650 (13 to 890)	ug/L	1,300	AL=1,300	Corrosion of household plumbing systems
Fluoride	No	6/20 (Every 3 Yrs)	Avg.=0.33 (ND to 0.62)	mg/L	N/A	2.2	Erosion of natural deposits
Gross Alpha Activity[4]	No	10/20 (Quarterly)	Avg.=5.8 (ND to 10.1)	pCi/L	0	15	Erosion of natural deposits
Iron	No	11/19	Avg.=60 (60 to 60)	ug/L	N/A	300	Naturally occurring
Lead[3]	No	6/18 (Every 3 Yrs)	90th=4.5 (ND to 19)	ug/L	0	AL = 15	Corrosion of household plumbing systems
Manganese	No	11/19	Avg.=422 (27 to 710)	ug/L	N/A	300	Naturally occurring
Nickel	No	6/20 (Every 3 Yrs)	Avg.=3.2 (1.4 to 4.7)	ug/L	N/A	N/A	Erosion of natural deposits
Perfluorooctanoic acid (PFOA) (See note 6)	No	10/20 (Quarterly)	Avg.=1.45 (ND to 5.95)	ng/L	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctane-sulfonic acid (PFOS) (See note 6)	No	10/20 (Quarterly)	Avg.=4.4 (ND to 38)	ng/L	N/A	10	
Selenium	No	6/20 (Every 3 Yrs)	Avg.=1.4 (ND to 3.6)	ug/L	50	50	Erosion of natural deposits
Sodium[1]	No	10/20 (Quarterly)	Avg.=80 (52 to 110)	mg/L	N/A	See footnote 1 below	Naturally occurring or indicative of road salt
Toluene	No	10/20 (Quarterly)	Avg.=0.16 (ND to 0.78)	ug/L	N/A	5	Leaching of solvent from lining of potable water tanks
Total Coliform Bacteria (See note 5)	No	6 samples per month	1 positive sample (10/20)	N/A	0	TT=2 positive samples/month	Naturally present in the environment
Total Haloacetic Acid's (HAA5's)	No	8/20 (Annually)	3.6	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms
Total Trihalomethanes	No	8/20 (Annually)	18	ug/L	N/A	80	By-product of drinking water disinfection needed to kill harmful organisms
Uranium[4]	No	10/20 (Quarterly)	Avg.=8.4 (ND to 16.2)	pCi/L	0	20	Erosion of natural deposits

NOTES:

[1] 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.

[2] The level presented represents the 90th percentile of the 22 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. The action level for copper was not exceeded at any of the sites tested.

[3] The level presented represents the 90th percentile of the 22 samples collected. The action level for lead was exceeded at 1 of the sites tested.
[4] The values for average gross alpha and uranium levels as reported above are quarterly averages that always include the three previous quarters.
[5] All required repeat samples did not detect the presence of total coliform bacteria.
[6] The level represented in the table are indicative of source water quality. Although some of our source water samples exceeded the MCL in October 2020, our system did not receive a violation because compliance is based on entry point results. Our system blends source water in order to achieve compliance. If blended entry point water exceeds (or exceeded) standards, as customers you will be (or have been) informed of these exceedances under separate cover. We also took one sample from an entry point in August 2020 before the MCL regulations were put into effect, and detected PFOA at 2.62 ng/L and PFOS at 13.9 ng/L. Although the following related contaminants are not regulated, we must also report that we also detected Perfluorobutanesulfonic Acid (PFBS) at 1.88 ng/L, Perfluoroheptanoic Acid (PFHpA) at 1.44 ng/L, and Perfluorohexanesulfonic Acid (PFHxS) at 4.45 ng/L in August 2020.

DEFINITIONS:

***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.

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

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

***Micrograms per liter* (ug/l):** 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 in one trillion parts of liquid (parts per trillion – ppt).

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

***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.
***Nanograms per liter* (ng/l):** Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion – ppt).

***Non-Detects* (ND):** Laboratory analysis indicates that the constituent is not present.

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

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.

We are required to present the following information on lead in drinking water:
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. The Village of Harriman is responsible for providing high quality drinking water, but cannot control the variety of materials used in your home's 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?

We constantly test for various contaminants in the water supply to comply with regulatory requirements. During 2020, our system was in compliance with applicable state drinking water operating, monitoring and reporting requirements.

INFORMATION ON RADON

Radon is a naturally-occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes. In 2015, we collected a total of 5 samples from 3 of our water sources during the first half of the year that were analyzed for radon. The average of the radon test results was 4,438 pCi/L. There is currently no federally-enforced drinking water standard for radon. The EPA has proposed regulations for radon in drinking water that advocate for enforcement and action at the state level. For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

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).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

To meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.

- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, and then check the meter after 15 minutes; if it still moves, you have a leak.

SYSTEM IMPROVEMENTS

In 2020, the Village Water Department continued to replace the existing water meters with Kamstrup Smart Water Meters. These new water meters allow for reading meters remotely by driving around our water supply area without disturbing our customers during manual readings. The Village has contracted for leak detection which discovered a few leaks, two of which were significant and have been repaired.

CLOSING

Thank you for allowing us to continue to provide your family with high-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, our way of life, and our children's future. Please call our office if you have any questions.