

# Consumer Confidence Report

## Annual Drinking Water Quality Report

DANVERS

IL1130450

Annual Water Quality Report for the period of January 1 to December 31, 2021

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

DANVERS is Ground Water from the Mahomet aquifer.

For more information regarding this report contact:

Name Brad Bode

Phone 309-963-4928

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

Monthly board meetings are scheduled for the first Wednesday of each month at 7PM. Meetings are held at the Danvers Township Community Building at 898 N. West St.

### 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 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.

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).

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 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 309-963-4928. 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: DANVERSTo determine the susceptibility to groundwater contamination, the Well Site Survey, published in 1991, and the 2005 new well survey were reviewed. During surveys of the Danvers source water protection area, Illinois EPA staff recorded potential sources, routes, or possible problem sites within the 200 foot minimum setback zones and 1,000 foot Phase I Wellhead Protection Areas (WHPA). No sources exist within the minimum setback zones. Four sources exist within the Phase I WHPA. Three additional sites were located within 2,000 feet of the wells. These include one active below ground fuel storage tank, an additional abandoned but in-place tank, two above ground fuel tanks, a pesticide/ herbicide warehouse and mixing facility, and an anhydrous ammonia storage area. According to information obtained in the 2005 survey, the below ground fuel tanks at the Danvers Elevator and Elementary School have been remediated. The inactive below ground fuel tank is reported to be in-place, but paved over. The Illinois EPA does not consider the source water of this facility to be susceptible to IOC, VOC, or SOC contamination. This determination is based on a number of criteria including: the land-use activities in the recharge area of the wells, the available hydrogeologic data, monitoring conducted at the wells, and monitoring conducted at the entry point to the distribution system.

## Source Water Information

Source Water Name	Type of Water	Report Status	Location
WELL 4 (47595)	GW	<u>active</u>	80 FT SOUTH OF PLANT
WELL 5 (01236)	GW	<u>active</u>	IN PARK W OF PLANT

**2021 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:** 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	2021	1.3	1.3	2.1	7	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	5.7	2	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.

**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	12/31/2021	2.8	1.95 - 3.5	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	32	31.9 - 31.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (THM)	2021	27	26.7 - 26.7	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
Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics 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.	2021	6	4.9 - 6.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	09/16/2020	0.061	0.061 - 0.061	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	09/16/2020	8.6	8.6 - 8.6	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	09/16/2020	1.19	1.19 - 1.19	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Iron	2021	0.021	0 - 0.021		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2021	202	130 - 290	150	150	ppb	Y	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2021	0.6	0.26 - 0.6	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2021	0.34	0.34 - 0.34	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	09/16/2020	240	240 - 240			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Zinc	09/16/2020	0.0083	0.0083 - 0.0083	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal

**Violation Summary Table**

The following table(s) lists all violations that occurred during 2021. We included a brief summary of the actions we took following notification of the violation.

Contaminant or Program	Violation Type	Violation Duration Start Date – End date	Violation Explanation
MANGANESE	MCL	7/1/2021 - 09/30/22	Exceeded state standard of .15 mg/L with result of .198 mg/L
Health Effects (if applicable)	•Children and adults who drink water with high levels of manganese for a long time may have problems with memory, attention, and motor skills. Infants (babies under one year old) may develop learning and behavior problems if they drink water with too much manganese in it.		
Actions we took:	We attempted to re-charge the media and made adjustments to chemical dosages. A representative from the filter equipment company inspected the filters and made the recommendation to replace the filter media		

Contaminant or Program	Violation Type	Violation Duration Start Date – End date	Violation Explanation
MANGANESE	MCL	10/1/22 - 12-31/22	Exceeded the state standard of .15 mg/L with result of .190 mg/L
Health Effects (if applicable)	•Children and adults who drink water with high levels of manganese for a long time may have problems with memory, attention, and motor skills. Infants (babies under one year old) may develop learning and behavior problems if they drink water with too much manganese in it.		
Actions we took:	Filter media was replaced in early April. Air wash plumbing was also replaced. Adjustments have been made to chemical dosages.		

The 1st quarter of 2022 manganese sample was .12 mg/L  
 Since the Filter media was replaced in early April, daily testing of  
 Manganese levels have averaged .045 mg/L  
 This is less than 1/3 of the state standard of .15 mg/L