Annual Consumer Confidence Report

Water Testing Preformed in 2018

Presented by
The Village of Morton

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

PWS ID#: IL1790500

Water Quality

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 Village of Morton is committed in meeting the challenges of new regulations, source water protection, water conservation, and community education.

For more information about this report, or for any questions related to your drinking water, please call Robert Burton, Water Treatment Superintendent, at (309) 266-5361 ext. 285.

Important Health Information

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 Home Plumbing

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.

Substances that could be in water

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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.

Source Water Assessment

In order to determine Morton's susceptibility to groundwater contamination, a Well Site Survey, published in 1989 by the Illinois EPA, and Source Water Protection Plan were reviewed. Based on the information contained in these documents, fifteen potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Morton community water supply wells. These include a restaurant/food service, a manufacturing/processing of chemicals, a church/library, a de-icing agent, two below ground fuel storage, a warehouse, two manufacturing processes, two offices, a pesticides retail sales, a machine shop/shed, a special waste surface impoundment on-site. A filter backwash lagoon is also located within the minimum setback zone of Wells #5 and #6. Based on information provided by Morton's water supply officials, the following facilities, also indicated as potential sources in the site data table, have changed their status: Cady Oil (non-existent), Bernard Caragher (non-existent), Morton School Dist. #709 (non-existent), Emro Unit #5189 (name changed to Speedway Superamerica), Grimm's Truck Stop (non-existent), Rinker Lawn & Leisure (non-existent), and Butler Mfg. Co. (name changed to Morton Metal Craft). According to Morton's water supply officials, the following facilities should be added as potential sources of contamination: Steiner's Corner, 1800 N. Morton Ave.; Casey's General Store, 1850 S. Main St.; Casey's General Store, 1989 N. Morton Ave.; and Amoco, 140 W. Ashland St.Based upon this information, the Illinois EPA has determined that Morton Wells #3, #4, #5, #6, #7, #8, #9, and #10 are not susceptible to IOC or SOC contamination. 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 the available hydrogeologic data for the wells. In anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that Morton's community water supply wells are 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 site conditions; there is a hydrogeologic barrier that restricts 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. However, having stated this, the U.S. EPA is proposing to require States to identify systems in karst, gravel and fractured rock aquifer systems as sensitive. Water systems utilizing these aquifer types would be required to perform routine source water monitoring. Because the community's wells are constructed in a confined aquifer, which should provide an adequate degree of protection to prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the vulnerability determination.

Where Does My Water Come From?

The Village of Morton water system consists of three water treatment plants: Water Treatment Plant #1 (123 S. Plum Ave.), Water Treatment Plant #2 (500 Detroit Ave., and Water Treatment Plant #3 (500 Detroit Ave). Our raw water source consists of 8 wells that draw water from the Mahomet Aquifer.

Source Water Name	Type of Water	Report Status	Location
Well 3 (50228)	GW	Active	WTP 1
Well 4 (50229)	GW	Active	80 FT NW OF WELL 3
Well 5 (50230)	GW	Active	100 FT S OF WTP 2
Well 6 (50231)	GW	Active	200 FT SE OF WTP 2
Well 7 (50232)	GW	Active	500 FT NE OF WTP 2
Well 8 (50233)	GW	Active	600 FT SW OF WTP 3
Well 9 (50234)	GW	Active	200 FT NW OF WTP 3
Well 10 (50235)	GW	Active	600 FT N OF WTP 3

How Is My Water Treated?

There are many steps required when treating water. First, water is pumped from the wells into an aerator, which helps eliminate certain gases. Then the water is gravity fed into a reaction basin where chlorine gas is added to disinfect the water and assist in oxidizing iron. From there, the water is pumped into pressure filters and water softeners. After the water is filtered and softened, fluoride (for tooth health) and phosphate (corrosion control) are added right before the water leaves the treatment plant and enters the distribution system.

Community

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 309-266-5361. 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.

2018 Regulated Contaminants Detected

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	2		0	N	Naturally present in the environment.

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	2017	1.3	1.3	1.3	4	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	4.2	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2018 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.

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 ByProducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2018	3.1	2.5-3.4	MRDLG = 4	MRDLG = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2018	36	0-29.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	43	4.29-11.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	1/29/2014	0.546	0.265-0.546	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	1/29/2014	2.85	0.284-2.85	0	15	pCi/L	N	Erosion of natural deposits.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2018	3.4	2.4-3.4	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards: Runoff from glass and electronics production wastes.
Barium	2018	0.15	0.15-0.15	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Beryllium	2018	2.5	0-2.5	4	4	ppb	N	Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace, and defense industries.
Cadmium	2018	2.3	0-2.3	5	5	ppb	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries.
Chromium	2018	5.4	0-5.4	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2018	0.659	0.659-0.659	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2018	0.059	0.059-0.059	1	1	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2018	13	9.8-13	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2018	0.13	0.04-0.13	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2018	4.5	3.8-4.5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Sodium	2018	84	84-84			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Zinc	2018	0.031	0-0.031	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal

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:

Violation Type	Violation Begin	Violation End	Violation Explanation
CCR Adequacy/Availability/Content	7/1/2018	2018	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

"Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments."

During the past year we were required to conduct 1 (one) Level 1 assessment. 1 (one) Level 1 assessment was completed. In addition, we were required to take 1 (one) corrective action and we completed 1 (one) of these actions.