

Annual Drinking Water Quality Report

City of Mendota

The City of Mendota is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is four deep wells, which draw from a confined aquifer. All four wells are located within the city limits.

The City of Mendota routinely monitors for constituents in your drinking water according to Federal and State laws. This report indicates the results of our monitoring for the period of January 1st to December 31st, 2022.

In this report you may find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (nd) – not detectable at testing limits.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000 or one ounce in 7,350 gallons.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000 or one ounce in 7,350,000 gallons.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000 or one ounce in 7,350,000,000 gallons.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000 or one ounce in 7,350,000,000,000 gallons.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

% < 0.5 NTU – Percent samples less than 0.5 NTU.

Action Level (AL) - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The “Maximum Allowed” (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.

Maximum Contaminant Level Goal - The “Goal”(MCLG) is 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 Goal (MRDLG) – The MRDLG is the level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG’s allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) – The MRDL is the highest level of disinfectant allowed in drinking water.

Not Applicable (N/A)

pos/mo – Number of positive samples per month.

% pos/mo - Percent number of positive samples per month.

Any questions about this report or concerning your water utility should be directed to Kevin McPheeters, Water Superintendent at 815.539.6307, Monday – Friday from 7:00am to 3:30pm. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council meetings. The meetings are held the 1st and 3rd Mondays of each month at 5:30pm. Copies of this report are available at City Hall.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, pesticides, herbicides, or radioactive materials. 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals, radioactive material, and substances resulting from the presence of animal or man. Possible contaminants consist of microbial, inorganic, organic, and radioactive contaminants, as well as, pesticides and herbicides. To assure that all drinking water is safe, the USEPA establishes contaminant limits for the public water supplies, while the FDA regulates the bottle water industry.

A source water assessment for our water supply has been completed by the Illinois Environmental Protection Agency. The assessment indicates our water supply is not susceptible to contamination. If you would like a copy of this assessment please stop by City Hall during normal hours.

The following contaminants are monitored in your drinking water on a regular basis.

Microbial Contaminants:

Over 200 water samples were sent for analysis. The samples were analyzed for Total Coliform, Fecal Coliform, and E.Coli bacteria.

Radioactive Contaminants:

Alpha Emitters; Beta/Photon Emitters; Combined Radium, Radium 226; Radium 228; Uranium.

Inorganic Contaminants:

Antimony; Arsenic; Asbestos; Barium; Beryllium; Cadmium; Chromium; Copper; Cyanide; Fluoride; Iron; Manganese; Mercury; Nitrate; Nitrite; Total Nitrate and Nitrite; Selenium; Sodium; Thallium; Zinc.

Synthetic Organic Contaminants:

2,4-D; 2,4,5-TP; Alachlor; Aldrin; Atrazine; Benzopyrene; Carbofuran; Chlordane; Dalapon; Diadipate; Diphthalate; Dibromochloropropane; Dieldrin; Dinoseb; Diquat; Dioxin; Endothall; Endrin; Ethylene Dibromide; Glyphosate; Heptachlor; Heptachlor Epoxide; Hexachlorobenzene; Hexachlorocyclopentadiene; Lindane; Methoxychlor; Oxamyl; PCBs; Pentachlorophenol; Picloram; Simazine; Toxaphene.

Volatile Organic Contaminants:

Benzene; Carbon Tetrachloride; Chlorobenzene; o-Dichlorobenzene; p-Dichlorobenzene; 1,2-Dichloroethane; 1,1-Dichloroethylene; Cis-1,2-Dichloroethylene; Trans-1,2-Dichloroethylene; Dichloromethane; 1,2-Dichloropropane; Ethylbenzene; Styrene; Tetrachloroethylene; 1,2,4-Trichlorobenzene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; Total Trihalomethanes; Toluene; Vinyl Chloride; Xylenes.

Disinfection / Disinfection By-Products

Total Trihalomethanes; Haloacetic Acids; Bromate; Chlorite; Chlorine; Chloramines; Chlorine Dioxide.

Unregulated Contaminants

1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; 1,1-Dichloroethane; 1,1-Dichloropropene; 1,2,3-Trichloropropane; 1,3-Dichloropropane; 2,2-Dichloropropane; 3-Hydroxycarbofuran; Aldicarb; Aldicarb Sulfone; Aldicarb Sulfoxide; Bromobenzene; Bromoform; Bromomethane; Butachlor; Carbaryl; Chloroethane; Chloromethane; Dibromochloromethane; Dibromomethane; Dicamba; M-Dichlorobenzene; Methomyl; Metolachlor; Metribuzin; Propachlor; Sulfate.

State Regulated Contaminants:

Aldrin; DDT; Dieldrin.

Additional Contaminants

Acetochlor; Acifluorfen; Acrylamide; Chlorotoluenes; Cis-1,3-Dichloropropene; Cyanazine; Dacthal; Dibromoacetic Acid; Dichloroacetic Acid; Epichlorohydrin; Methyl Tert-Butyl Ether; Molybdenum; Monobromoacetic Acid; Monochloroacetic Acid; Nickel; Trans-1,3-Dichloropropene; Treflan; Trichloroacetic Acid.

The following is a table which indicates test results for detected contaminants:

Contaminant	Date of Sample	Level Found	Range of detections	MCLG	MCL	Units	Violation	Typical Source of Contamination
Radioactive Contaminants								
Combined Radium 226/228	2022	1	0 - 1.34	0	5	pCi/L	NO	Erosion of natural deposits.
Beta/Photon Emitters	2003	2	n/a	0	50	mrem/yr	NO	Decay of natural and man-made deposits.
Gross Alpha Excluding Radon and Uranium	2022	5	0 – 4.59	0	15	pCi/L	NO	Erosion of natural deposits.

Uranium	2008	0.04	.04 - .04	0	30	ug/l	NO	Erosion of natural deposits.
Inorganic Contaminants								
Arsenic	2022	5	5-May	0	10	ppb	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2021	0.0653	0.0212 - 0.0653	2	2	ppm	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2022	5	5-May	100	100	ppb	NO	Discharge from steel and pulp mills; Erosion of natural deposits.
Cadmium	2019	5.42	5.42 - 5.42	5	5	ppb	NO	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints.
Copper	2022	0.396	0 exceeding AL	1.3	AL=1.3	ppm	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Fluoride	2022	0.729	0.729 - 0.729	4	4	ppm	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead	2019	7.55	0 exceeding AL	0	AL=15	ppb	NO	Corrosion of household plumbing systems; Erosion of natural deposits.
Selenium	2021	4.39	3.18-4.39	50	50	ppb	NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Disinfectants & Disinfection By-Product								
Total Haloacetic Acids	2022	18	2.18 – 46.7	n/a	60	ppb	NO	By-product of drinking water chlorination.
Total Trihalomethanes	2022	38	12.51 – 74.6	n/a	80	ppb	NO	By-product of drinking water chlorination.
Chloramines	2007	2.6	0.2 - 2.6	n/a	n/a	ppm	NO	Water additive used to control Microbes.
Chlorine	2022	0.7	0.5 – 1.0	4	4	ppm	NO	Water additive used to control Microbes.
State Regulated Contaminants								
Iron	2019	0.0495	0.0495 - 0.0495	n/a	1	ppm	NO	Erosion of naturally occurring deposits.
Sodium	2021	52.2	40.4-52.2	n/a	n/a	ppm	NO	Erosion of naturally occurring deposits; Used in water softener regeneration.
Manganese	2022	5	5-May	150	150	ppb	NO	Erosion of naturally occurring deposits.
Nitrate (as Nitrogen)	2022	0.05	0.05 - 0.05	10	10	ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (as Nitrogen)	2022	0.05	0.05-0.05	1	1	Ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic Organic Contaminants								
Methoxychlor	2009	0.17	0 - 0.17	40	40	ppb	NO	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
Chlorination								
				MRDLG	MRDL			Typical Source of Contamination
Chlorine	2017	0.7	0 - 1	4	4	ppm	NO	Water additive used to control microbes.
Bacteria								
				MRDLG	MRDL			
Coliform Bacteria	2021	1	n/a	0	1	sample	NO	Naturally present in the environment.
Fecal or E. Coli		0	n/a		1	sample	NO	Naturally present in the environment.

Volatile Organic Contaminates								
Xylenes	2016	0	0	10	10	ppm	NO	Discharge from petroleum factories; Discharge from chemical factories

What does the table mean?

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having any described health effect.

About the Data

In most cases, the "level found" column represents an average of sample result data collected. The "range of detection" column represents a range of individual sample results, from the lowest to highest that were collected. If the date in the "date of sample" column does not reflect the current CCR Calendar Year, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

Total Coliform:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems

Fecal Coliform/E. Coli:

Fecal Coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Total Trihalomethanes:

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Beta/Photon Emitters:

The MCL for beta particles is 4mrem/year. EPA considers 50pCi/l to be a level of concern for beta particles.

Combined Radium:

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.

Lead:

Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Infants and young children are typically more vulnerable to lead in drinking water than the general population. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Nitrate:

Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Iron:

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

Manganese:

This contaminant is not currently regulated by USEPA. However, the state has set an 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 you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Fluoride:

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends a target fluoride level of 0.7 mg/l.

Arsenic:

USEPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

Unregulated Contaminants:

A MCL for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

All the employees of the City of Mendota work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.