ANNUAL DRINKING WATER QUALITY REPORT FOR 2023 VILLAGE OF HERKIMER 120 GREEN STREET, HERKIMER, NEW YORK ID#2102306

To comply with State and Federal regulations the Village of Herkimer Water Department 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 the water at the wells and reservoir were tested for more than 388 contaminants.

As the State regulations require we routinely test your drinking water for numerous contaminants. These contaminants include: Total Coliform, Turbidity, Primary Inorganic Chemicals, Principal Organic Chemicals, Synthetic Organic Chemicals, Gross Alpha, including Radon & Uranium, Disinfection Byproducts/Stage 2, Nitrate, Total Trihalomethanes, PFOA,PFOS EPA533 Method and 1-4 Dioxane. Every week water department personnel collect three or more water samples from different locations throughout the distribution system and send them to Utica Water Authority Laboratory for bacteriological testing. Of the 108 bacteriological test samples taken within the Village during 2023, all of the test results were negative.

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 the report or other concerns about your drinking water, please contact Scott Blais, Water/Sewer Superintendent, at 866-0150. If you want to learn more, please attend any of our regularly scheduled Village Board Meetings. The meetings are the first and third Mondays of each month unless otherwise noted in *The Evening Telegram*.

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 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 animal 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. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Village of Herkimer has two sources of water. Mill Creek feeds into the Gravesville Intake in the Town of Russia. The water is piped through a 16" and 14" main from the Gravesville Reservoir to the Herkimer Reservoir. Herkimer's surface source of water is chlorinated and piped from our watershed in the Town of Russia to the storage reservoir in the village. The reservoir water now passes through the slow sand filter beds,

then is chlorinated and stored in the enclosed two million gallon concrete tank. From the storage tank, the filtered water enters the distribution system that includes East Herkimer Water District, Highland Ave Water District, West German Street Water District, the Petrie Development, Manion Heights Water District and the Village of Herkimer. This has been our surface source of water since 1929.

Two wells are located in the Village. They have been used as needed since July 1995. The wells can be used three ways. The water can be pumped directly into the distribution system, to the Reservoir, or to the two million gallon enclosed concrete storage tank at the Filtration Plant. If it is necessary to pump directly into the system, chlorination takes place at the pump house. When it becomes necessary to pump into the Reservoir, the water goes through the slow sand Filtration Plant; then is chlorinated before the water goes to the storage tank. The direct line from the wells to the Reservoir that was completed in September 1999 doesn't have a service connection on it. Blending of the two sources of water occurs all year long. During the summer months, the village uses more well water than normal to aid in optimizing corrosion control in the system. We shall continue to blend our two sources of water so we can meet NYS Health Department requirements for Trihalomethanes and Haloacetic Acids. The main source of water for the Village of Herkimer comes from our watershed in the Town of Russia. An emergency situation would be the only time well water would be used exclusively in the distribution system.

A slow sand filter plant was built at the Herkimer Reservoir and put online August 19", 2003. The construction of the filter plant, storage tank, and related pumping equipment cost four million dollars. New York State has provided funding for this project. The Village was awarded a two million dollar grant and a two million dollar no interest 30 year loan.

The general qualitative and quantitative conditions of these sources are very good...

Population served 7,498

Total amount of water withdrawn
Delivered
Overflow
Lost

692,101,000 gallons
433,837,000 gallons
258,264,000 gallons
51,652,800 gallons

The 2023 Water Operating Revenue was \$1,149,950.00. User Rate \$3.54 per unit (748 gal. equals one unit).

The New York State Department of Health has completed a source water assessment of our surface source and well source based on available information. Possible and actual threats to these primary and back-up drinking water sources were evaluated. The New York State source water assessment includes 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. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards. See tables below for list of

contaminants in our drinking water that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Our surface water is derived from the Gravesville Reservoir. The assessment area for this drinking water source contains no discrete potential contamination sources. However, because of the high mobility of microbial contaminants in reservoirs, this source has a medium high susceptibility rating for protozoa, enteric bacteria and viruses. It should be noted that reservoirs in general are highly sensitive to phosphorus and microbial contaminants.

Please note that our surface water is filtered and disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

The source water assessment has rated the wells as having a very high susceptibility to bacteria, viruses and nitrates; a high susceptibility to halogenated solvents, metals, petroleum products, protozoa and industrial organic compounds; and a medium-high susceptibility to herbicides and pesticides. These ratings are due primarily to the proximity of the wells to several permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and is regulated by the state and/or federal governments), a hazardous waste site, high and low intensity residential activities, transportation facilities and commercial activity in the assessment area. In addition, the wells draw from an unconfined aquifer of very high hydraulic conductivity.

While this source water assessment rates our wells as being susceptible to microbials, please note that the water is disinfected to ensure that the finished blended water delivered into your home meets New York State drinking water standards for microbial contamination. All the hundreds of tests of the well water since 1994 have been within the limits set by the New York State Health Department.

A copy of the assessments, including maps of the assessment areas, can be obtained by contacting us as noted below.

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 concentration of these contaminants does not change frequently. Some of our data though representative are more than a year old.

It also should be noted that all drinking water, including bottled drinking water, might contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 New York State Health Department at 315-866-6879. All weekly test results are available upon request at Village Hall, 120 Green Street.

TURBIDITY

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL. TT or AL	Likely Source of Contamination
Turbidity	No	06/27/23	0.989 NTU	NTU	N/A	1.0 NTU	Soil Runoff

NOTES: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indication of water quality and high turbidity can hinder the effectiveness of disinfectants. Our highest turbidity measurement (0.989 NTU) occurred on June 27, 2023. This value is below the turbidity standard (1 NTU) assigned to our system. 100% of the samples taken in 2023 were < 1.0 NTU.

TABLE OF DETECTED CONTAMINANTS AT RESERVOIR

Contaminant	Violations Yes/No	Date of Sample	Level Detected	Regulatory Limit (MCL)	Sources In Drinking Water	MCLG
Nitrogen Nitrate	No	06/02/23	<0.2 mg/1	10 mg/l	Runoff from fertilizer use leaching from septic tanks, sewage and erosion of natural deposits.	10 mg/L
Antimony	No	06/02/23	0.4 ug/l	6 ug/l	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	6ug/l
Arsenic	No	06/02/23	1.0 ug/l	10 ug/l	Erosion of natural deposits.	N/A
Barium	No	06/02/23	.0064 mg/l	2.0mg/l	Erosion of natural deposits.	2.0mg/l
Beryllium	No	06/02/23	0.30 ug/l	4.0 ug/l	Discharge from metal factories.	4 ug/l
Cadmium	No	06/02/23	1.0 ug/l	5 ug/l	Corrosion of galvanized pipes. Natural occurring.	5ug/l
Chromium	No	06/02/23	1.0 ug/l	100ug/1	Erosion of natural deposits.	100ug/1
Mercury	No	06/02/23	.20 ug/l	2.0ug/1	Erosion of natural deposits.	2.0ug/l
Nickel	No	06/02/23	1.0ug/l	50 ug/l	Erosion of natural deposits.	50ug/l
Selenium	No	06/02/23	1.00 ug/l	50ug/l	Erosion of natural deposits.	50ug/l

Thallium No 06/02/23 0.30 ug/l	2.0 ug/l Leaching f	. 0.5ug/l
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TABLE OF DETECTED CONTAMINANTS AT WELLS

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Contaminant	Violations Yes/No	Date of Sample	Level Detected	Regulatory Limit (MCL)	Sources In Drinking Water	MCLG
Nitrogen Nitrate	No	12/09/22	2.6 mg/l	10 mg/l	Runoff from fertilizer use leaching from septic tanks, sewage and erosion of natural deposits.	10 mg/L
Antimony	No	10/07/21	.40ug/l	6ug/l	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	6ug/l
Arsenic	No	10/07/21	1.0ug/l	10ug/1	Erosion of natural deposits	N/A
Barium	No	10/07/21	.0057mg/l	2.0mg/l	Erosion of natural deposits	2.0mg/l
Beryllium	No	10/07/21	.30ug/l	4.0ug/l	Discharge from metal factories	4ug/l
Cadmium	No	10/07/21	1.0ug/l	5ug/l	Corrosion of galvanized pipes	5ug/l
Chromium	No	10/07/21	1.0ug/l	100ug/l	Erosion of natural deposits	100ug/l
Mercury	No	10/07/21	0.20ug/l	2.0ug/l	Erosion of natural deposits	2.0ug/l
Nickel	No	10/07/21	0.86ug/l	50ug/l	Erosion of natural deposits	50ug/l
Selenium	No	10/07/21	1.0ug/l	50ug/l	Erosion of natural deposits	50ug/l
Thallium	No	10/07/21	0 .30ug/l	0.5ug/l	Leaching from ore-processing sites	0.5ug/l
PFOA	No	09/08/23	0.70NG/L 0.69NG/L	1.9ngl	Released into the environment from widespread use in commercial and industrial applications	
PFHpA PFOS	No	09/08/23	0.86NG/L 0.98NG/L	1.9ngl	Released into the environment from widespread use in commercial and industrial applications	
1,4-Dioxane	No	3/14/22	0.12UG/L	<0.20	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites	

Trihalomethanes

Village of Herkimer Samples Trihalomethanes	Violations Yes/No	Date of Sample	Level Detected (ug/l)	Regulatory Limit (MCL) in Ug/l	Sources In Drinking Water	MCLG
Highland Ave	No	06/2/23	35.0 (2) 20.8- 35.0	MCL 80	By Product Of Chlorination	N/A
Fire Station	No	06/2/23	45.5 (2) 22.7-45.5	MCL 80	By Product of Chlorination	N/A
Herkimer ARC Bus Garage	No	06/2/23	45.3 (2) 22.1-45.3	MCL 80	By Product of Chlorination	N/A
East Herkimer Troopers Barracks	No	06/2/23	51.6 (2) 27.5-51.6	MCL 80	By Product of Chlorination	N/A
Manion Heights	No	06/2/23	48.6 (2) 22.7-48.6	MCL 80	By Product of Chlorination	N/A
Lowes	No	06/2/23	50.0 (2) 26.8-50.0	MCL 80	By Product of Chlorination	N/A

Haloacetic Acids

Village of Herkimer Samples Haloacetic Acids	Violations Yes/No	Date of Sample	Level Detected Ug/l	Regulatory Limit (MCL) in Ug/l	Sources In Drinking Water	MCLG
Highland Ave	No	09/07/23	14.1 7.1-14.1	MCL 60	By Product Of CHlorination	N/A
Fire Station	No	06/02/23	16.8 (2) 8.6-16.8	MCL 60	By Product of Chlorination	N/A
	No	06/02/23	19.4 (2)	MCL 60		N/A

Herkimer ARC Bus Garage			8.8-19.4		By Product of Chlorination	
East Herkimer Troopers Barracks	No	09/07/23	21.7 (2) 10.4-21.7	MCL 60	By Product of Chlorination	N/A
Manion Heights	No	06/02/23	14.9 (2) 7.2-14.9	MCL 60	By Product of Chlorination	N/A
Lowes	No	06/02/23	16.6 (2) 9.6-16.6	MCL 60	By Product of Chlorination	N/A

Contaminant	Violations Yes/No	Date of Sample	Level Detected Max/Range Unit	Regulatory Limit (AL)	Sources	MCLG
Lead	YES	05/20/20	.022 (1) mg/l .0010040	.015mg/l	Corrosion of household plumbing systems; Erosion of natural deposits	0
Lead	YES	11/30/20	.019(1) mg/l .0010160	.015mg/l	Corrosion of household plumbing systems; Erosion of natural deposits	0
Copper	YES	05/20/20	1.7 (1) mg/l .084-2.2	1.3mg/l	Corrosion of household plumbing Systems; Erosion of natural deposits	1.3
Copper	YES	11/30/20	2.0(1) mg/l .0010-3.3	1.3mg/l	Corrosion of household plumbing Systems; Erosion of natural deposits	1.3

Radium 226	Violations	Date of Sample	Level Detection	Units/Limits	Sources	MCLG
	Yes/No					
Reservoir	No	10/07/21	ND	5 pci/l	Erosion of natural deposits.	
Well#1	No	10/07/21	ND	5 pci/l		

Well#2	No	10/07/21	ND	5 pci/l		
Radium 228	Violations	Date of Sample	Level Detection	Units/Limits	Sources	MCLG
Danamain	Yes/No	10/07/21	2.04	5 mai/1	Ensaine of national dancasite	
Reservoir	No	10/07/21	2.04	5 pci/l	Erosion of natural deposits.	
Well#1	No	10/07/21	ND	5 pci/l		
Well#2	No	10/07/21	ND	5 pci/l		

Notes: May 2020

- 1. The level presented represents the 90" percentile of the 40 sites tested in May 2020. 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 90" percentile is equal to or greater than 90% of the lead or copper values detected at your water system. In this case 40 samples were collected at your water system and the 90 percentile value was the 4th highest value. Nine Copper samples exceeded the action level and eleven Lead samples exceeded the action level.
- 2. This level represents the highest annual quarterly average along with the range of results.

December 2020

- 1. The level presented represents the 90" percentile of the 40 sites tested in December 2020. 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 90" percentile is equal to or greater than 90% of the lead or copper values detected at your water system. In this case 40 samples were collected at your water system and the 90 percentile value was the 5th highest value. Eight copper samples exceeded the action level and 11lead samples exceeded the action level.
- 2. This level represents the highest annual quarterly average along with the range of results.

Definitions to help you understand the above charts and following notification: **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.

<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.

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

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

<u>Non-Detects (ND):</u> Laboratory analysis indicates that the constituent is not present. <u>Nephelometric Turbidity Unit (NTU):</u> A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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>Picograms per liter (pg/l):</u> Corresponds to one part of liquid to one quadrillion parts of liquid (parts per quadrillion - ppq).

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

Millirems per year (mrem/vr): A measure of radiation absorbed by the body.

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

Lead. 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 homes plumbing. The Village of Herkimer 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.

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immune - 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 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).

Public Notice

Herkimer Village Public Water Supply has been found to be in violation of the New York State Sanitary Code Drinking Water Regulations and the National Primary Drinking Water Regulations. Routine water samples collected for lead during May and November 2020 found the 90th percentile of the results exceeded the State and Federal action level. When this occurs, delivery of public education is required to inform consumers. Delivery of public material and completion of the public education tasks was required by November 30, 2020. The violation results from failing to provide public education material as required. Public water systems that violate this drinking water standard are required to make public notification of the violation through the following notice:

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. The greatest risk of lead exposure is to infants, young children and pregnant woman.

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. The primary source of lead exposure for most children is lead-based paint. Other sources of lead exposure include lead-contaminated dust or soil, and some

plumbing materials.

Steps you can take to reduce your exposure to lead in your drinking water:

- 1. Run your water to flush out lead. Run water for 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking, if it hasn't been used for several hours. This flushes lead- containing water from the pipes.
- 2. Use cold water for cooking and preparing baby formula. Do not cook with or drink water from the hot water tap: Lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- 3. Do not boil water to remove lead. Boiling water will not reduce lead.
- 4. Replace your plumbing fixtures if they are found to contain lead. Plumbing materials including brass faucets, fittings, and valves, including those advertised as "lead-free" may contribute lead to drinking water. The law previously allowed enduse brass fixtures, such as faucets, with up to 8percent lead to be labeled as "lead-Free". As of January 4, 2014, end-use brass fixtures, such as faucets, fittings and valves, must meet the new "lead-free" definition of having no more than 0.25 percent lead on a weighted average. Visit the National Sanitation Foundation Website at: http://www.nsf.org/newsroom_pdf/lead_free_certification_marks.pdf to learn more about lead-containing plumbing fixtures and how to identify lead-free certification marks on new fixtures.
- 5. Use bottled water or use a water filter. If your home is served by a lead service line, and /or if lead containing plumbing materials is found to be in your home, you may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International at 800-NSF-8010 or visit http://www.nsf.org/consumer-resources/what-is-nsf certification/faucets-plumbing-certification/lead-older-homes, for a consumer guide of approved water filters. Be sure to maintain and replace a filter devise in accordance with the manufacturer's instructions to protect water quality. Any measure you take to reduce your exposure to lead should be continued until the lead source(s) has been minimized or eliminated.

If your child has not had routine well-child visits (since the age of one year) and you are concerned about lead exposure to your child, contact your local health department or healthcare provider to find out how you can get your child tested for lead. This notice is provided so that you can take prudent steps to protect your health. Individuals that have symptoms described in the above notice may wish to seek medical attention. Additional samples will be taken to monitor the water quality.

Public Notice

Herkimer Village Public Water Supply has been found to be in violation of the New York State Sanitary Code Drinking Water Regulations and the National Primary Drinking Water Regulations.

The New York State Department of Health determined that the water being supplied from the transmission main and prior to treatment is surface water and that we do not provide adequate treatment to assure that potentially harmful organisms are removed or inactivated.

Until we adopt measures to increase treatment or use an alternate source, we are

advising you of the following:

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

All customers receiving water directly from the transmission main prior to filtration must bring tap water to a rolling boil, boil for one minute, and cool before using. Alternatively, bottled water certified for sale by the New York State Department of Health may be used. Boiling or bottled water should be used for drinking, making ice, washing dishes, brushing teeth, and preparing food until further notice.

This notice is provided so that you can take prudent steps to protect your health. Individuals that have symptoms described in the above notice may wish to seek medical attention.

If you have any questions, please contact Scott Blais at (315) 866-3303, or the New York State Department of health, Herkimer District at (315) 866-6879.

The Village of Herkimer is undergoing a Corrosion Control Study with Corona Environmental Consulting, LLC. in an attempt to resolve the lead and copper violations. Public Education pertaining to these violations has been out to all customers.

Although our system has an adequate supply of water to meet present and future demands there are a number of reasons why it is important to conserve water:

In General:

Saving water saves energy and some of the costs of delivering the water to our customers. Saving water lessens the strain on the water system during a dry spell or drought.

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. Conservation tips include:

- Automatic dishwasher use 15 gallons for every cycle, regardless of how many dishes are loaded. To get your money's worth, load it to capacity.
- Turn off water while brushing your teeth. Check every faucet in your house for leaking. Just a slow drip can waste 15 20 gallons a day.
- Check your toilet 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 leaks.

Thank you for allowing us to provide your family with quality drinking water this year. Please call our office at 866-0150 if you have any questions about this report or any part of our water system.

Scott Blais Water/Sewer Superintendent VILLAGE OF HERKIMER 120 Green Street Herkimer, NY 13350