CITY OF MORRISON WATER DEPARTMENT - IL1950350
Water Quality Report
For the period of January 01 to December 31, 2020
HOW SAFE IS OUR WATER?

In 2020, as in years past, your tap water met all USEPA and state drinking water health standards. Our system vigilantly safeguards its groundwater supply, and we are able to report that the department had no violations of a contaminant level or of any other water quality standard during the past year. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies. We invite you to participate in the decision-making processes that affect drinking water quality. Please feel welcome to attend any of our regularly scheduled City Council meetings and work sessions which are held at 7:00 PM on the second and fourth Mondays of each month at the Morrison Community Room located at 307 S. Madison Street. The City of Morrison Water Department will notify you immediately if there is any reason for concern about your drinking water.

This report is intended to provide you with important information about your drinking water and the efforts made by the City of Morrison Water Department to provide safe drinking water for our residents.
The source of drinking water used by the City of Morrison is Ground Water.
For more information regarding this report, contact:
Name: Lori Matlack
Phone: 815-772-7657

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 groundwater wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 USEPA's Safe Drinking Water Hotline at (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 (800) 426-4791.

In order to ensure that tap water is safe to drink, USEPA 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.

Contaminants that may be present in source water include:

- Micro 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 may 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 may 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.

Availability of Morrison Source Water Assessment
Below is a summary of the IEPA source water assessment of Morrison's water system. The full report is available for viewing at City Hall.

Source Water Assessment
Based on information obtained from sampling data, the location of the wells relative to potential sources of contamination, and well depth, the Illinois EPA has determined that the Morrison Community Water Supply's source water is not susceptible to contamination. As referenced above, this determination is based on a number of criteria including; monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and available hydrogeologic data on the wells.

The Illinois EPA has determined that the Morrison Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process; the community's wells are properly constructed with sound integrity and proper sitting conditions; a hydraulic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this system ground water supply.

Source Water:

Well 4 (11910)	Next to tower northside	Groundwater well
Well 5 (01855)	SE Edge town by Ash Ave	Groundwater well

Source Water Protection Efforts
The Illinois Environmental Protection Act provided minimum protection zones of 200 feet for your wells. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to source water, the Facility has implemented a wellhead protection program which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA which allows a reduction in monitoring. The outcome of this monitoring reduction has saved the community considerable laboratory analysis costs.

Vulnerability waiver
Due to favorable monitoring history, aquifer characteristics, and inventory of potential sources of contamination, our water supply was issued a vulnerability waiver renewal for SOCs at Tap2 – Well number 11910 (Well #4). No monitoring for SOCs were required, between January 1, 2017 through December 31, 2019.

2020 Water Quality Data

- Definition of Terms –

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.

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 (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 (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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.*

Maximum Residual Disinfectant Level Goal (MRDLG): *The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.*

n/a: *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.*

ppm: *milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.*

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

Distribution

Lead and Copper
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 are responsible for providing high quality drinking water, but 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.

Lead & Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# of Sites Over AL	Units	Violation	Likely Sources of Contamination
Copper	2020	1.3	1.3	0.21	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2020	0	15	9	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2020	.9	0.49 – 1.34	MRDLG=4	MRDL =4	ppm	No	Water additive used to control microbes
Total Trihalomethanes (TTHM)	2020	4	3.86 – 3.86	No goal for the total	80	ppb	No	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	2020	0.064	0.064 – 0.064	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2020	0.332	0.332 – 0.332	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Iron	2020	0.22	0.22 – 0.22	N/A	1.0	ppm	No	This contaminant is not currently regulated by USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2020	2.6	2.6 – 2.6	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Sodium	2020	4	4.0 - 4.0	N/A	N/A	ppm	No	Erosion from naturally occurring 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	2020	3	1.54 – 4.14	0	5	pCi/L	No	Erosion of natural deposits
Gross Alpha excluding radon and uranium	2020	7	3.7 – 11.2	0	15	pCi/L	No	Erosion of natural deposits

Water Quality Data Table Footnotes

Triennial or Less Frequent Monitoring Footnote
The state requires us to monitor 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.

GROSS ALPHA (pCi/L)
The MCL for Alpha emitters is 15 pCi/L. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

COMBINED RADIUM (pCi/L)
The MCL for Combined Radium is 5 pCi/L. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

IRON
This contaminant is not currently regulated by USEPA. However, the state has set and MCL for this contaminant for supplies serving a population of 1000 or more.

SODIUM
There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 mg/I, and you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

About the Data
An 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. If a facility exceeds the MCL, the facility must immediately investigate treatment options to reduce the level of the contaminant in the water supply. MCL's are first based on a Reference Dose (RfD) which carries a very low risk of causing adverse health effects. The RfD is obtained by taking the maximum daily dose of a toxic substance that does not produce any observable adverse health effects. This no-observable-adverse-effect level (NOAEL) dosage is divided by safety factors (SF), to obtain the reference dose. Regulatory agencies generally use safety factor values of between 10 to 1,000.

What this Table Means

As you can see by the table, our system had no violations. We are proud that your drinking water meets or exceeds all Federal and State Requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is SAFE at these levels.
We, at the Morrison Water Department, work around the clock to provide top quality water to every tap. We ask that all our customers help us protect water sources, which are the heart of our community, our way of life and our children's future.

Additional Data Available
If you would like additional data, please contact City Hall at the address below.

This report will not be mailed to customers
Additional copies are available at
City Hall
200 West Main St.
Morrison, IL. 61270