2022 Water Quality Data: Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range Of Detections	Violation	Date of Sample
MICROBIAL CONTAMINANTS						
TOTAL COLIFORM BACTERIA (% pos/mo)	0	5%	0.4%	N/A	N	
Naturally present in the environment						
FECAL COLIFORM AND E. COLI (# pos/mo)	0	0	0	N/A	N	
Human and animal fecal waste			(Lowest Monthly %)			
TURBIDITY (NTU/Lowest Monthly % ≤ 0.3 NTU)	N/A	TT	100%	100%-100%	N	
Soil runoff			(Limit: 95% ≤ 0.3 NTU)			
TURBIDITY (NTU/Highest Single Measurement)	N/A	TT	0.30	N/A	N	
Soil runoff			(Limit: 1 NTU max)			
INORGANIC CONTAMINANTS						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0201	0.0193 - 0.0201	N	
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives	1.3	AL = 1.3	0.065 (90^{th} percentile)	0 sites exceeding AL	N	6/1/22-9/30/22
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits	0	AL= 15	6.8 (90^{th} percentile)	0 sites exceeding AL	N	6/1/22-9/30/22
NITRATE (AS NITROGEN) (ppm)	10	10	0.30	0.30 – 0.30	N	
Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural deposits						
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm)	10	10	0.30	0.30 – 0.30	N	
DISINFECTANTS \ DISINFECTION BY-PRODUCTS						
TTHM [TOTAL TRIHALOMETHANES] (ppb) *	N/A	80	25.1	12.8 – 37.6	N	
By-product of drinking water disinfection						
HAA5 [HALOACETIC ACIDS] (ppb) *	N/A	60	11.9	5.8 – 15.2	N	
By-product of drinking water disinfection						
CHLORINE (as Cl_2) (ppm) Drinking water disinfectant	4.0	4.0	1	1 – 1.3	N	
TOC [TOTAL ORGANIC CARBON]						
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.						
UNREGULATED CONTAMINANTS						
SULFATE (ppm)	N/A	N/A	27.1	25.8 – 27.1		
Erosion of naturally occurring deposits						
SODIUM (ppm)	N/A	N/A	9.08	8.56 – 9.08		
Erosion of naturally occurring deposits; Used as water softener						
STATE REGULATED CONTAMINANTS						
FLUORIDE (ppm)	4	4	0.76	0.63 – 0.76	N	
Water additive which promotes strong teeth						
RADIOACTIVE CONTAMINANTS						
COMBINED RADIUM 226/228 (pCi/L) ** Decay of natural and man-made deposits	0	5	0.95	0.83 – 0.95	N	2/04/2020
GROSS ALPHA excluding Radon & Uranium (pCi/L) ** Decay of natural and man-made deposits	0	15	3.1	2.8 – 3.1	N	2/04/2020

Definition Of Terms

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.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2022, except where a specific date is indicated.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the Consumer Confidence Report (CCR) calendar year.

Date of Sample: If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report (CCR) calendar year.

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 required process intended to reduce the level of a contaminant in drinking water.

ND: Not detectable at testing limits; **N/A**: Not applicable

Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80 µg/L for TTHM and 60 µg/L for HAA5.

Water Quality Data Table Footnotes

TURBIDITY	UNREGULATED CONTAMINANTS
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.	A maximum contaminant level (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.
FLUORIDE	**SODIUM**
Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health has recommended an optimal fluoride level of 0.7 mg/L, with a range of 0.6 mg/L to 0.8 mg/L.	There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Unit of Measurement

- **ppm** - Parts per million, or milligrams per liter (mg/L)
- **ppb** - Parts per billion, or micrograms per liter (µg/L)
- **NTU** - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.
- **% ≤ 0.3 NTU** - Percent of samples less than or equal to 0.3 NTU
- **pCi/L** – Picocuries per liter, used to measure radioactivity.
- **mrem:** millirems per year, a measure of radiation absorbed by the body

Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution System.

*Data expressed as LRAA – Locational Running Annual Average (See Definition of Terms for Details)
**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. 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, they are included in the table along with the date that the detection occurred. Radiochemical contaminant monitoring is conducted every 6 years.