ANNUAL DRINKING WATER QUALITY REPORT

NORTH MORGAN WATER COOP

IL1375050

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 water system to provide safe drinking water.

The source of drinking water used by North Morgan Water Coop is Purchased Surface Water.

For more information regarding this report contact:

Name: North Morgan Water Coop.

Phone: 1-217-204-6042

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

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. In some cases, the water may dissolve radioactive material. Water can also 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 system, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which may 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 stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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.

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 USEPAs Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 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 or at http://www.epa.gov/safewater/lead.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC01 – Black's Lane Master Meter	Surface Water	Active	East of Jacksonville, near the intersection of Orchard Cove and Blacks Lane
CC02 – Route 78 Master Meter	Surface Water	Active	Northwest of Jacksonville, along Rte. 78, west of Westgate Ave.
CC03 – Master Meter (Virginia)	Ground Water	Active	South of Virginia, along Virginia Rd east of Petefish Rd.

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 call 1-217-204-6042. To view a summary version of the completed Source Water Assessments, including: Importance of Source Waters, 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.

North Morgan Water Coop purchases water from the City of Virginia. To determine Virginia's susceptibility to contamination, a Well Site Survey, published by the Illinois EPA in 1992, was reviewed. Based upon this survey, there are no potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Virginia's wells. However, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated additional sites with on-going remediation which may be of concern. Based upon this information, the Illinois EPA has determined that the Virginia community water supply's source water is susceptible to contamination. As such, the Illinois EPA has provided 5-year recharge area calculations for the wells. The land use within the recharge area of the wells was analyzed as part of this susceptibility determination. This land use includes agricultural properties.

North Morgan Water Coop purchases water from the City of Jacksonville. 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. Causes of pollution to the lake include nutrients, siltation, suspended solids, and organic enrichment. Primary sources of pollution include agricultural runoff, land disposal (septic systems), and shoreline erosion.

2023 Regulated Contaminants Detected

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 (AL): 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	2023	1.3	1.3	.14	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2023	0	15	4.3	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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 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.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Level 1 Assessment: A level 1 assessment is the 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.

Regulated Contaminants

Disinfectants and Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	1.1	1 – 1.2	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	7	3.9 – 9.76	n/a	60	ppb	No	Byproduct of drinking water chlorination.
Total Trihalomethanes (TTHM)	2023	21	14.33 – 22.39	n/a	80	ppb	No	Byproduct of drinking water chlorination.

Abbreviations:
n/a: not applicable
mrem: millirems per year (a measure of radiation absorbed by the body)
TT: treatment technique; required process intended to reduce the level of a contaminant in drinking water.
ppb: parts per billion or micrograms per liter (µg/L)
ppm: parts per million or milligrams per liter (mg/L)
pCi/L: picocuries per liter (a measure of radioactivity)
Note: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.
Note: This report includes raw, finished and distribution water sample results.

THE FOLLOWING WATER MONITORING DATA IS PROVIDED BY THE CITY OF JACKSONVILLE, ILLINOIS, AS THE PARENT WATER SUPPLY FOR THE NORTH MORGAN WATER COOP.

City of Jacksonville (IL1370200) Regulated Contaminants Detected in 2023 (collected in 2023 unless noted)

Coliform Bacteria

MCL - Coliform	MCLG	Total Coliform Maximum Contaminant Level	Highest Number of Positive	MCL- Fecal Coli-form or E-Coli	Violation ?	Total # Positive E-Coli or Fecal Coliform Samples	Likely Source of Contaminant
Monthly Samples	0		0	0	No	0	Naturally present in the environment

Lead & Copper (Collection Date 08/01/2023)

	Lead Action Level (AL)	90th Percentile	# Sites Over (AL)	MCLG	Units	Violation ?	Likely Source of Contamination
Lead **	15	1.3	0	0	ug/L	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper **	1.3	0.0047	0	1.3	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

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 City of Jacksonville 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 your drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact the Water Plant at 217-479-4660. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Regulated Contaminants	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation?	Likely Source of Contaminant
Some contaminants may include raw water data from emergency backup wells.							
Disinfectants & Disinfection By-Products							
Free Chlorine	1.2	0 - 2	ppm	MRDLG = 4	MRDL=4	No	Water additive used to control microbes
Haloacetic Acids (HAA5)	16	12.1 - 23.6	ppb	No goal for total	60	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	67	41 - 82.6	ppb	No goal for total	80	No	By-product of drinking water disinfection
Inorganic Contaminants (Sodium is not currently regulated by the USEPA. However, the state has set an MCL for supplies serving a population of 1,000 or more.)							
Barium	0.011	0.011 - 0.011	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	0.6	0.57 - 0.57	ppm	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate(measured as Nitrogen)	1	1.4 - 1.4	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	35	35 - 35	ppm			No	Erosion of naturally occuring deposits; used in water softener regeneration
Total Organic Carbon	The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set , unless a TOC violation is noted in the violations section.						

In 2021, our Public Water Supply was sampled as part of the State of Illinois PFAS Statewide Investigation. Eighteen PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS health advisories visit http://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination	
Lowest monthly % meeting limit	0.3 NTU	100%	No	Soil Runoff	Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of
Highest single measurement	1 NTU	0.091 NTU	No	Soil Runoff	water quality and the effectiveness of our filtration system and disinfectants.

Radioactive Contaminants UNTREATED SOURCE WATER							
Combined Radium 226/228 (sample date 04/06/23)	1.71	1.31 - 1.71	pCi/L	0	5	No	Erosion of natural deposits
Gross Alpha (Excluding Radon & Uranium) (sample date 04/06/23)	3.67	0 - 3.67	pCi/L	0	15	No	Erosion of natural deposits

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 call Ricky Hearin, Superintendent of Operations, at (217)479-4660. 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.p1.
Source Water Information - Intake (52123) Lake Mauvaisterre Intake, Water type SW, Report Status good, 600 ft SE WTP, Well (52120) Local #1,2,3 Ranney Collector Well, IL River, Water type GU, Report Status good, Naples IL.
**The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

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. **NTU:** The amount of turbidity in a water sample as measured by a nephelometric turbidimeter.
Level 1 Assessment: 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 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.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. **pCi/L:** Picocuries per liter - a measure of radioactivity.
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. **mrem:** millirems per year (a measure of radiation absorbed by the body)
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. **Na:** Not applicable
Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
ppm: Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. **ppb:** Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. **ug/L:** Parts per billion.
Treatment Technique or TT: A required process intended to reduce the level of contaminant in drinking water.
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.

THE FOLLOWING WATER MONITORING DATA IS PROVIDED BY THE CITY OF VIRGINIA, ILLINOIS, AS THE PARENT WATER SUPPLY FOR THE NORTH MORGAN WATER COOP.

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	1.2	0.8 - 1.3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2023	6	6.3 - 6.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	23	23 - 23	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2023	0.00934	0.00934 - 0.00934	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2023	0.38	0.38 - 0.38	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2023	2	2.11 - 2.11	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2023	9010	9010 - 9010			ppb	N	Erosion from naturally occuring deposits. Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	10/26/2020	0.85	0.85 - 0.85	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	10/26/2020	1	1 - 1	0	15	pCi/L	N	Erosion of natural deposits.

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	08/30/2023	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.