Annual Drinking Water Quality Report

HAMPTON IL1610300

Annual Water Quality Report for the period of January 1 to December 31, 2023

This report is intended to provide you with important information about your drinking water and the efforts made by the Hampton water system to provide safe drinking water. The source of drinking water used by Hampton is purchased water from the City of East Moline.

For more information regarding this report contact: Eric Toalson 309-755-7165 email: etoalson@hamptonil.org

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 scheduled meetings. The Village Board meets on the second and fourth Monday of the month at 6:30 PM at the Village Hall, 520 First Avenue.

Source of Drinking Water

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

In order 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).

Lead In Drinking Water

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. The Village of Hampton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If 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 your 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 www.epa.gov/safewater/lead.

Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at the East Moline Water Treatment Plant office. This plan is an assessment of the delineated area around our listed sources through which contaminates, if present, could migrate and reach our source water. It includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources. According to the SWAP, East Moline had a susceptibility rating of medium. If you would like to review the SWAP, you may access the assessment from the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

East Moline
Water Quality Test Results

Table 1: Substances Regulated by the IEPA

Substance we test for...	Unit the substance is measured in ...	Year we sampled...	MCL or MRDL	MCLG or MRDLG	Amount we detected...	Range detected	Violation	Likely Source of contamination...
Combined Radium 226/228	pCi/L	2023	5	0	1.52	1.52-1.52	No	Erosion of natural deposits
Gross Alpha excluding Radon & Uranium	pCi/L	2015	15	0	0.552	0.552-0.552	No	Erosion of natural deposits
Barium	ppm	2016	2	2	0.043	0.043-0.043	No	Discharge of drilling wastes Discharge from metal refineries Erosion of natural deposits
Fluoride	ppm	2016	4	4	0.749	0.749-0.749	No	Discharge from fertilizer and aluminum factories Erosion of natural deposits Water additive that enhances dental health
Nitrate	ppm	2016	10	10	2.8	2.8-2.8	No	Erosion of natural deposits Leaching from septic tanks and sewage Runoff produced from agriculture processes
Turbidity[1]	NTU	2016	1	NA	0.33	0.09-0.33	No	Soil runoff
Turbidity	Lowest monthly % of samples meeting limit	2016	0.3 NTU	NA	100%	100%	No	Soil runoff

[1]Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Table 2: Substances Regulated by the IEPA

Substance we tested for...		Violation	Likely source of contamination...
Total Organic Carbon	The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA, unless a TOC violation is noted in the violation section.	No	Naturally present in the environment

Table 3: Substances Regulated by the State of IL[2]

Substance we test for...	Unit the substance is measured in ...	Year we sampled...	MCL or MRDL	MCLG or MRDLG	Amount we detected...	Range detected	Violation	Likely Source of contamination...
Manganese	ppb	2016	150	150	1.4	1.4-1.4	No	Erosion of naturally occurring deposits
Sodium	ppm	2016	NA	NA	26	26-26	No	Erosion of naturally occurring deposits Used in water softener regeneration

[2]Manganese and Sodium are not currently regulated by the U.S. EPA. However, the state has set MCL's for supplies serving a population of 1000 or more.

Table 4: Unregulated Contaminant Monitoring Rule (UCMR3) Substances[3]

Substance we test for...	Unit the substance is measured in ...	Year we sampled...	MCL or MRDL	MCLG or MRDLG	Amount we detected...	Range detected	Violation	Likely Source of contamination...
1,4-Dioxane:								Cyclic Aliphatic Ether- which is used as a solvent or solvent stabilizer in manufacturing and processing of paper, cotton, textile products, automotive coolant, cosmetics, shampoos, cleaning agents, surface coating,
Entry Point	ppb	2013	NA	NA	0.31	0.00-0.56	NA	and adhesive agents
Chlorate:								
Entry Point	ppb	2013	NA	NA	174	46-310	NA	Erosion of naturally occurring deposits
Distribution	ppb	2013	NA	NA	191	46-340	NA	Used in water softener regeneration
Chromium 6:								Naturally occurring element Used in making steel and other alloys
Entry Point	ppb	2013	NA	NA	0.05	0.00-0.07	NA	Used for chrome plating, dyes, pigments, leather tanning,
Distribution	ppb	2013	NA	NA	0.06	0.03-0.09	NA	and wood preservation
Molybdenum:								Commonly used from molybdenum trioxide used as a chemical reagent
Entry Point	ppb	2013	NA	NA	0.06	0.00-1.3	NA	Naturally occurring element found in ores, plants,
Distribution	ppb	2013	NA	NA	0.06	0.00-1.3	NA	animals, and bacteria
Strontium:								Naturally occurring element
Entry Point	ppb	2013	NA	NA	96	86-110	NA	Commercially found in the faceplate glass of cathode-ray
Distribution	ppb	2013	NA	NA	92	87-110	NA	televisions to block x-ray emissions
Vanadium:								Naturally occurring elemental metal
Entry Point	ppb	2013	NA	NA	0.96	0.29-1.60	NA	Used in the form of vanadium pentoxid as a chemical
Distribution	ppb	2013	NA	NA	0.98	0.43-1.50	NA	intermediate and catalyst

[3]Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

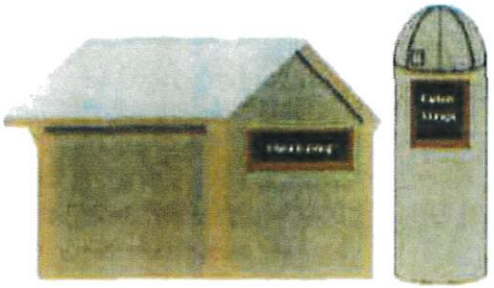
Table 5: Cryptosporidium samples were collected from our source water[4]

Substance we test for...	Unit the substance is measured in ...	Year we sampled...	MCL or MRDL	MCLG or MRDLG	Amount we detected...	Range detected	Violation	Likely Source of contamination...
Cryptosporidium	Oocysts per liter	2016	TT	0	5	0-5	No	Naturally present in the environment

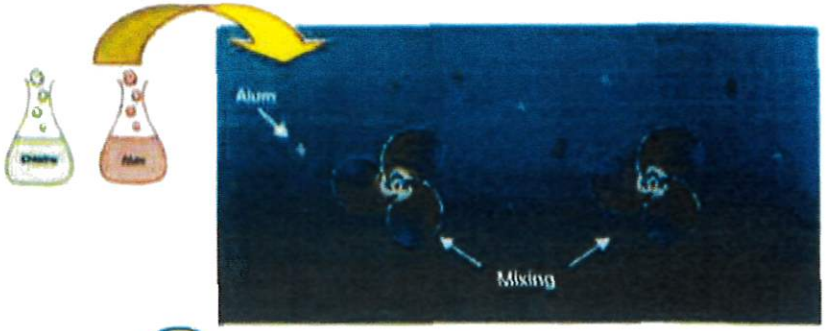
[4]Our source water is the Mississippi River

EAST MOLINE ' S WATER TREATMENT PROCESS

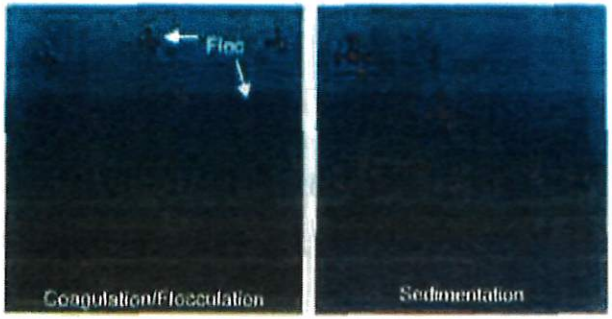
1 Raw surface water is taken in from the Mississippi River via an intake pipe and flows to the intake building.



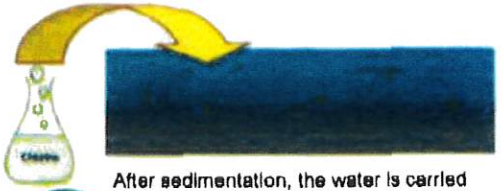
2 Here the water flows through a large mesh screen to remove debris, and a chemical called Carbon is added to remove unwanted tastes and odors from the water. The water is then pumped to the water plant for further treatment.



3 At the water plant the water is treated with a chemical called Aluminum sulfate (alum). Alum is used in a process called coagulation, which helps dirt, bacteria, algae, and other particles bind together and form larger particles called floc. These chemicals are added to the water and mixed using large propeller mixers.

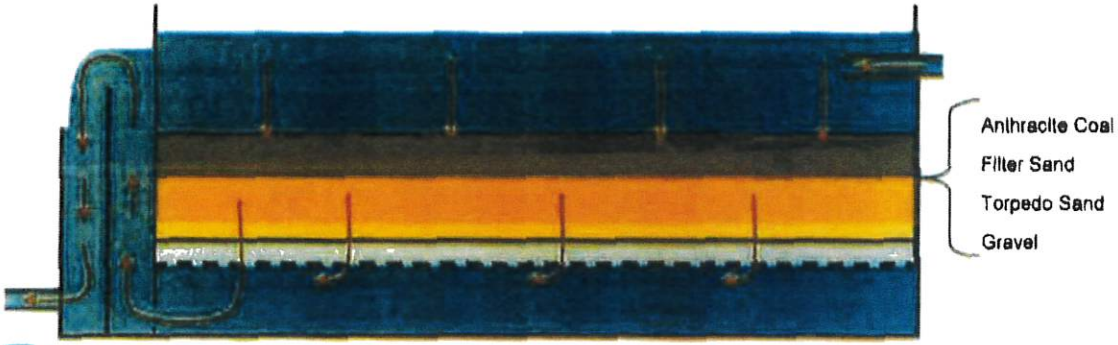


4 During the coagulation/flocculation stage of treatment the water goes through a series of basins that mix progressively slower and allow floc to become heavy enough that it will drop to the bottom of the sedimentation basin. The floc is then removed from the bottom of the sedimentation basin using a large sweep.

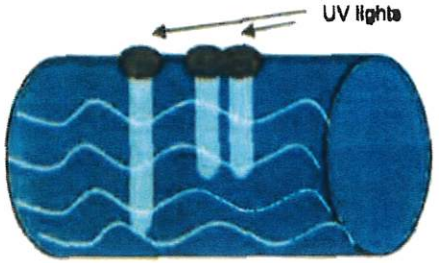


5 After sedimentation, the water is carried through a settled water channel to the filters. Chlorine is added in the settled water channel to disinfect the water.

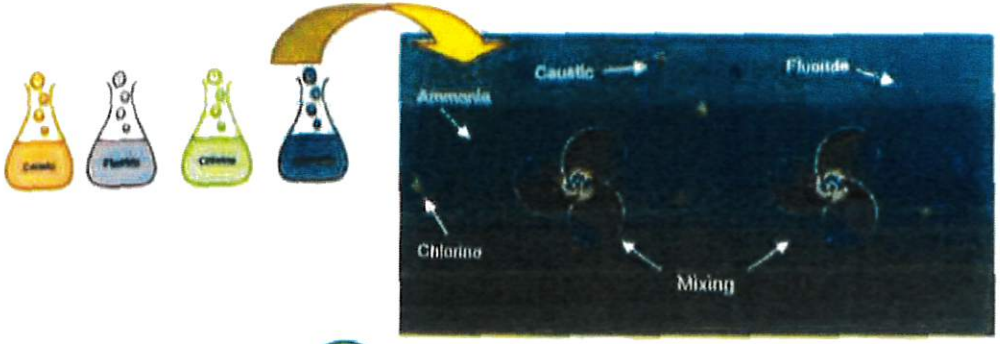
EAST MOLINE ' S WATER TREATMENT PROCESS



6 Any particles remaining in the water after coagulation and sedimentation are removed by passing the water through filters made from crushed coal (anthracite), sand, and gravel. The filters catch the small particles and do not allow them to pass through the filter.



7 Some organisms in the water, such as Giardia and Cryptosporidium, are resistant to disinfection treatment and therefore must be inactivated. We treat the water with ultraviolet (UV) radiation to inactivate these organisms.



8 After UV inactivation, the water is treated with a combination of chlorine and ammonia to form a product called chloramine. Chloramines further disinfect the water while hindering the formation of unwanted trihalomethanes (THMs). In addition, Fluoride is added to the water to help protect our teeth from decay, and Caustic is added to help stabilize the pH of the water

9 Finally, based on consumer demands, finished water is pumped from the clearwell storage tank at the water plant to the cities ' four water towers for additional storage. The water then flows through underground water mains and water service lines to homes and businesses throughout the city.

Consumer Confidence Report

Annual Drinking Water Quality Report

HAMPTON

IL1610300

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The source of drinking water used by HAMPTON is Purchased Surface Water

For more information regarding this report contact:

Name Eric Toalson

Phone 309.755.7165

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Source of Drinking Water

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Source Water Information

Source Water Name		Type of Water	Report Status	Location
CC 01 MASTER METER 1	FF IL1610250 TP01	SW	ACTIVE	158th ST. N, EAST MOLINE, IL

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 City Hall or call our water operator at 309.755.7165 . 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: EAST MOLINEIllinois 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 Upper 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 Upper Mississippi River Basin contributes to the susceptibility of the East Moline intakes. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the East Moline 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 East Moline 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. Further information concerning spill response planning on the Mississippi River may be found in U.S. EPA's website at www.epa.gov/region5/oil and at U.S. Geological Survey's website ftp://ftp.umesc.er.usgs.gov/pub/gis_data/oil_spill. The Upper Mississippi River Water Suppliers Coalition is currently working to develop an Early Warning Monitoring Network on the Mississippi River. This Network would enhance response times by providing supplies with early notification of spills on the Mississippi River.

Lead and Copper

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	06/25/2021	1.3	1.3	0.16	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	06/25/2021	0	15	1.1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
Maximum Contaminant Level or 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.
Maximum Contaminant Level Goal or 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 or 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 or 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.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

Water Quality Test Results

ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	2.6	2 - 3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	36	18.2 - 49.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	34	4.71 - 44.6	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Violations Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	**Violation Begin**	**Violation End**	**Violation Explanation**
CCR REPORT	07/01/2023	2023	We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.

Last year we failed to deliver the report on time, this year we are making sure that doesn't happen again