



# 2025 ANNUAL WATER QUALITY REPORT FOR THE VILLAGE OF HAMEL

This report is designed to inform you about the quality of water we delivered to you over the past year. Copies will be available at the Hamel Village Hall, 111 S. Old U.S. Rt. 66, Hamel, IL. If you wish to have a copy mailed to you or if you have any questions about this report, please contact the water supply operator, Don Grimm (618) 633-2484, or attend our regularly scheduled meetings, 7:00 p.m. on the second Tuesday of each month at the Village Hall, 111 S. Old U.S. Rt. 66, Hamel, IL.

Hamel purchases water from Bond/Madison Water Company who in turn is supplied by the Illinois American Water Company. This water is piped from the Granite City and East St. Louis Water Treatment Plant which receives water from the Mississippi Rivers. A source water assessment for the Granite City and East St. Louis systems have been completed by the Illinois EPA. If you would like a summary of the information contained in this report, contact Jamie Gough, Illinois American Water Quality Supervisor at (618) 250-8723. IEPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. To view a summarized version of the completed Source Water Assessments you may access the IEPA website at <http://www.dataservices.epa.illinois.gov/swap/factsheets.aspx>. IEPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection.

## SOURCE WATER INFORMATION

Source Water Name		Type of Water	Report Status	
CC 02-METER STAUNTON RD.	FF-IL1195280 TP02	SW	<u>Active</u>	NE IL 140 AND STAUNTON RD METER
CC 03-MASTER METER	FF IL0050020 TP01	SW	<u>Active</u>	

The Granite City distribution system also has an interconnection with the East St. Louis distribution system. Water is routinely supplied to the Granite City system through that connection. To view a summary version of the completed Source Water Assessments you may access the IEPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

The Village of Hamel routinely monitors for contaminants in your drinking water according to Federal and State laws. The first table in this report shows the results of Illinois American's monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2025 at their Granite City supply. Because customers may at times receive water from the East St. Louis supply, the second table contains the monitoring information from that distribution system. The third table includes the system monitoring data for the Village of Hamel.

## **Source of Drinking Water**

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 activity. Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least some small amounts of 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.

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## **Source Water Assessment**

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by The Village of Hamel or call our water operator at 618-633-2484. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: IL AMERICAN-GRANITE City Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Within the Illinois portion of the Mississippi River Watershed, which is illustrated in Figure 3, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Illinois portion of the Mississippi River Basin contributes to the susceptibility of the IAWC-Granite City intakes. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the IAWC-Granite City intake was determined using data from a joint U. S. Environmental Protection Agency/U. S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States. Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analysis of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 92% of these spills occurred along the Mississippi and/or the Illinois River. Figure 2 shows the critical area of concern (Zone 1) for the IAWC-Granite City surface water intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. Information concerning spill response planning on the Mississippi River may be found at the U. S. EPA website [www.epa.gov/region5/oil](http://www.epa.gov/region5/oil), and additional data can also be downloaded at the U. S. Geological Survey's FTP site [ftp://ftp.umesc.er.usgs.gov/pub/gis\\_data/oil\\_spill](ftp://ftp.umesc.er.usgs.gov/pub/gis_data/oil_spill). Source of Water: IL AMERICAN-

EAST ST LOUIS Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Within the Illinois portion of the Mississippi River Watershed, which is illustrated in Figure 3, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Illinois portion of the Mississippi River Basin contributes to the susceptibility of the IAWC-East St. Louis intakes. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the IAWC-East St. Louis intake was determined using data from a joint U. S. Environmental Protection Agency/U. S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States. Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analysis of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 92% of these spills occurred along the Mississippi and/or the Illinois River. Figure 2 shows the critical area of concern (Zone 1) for the IAWC-East St. Louis surface water intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. Information concerning spill response planning on the Mississippi River may be found at the U. S. EPA website [www.epa.gov/region5/oil](http://www.epa.gov/region5/oil), and additional data can also be downloaded at the U. S. Geological Survey's FTP site

# What are the Sources of Contaminants?

To provide tap water that is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, aquifers and/or groundwater. 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 activity.

## CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

### Microbial Contaminants

such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

### Inorganic Contaminants

such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

### Pesticides and Herbicides

which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.

### Organic Chemical Contaminants

including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

### Radioactive Contaminants

which can be naturally occurring or be the result of oil and gas production and mining activities.

## Definition of Terms

These are terms that may appear in your report.

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

**Compliance Achieved:** Indicates that the levels found were all within the allowable levels as determined by the USEPA.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**LRAA:** Locational Running Annual Average

**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 using the best available treatment technology. See also Secondary Maximum Contaminant Level (SMCL).

**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.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 contaminants.

**MREM/year:** Millirems per year (a measure of radiation absorbed by the body).

**MFL:** Million fibers per liter.

**NA:** Not applicable

**ND:** Not detected

**Nephelometric Turbidity Units (NTU):** Measurement of the clarity, or turbidity, of the water.

**picocuries per liter (pCi/L):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

**parts per billion (ppb):** One part substance per billion parts water, or micrograms per liter.

**parts per million (ppm):** One part substance per million parts water, or milligrams per liter.

**parts per trillion (ppt):** One part substance per trillion parts water, or nanograms per liter.

**RAA:** Running Annual Average

**Range of Detections:** The range of individual sample results, from lowest to highest, that were collected during the sample period.

**Secondary Maximum Contaminant Level (SMCL):** Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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

**%:** Percent

## MEASUREMENTS

### Parts Per Million



in a 10 gallon fish tank

### Parts Per Billion



in a 10,000 gallon swimming pool

### Parts Per Trillion



in 35 junior size Olympic pools

# GRANITE CITY WATER REPORT

## LEAD AND COPPER MONITORING PROGRAM - At least 30 tap water samples collected at customers' taps every 3 years.

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	Homes Above Action Level	Typical Source
Copper (ppm)	2025	Yes	1.3	1.3	0.371	0	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

## DISINFECTION BYPRODUCTS - Collected in the Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Haloacetic Acids (HAAs) (ppb)	2025	Yes	NA	60	40	31.7-49	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs) (ppb)	2025	Yes	NA	80	57	29-66.4	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location. The Highest Compliance Result reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average.

## DISINFECTANTS - Collected in the Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Chloramines (ppm)	2025	Yes	MRDLG = 4	MRDL = 4	2.7	2-3	Water additive used to control microbes.

### REGULATED SUBSTANCES - Collected at the Granite City Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Fluoride (ppm)	2025	Yes	4	4.0	0.7	0.73-0.73	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate measured as nitrogen (ppm)	2025	Yes	10	10	3	2.5-2.5	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

### OTHER SUBSTANCES OF INTEREST - Collected at the Granite City Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Result	Range Detected	Comments
Sodium (ppm)	2025	Yes	NA	NA	26	25.8-25.8	Erosion from naturally occurring deposits. Used in water softener regeneration.

For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

### Total Organic Carbon – Granite City Treatment Plant

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA. TOC has no health effects but contributes to the formation of disinfection by-products. Reduction of TOC can help to minimize disinfection by-product formation.

### TURBIDITY - Collected at the Granite City Treatment Plant

Substance (with units)	Requirement	Limit (Treatment Technique)	Level Detected	Compliance Achieved	Likely Source of Contamination
Turbidity (NTU)	Highest single measurement	1 NTU	0.2 NTU	Yes	Soil runoff.
	Lowest monthly % meeting limit	0.3 NTU	100%	Yes	Soil runoff.

Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the effectiveness of our filtration system, water quality, and disinfectants. The treatment technique requires that at least 95% of routine samples are less than or equal to 0.3 NTU, and no sample exceeds 1 NTU. We are reporting the percentage of all readings meeting the standard of 0.3 NTU, plus the single highest reading for the year.

## UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST – Collected at the Granite City Treatment Plant or Distribution System					
Parameter	Units	Year	Average Result	Range Detected	Typical Source
Total Haloacetic Acids	ppb	2019	24	16 to 35	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	2019	3.2	1.4 to 7.1	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	ppb	2019	27	18 to 42	By-product of drinking water disinfection
Manganese*	ppb	2019	10	4.7 to 16	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

\* Manganese has a Secondary MCL of 150 ppb.

## PER- AND POLYFLUOROALKYL SUBSTANCES

Per- or polyfluoroalkyl substances (PFASs) are synthetic substances used in a variety of products, such as: stain resistant fabric, non-stick coatings, firefighting foam, paints, waxes, and cleaning products. They are also components in some industrial processes like electronics manufacturing and oil recovery. While the EPA has not developed drinking water standards for PFAS, Illinois American Water recognizes the importance of testing for these contaminants. Compounds detected are tabulated below, along with typical sources.

For more information about PFAS health advisories <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>

UNREGULATED PERFLUORINATED COMPOUNDS – Collected at the Granite City Treatment Plant						
Parameter	Year Sampled	Units	Health-Based Guidance Level	Highest Result	Range Detected	Typical Source
Perfluorobutanesulfonic Acid (PFBS)	2024	ppt	2,100	17.4	9.9 to 17.4	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorooctanoic Acid (PFOA)	2025	ppt	2	1.1	ND to 2.3	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorohexanoic Acid (PFHxA)	2025	ppt	3,500	1.1	ND to 2.3	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.

The health-based guidance levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that guidance levels are not regulatory limits for drinking water. Rather, the guidance levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.

# East St. Louis Plant Information

The Granite City Distribution System is supplemented by the East St. Louis Water Treatment Plant. Below is the applicable data.

## Total Organic Carbon – East St. Louis Treatment Plant

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA. TOC has no health effects but contributes to the formation of disinfection by-products. Reduction of TOC can help to minimize disinfection by-product formation.

### TURBIDITY - Collected at the Treatment Plant

Substance (with units)	Requirement	Limit (Treatment Technique)	Level Detected	Compliance Achieved	Likely Source of Contamination
Turbidity (NTU)	Highest single measurement	1 NTU	0.2	Yes	Soil runoff.
	Lowest monthly % meeting limit	0.3 NTU	100%	Yes	Soil runoff.

Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the effectiveness of our filtration system, water quality, and disinfectants. The treatment technique requires that at least 95% of routine samples are less than or equal to 0.3 NTU, and no sample exceeds 1 NTU. We are reporting the percentage of all readings meeting the standard of 0.3 NTU, plus the single highest reading for the year.

### REGULATED SUBSTANCES - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Fluoride (ppm)	2025	Yes	4	4.0	0.8	0.75-0.75	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate measured as nitrogen (ppm)	2025	Yes	10	10	2	2.06-2.77	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

#### OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Result	Range Detected	Comments
Sodium (ppm)	2025	Yes	NA	NA	25	25.1-25.1	Erosion from naturally occurring deposits. Used in water softener regeneration.

For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

#### UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

#### ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST – Collected at the East St. Louis Treatment Plant

Parameter	Units	Year	Average Result	Range Detected	Typical Source
Manganese*	ppb	2019	7.3	2.5 to 17	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

\* Manganese has a Secondary MCL of 150 ppb.

## PER- AND POLYFLUOROALKYL SUBSTANCES

Per- or polyfluoroalkyl substances (PFASs) are synthetic substances used in a variety of products, such as: stain resistant fabric, non-stick coatings, firefighting foam, paints, waxes, and cleaning products. They are also components in some industrial processes like electronics manufacturing and oil recovery. While the EPA has not developed drinking water standards for PFAS, Illinois American Water recognizes the importance of testing for these contaminants. Compounds detected are tabulated below, along with typical sources.

For more information about PFAS health advisories <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>

### UNREGULATED PERFLUORINATED COMPOUNDS

Parameter	Year Sampled	Units	Health-Based Guidance Level	Highest Result	Range Detected	Typical Source
Perfluorooctane Sulfonic Acid (PFOS)	2025	ppt	14	0.5	ND to 2	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorooctanoic Acid (PFOA)	2025	ppt	2	1.1	ND to 2.2	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorohexanoic Acid (PFHxA)	2025	ppt	3,500	1.1	ND to 2.3	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorobutanesulfonic Acid (PFBS)	2025	ppt	2,100	0.5	ND to 2	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.

The health-based guidance levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that guidance levels are not regulatory limits for drinking water. Rather, the guidance levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.

# VILLAGE OF HAMEL WATER REPORT

## Lead and Copper

Definitions:

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Copper Range: 0 to 319ppm

Lead Range: 0 to 0ppb

Our Community Water Supply has developed a service line material inventory. To obtain a copy of the system's service line inventory, or lead tap sampling data, call Don Grimm, Water Supply Coordinator, at 618-633-2484.

Regulated Substances								
	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
<b>Lead</b>	2022	0	15	0	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Copper</b>	2025	1.3	1.3	0.339	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

**Lead** - 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. Village of Hamel is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact Don Grimm, Director of Public Works for the Village of Hamel at 618-633-2484. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Chloramines</b>	2025	1.8	1.5-1.9	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
<b>Haloacetic Acids (HAA5)</b>	2025	4	0-9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
<b>Total Trihalomethanes (TTHM)</b>	2025	65	22.9-70	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

\*Chlorine and chloramines are disinfecting agents added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most water systems in Illinois are required by law to add either chlorine or chloramines. The values reported reflect multiple locations in the service area. Chloramines are a disinfectant made from combining chlorine and ammonia.

## Violations Table

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

<b>Violation Type</b>	<b>Violation Begin</b>	<b>Violation End</b>	<b>Violation Explanation</b>	<b>Corrective Action</b>
<b>PUBLIC NOTICE RULE LINKED TO VIOLATION</b>	07/12/2025	07/25/2025	We failed to adequately notify you, our drinking water consumer, about a violation of the drinking water regulations.	We have since given the required notice. The results showed we are meeting drinking water standards.

# DEFINITION OF TERMS

## LEAD

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. We cannot control the variety of materials used in plumbing components. When your water has been sitting around 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 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

## CRYPTOSPORIDIUM

Cryptosporidium is a protozoan found in untreated surface waters through the United States (the organism is generally not present in a ground water source). Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, people with severely weakened immune systems have a risk of developing life-threatening illness. We encourage such people to consult their doctors regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it is spread through means other than drinking water.

USEPA issued a new rule in 2006 that requires systems with higher Cryptosporidium levels in their source water to provide additional treatment.

In 2015, our monitoring of the Mississippi River raw untreated water indicated the presence of this organism. The Mississippi River cryptosporidium levels ranged from not detected to 0.698 oocysts/L, with an average of 0.079 oocysts/L. Although this organism is present, it is at levels low enough that no supplemental treatment is required by our facility per USEPA standards.

**Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present. **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. **Picocuries per liter (pCi/L)** - Picocuries per liter is a measure of the radioactivity in water. **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body. **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. **Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water. **Maximum Contaminant Level-** The "Maximum 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-** 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. **Maximum Residual Disinfectant Level-** the MRDL is the highest level of disinfectant routinely allowed in drinking water. Addition of a disinfectant is necessary for control of microbial contaminants. **Maximum Residual Disinfectant Level Goal-** The level of drinking water disinfectant below which there is no known or expected risk to health.

Your drinking water meets or exceeds all Federal and State requirements. "All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or are manmade. Those contaminants can be microbes, organic or inorganic chemicals, or radioactive materials" 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

Some people may be more vulnerable to contaminants 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 another immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline.