

**Central Stickney Sanitary District (CSSD)**  
**Public Water Supply Facility ID: IL0315570**  
**2021 Water Quality Report / Consumer Confidence Report**  
**Jason Gustafson, Superintendent**

**Dear CSSD Water Customer,**

The CSSD, in compliance with the Safe Drinking Water Act (SDWA), is issuing the Consumer Confidence Report (CCR) for the monitoring period of January 1, 2021 through December 31, 2021. The CSSD, in conjunction with the City of Chicago and the Illinois Environmental Protection Agency (IEPA) is providing this report to you that includes important information concerning the quality and source of your drinking water. During 2021, the CSSD continued to provide drinking water that meets the monitoring and testing requirements of the United States Environmental Protection Agency (USEPA) and the Illinois EPA (IEPA).

Further information on our community water supply's Source Water Assessment Program is available by going online to the Illinois EPA (IEPA) Website at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>, or by contacting the CSSD Office at 708-496-3520. All residents and business owners are also invited to attend the regular scheduled CSSD Board meetings which are held on the first Tuesday of each month at 6:00 pm. If you have any questions regarding this Consumer Confidence Report, please contact Walter Dowling, Water Operator, at 708-496-3520.

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

**Please share** this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

**CONSUMER INFORMATION**

The CSSD tests the water supply for chlorine content daily to maintain the optimum chlorine residual levels. On a monthly basis, bacteriological samples are taken. On a yearly basis, samples are submitted for Total Trihalomethane (TTHM) Analysis. Samples are also provided for lead and copper monitoring on a schedule established by the IEPA. All testing and reports are performed according to the requirements of IEPA.

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, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Federal Drug Administration (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. The EPA and the Center of Disease Control and Prevention (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.

**Lead:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead is not found in the source water. 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. A common source is from brass or chrome-plated brass faucets, and fixtures with lead solder, from which significant amounts of lead can enter the water, especially from hot water use. Homes built before 1986 are more likely to have lead pipes, fixtures, and solder. The Safe Drinking Water Act (SDWA) has reduced the maximum allowable lead content that is considered "lead-free" to be a weighted average of 0.25 percent calculated across the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures and 0.2 percent for solder and flux.

The Safe Drinking Water Act requires the EPA to determine the level of contaminants in drinking water at which no adverse health effects are likely to occur with an adequate margin of safety. These non-enforceable health goals, based solely on possible health risks, are called maximum contaminant level goals (MCLGs). The EPA has set the maximum contaminant level goal for lead in drinking water at zero because, lead is a toxic metal that can be harmful to human health even at low exposure levels. Lead is persistent, and it can bioaccumulate in the body over time.

**Measures to Reduce Lead in Drinking Water at Home:** Flush your pipes before drinking. 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. Use only cold water for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. Run cold water until it becomes as cold as it can get. Note that boiling water will NOT get rid of lead contamination. Bathing and showering should be safe for you and your children, even if the water contains lead over EPA's action level. Human skin does not absorb lead in water. This information applies to most situations and to a large majority of the population, but individual circumstances may vary.

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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

**SOURCE WATER ASSESSMENT:** In 2021 all the approximately 46 million gallons of water the CSSD distributed came from Lake Michigan. Lake Michigan water is drawn from far offshore structures (known as Cribbs) along the bottom of the Lake and treated at the City of Chicago Jardine Water Purification Plant (north of Navy Pier). This water is pumped through large transmission lines to the near Chicago suburbs where it is collected and redistributed. The CSSD purchases this water directly from the City of Chicago and receives this water into our reservoir and pumping station facility at 50<sup>th</sup> Street and Laramie Avenue. The water is then pumped at this station through the CSSD's water main grid system (approximately 4 miles of water main pipe) to the residents, businesses, and public facility end users.

**SOURCE WATER ASSESSMENT SUMMARY:** The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply.

To view a summary of the completed Source Water Assessments, including: Importance of Source Water, Susceptibility to Contamination Determination and documentation or 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>.

**SUSCEPTIBILITY TO CONTAMINATION:** The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential

pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas, and shoreline point sources due to the influx of groundwater to the lake.

**SOURCE OF DRINKING WATER CONTAMINATION:** The source for both tap water and bottled water includes 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 process 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.

## **THE CITY OF CHICAGO TESTING INFORMATION**

### **2021 Voluntary Monitoring**

The City of Chicago has continued monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. No Cryptosporidium or Giardia was detected in source water samples collected in 2021. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced.

In 2021, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to DWM's Water Quality Division at 312-744-8190. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below.

[https://www.chicago.gov/city/en/depts/water/supp\\_info/water\\_quality\\_resultsandreports.html](https://www.chicago.gov/city/en/depts/water/supp_info/water_quality_resultsandreports.html).

**For more information, please contact Andrea Cheng, Acting Commissioner at 312-744-8190.**

**Chicago Department of Water Management, 100 East Ohio Street, Chicago IL 60611, Attn: Andrea Cheng.**

## **DEFINITION OF TERMS / UNITS OF MEASUREMENTS**

<b><u>DEFINITION OF TERMS</u></b>	
<p><b>Maximum Contaminant Level Goal (MCLG):</b> The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.</p> <p><b>Maximum Contaminant Level (MCL):</b> 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.</p> <p><b>Maximum Residual Disinfectant Level Goal (MRDLG):</b> The level of 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.</p> <p><b>Maximum Residual Disinfectant Level (MRDL):</b> The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.</p> <p><b>Range of Detections:</b> This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.</p> <p><b>Action Level (AL):</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.</p>	<p><b>Action Level Goal (ALG):</b> 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.</p> <p><b>Date of Sample:</b> 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 CCR calendar year.</p> <p><b>Treatment Technique (TT):</b> A required process intended to reduce the level of a contaminant in drinking water.</p> <p><b>ND:</b> Not detectable at testing limits. <b>N/A:</b> Not applicable</p> <p><b>Turbidity:</b> Is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.</p>
	<b><u>UNITS OF MEASUREMENTS</u></b>
	<p><b>ppb:</b> Micrograms Per Liter or Parts Per Billion (or url), or one ounce in 7,350,000 gallons of water.</p> <p><b>ppm:</b> Milligrams Per Liter or Parts Per Million (or mg/l), or one ounce in 7,350 gallons of water.</p> <p><b>NTU:</b> Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.</p> <p><b>%&lt;0.3NTU:</b> Percent samples less than 0.3 NTU</p> <p><b>pCi/L:</b> Picocuries per liter, used to measure radioactivity</p> <p><b>mrem:</b> Millirems per year (a measure of radiation absorbed by the body)</p>

**REGULATED CONTANIMANTS TABLES**

Regulated Disinfectants & Disinfection By-Products	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Units	Municipality	Violation	Collection Date	Likely Source of Contaminants
Chlorine	MRDLG = 4	MRDL = 4	1	0.9 – 1	ppm	CSSD	N	12/31/2021	Water additive used to control microbes.
	MRDLG = 4	MRDL = 4	1	1 — 1	ppm	Chicago	N	12/31/2021	
Haloacetic Acids (HAA5)	No Goal	60	14	13.64 – 13.64	ppb	CSSD	N	2021	By-product of drinking water disinfection
	No Goal	60	13	7.2 – 19	ppb	Chicago	N	2021	
Total Trihalomethanes (TTHM)	No Goal	80	41	41 – 41	ppb	CSSD	N	2021	
	No Goal	80	30	13.6 – 39	ppb	Chicago	N	2021	
Inorganic Contaminants									
Barium	2	2	0.0203	0.0200 – 0.0203	ppm	Chicago	N	2021	Discharge of drilling wastes; Discharge from refineries; Erosion of natural deposits.
Fluoride	4	4.0	0.77	0.65 – 0.77	ppm	Chicago	N	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (Measured as Nitrogen)	10	10	0.28	0.28 – 0.28	ppm	Chicago	N	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Total Nitrate & Nitrite (as Nitrogen)	10	10	0.28	0.28 – 0.28	ppm	Chicago	N	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	N/A	N/A	9.99	9.79 – 9.99	ppm	Chicago	N	2021	Erosion from naturally occurring deposits: used in water softener regeneration.
Sulfate	N/A	N/A	27.4	26.9 – 27.4	ppm	Chicago	N	2021	Erosion of naturally occurring deposits.
Radio Active & Synthetic Organic Contaminants									
Combined Radium 226/228	0	5	0.95	0.83 — 0.95	pCi/L	Chicago	N	02/04/2020	Erosion of natural deposits.
Gross alpha excluding radon and uranium	0	15	3.1	2.8 — 3.1	pCi/L	Chicago	N	02/04/2020	Erosion of natural deposits.
Coliform Bacteria									
Total Coliform Maximum Contaminant Goal	Total Coliform Maximum Contaminant Level		Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. Positive E. Coli or Fecal Coliform Samples		Municipality	Violation	Likely Source of Contaminants
0	5% of Monthly Samples are positive.		0.6	A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	3		Chicago	N	Naturally present in the environment.
Lead and Copper									
	MCLG	Action Level	90th Percentile	# Sites Over	Units	Municipality	Violation	Date Sampled	Likely Source of Contaminants
Lead	0	15	5.6	1	ppb	Chicago	N	2021	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	1.3	1.3	0.012	0	ppm	CSSD	N	2/21/2019	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
	1.3	1.3	0.13	0	ppm	Chicago	N	2021	
Turbidity	Limit (Treatment Technique)		Level Detected	Municipality		Violation		Likely Source of Contaminants	
Highest Single Measurement %	1 NTU		0.2 NTU	Chicago		N		Soil Runoff	
Lowest Monthly % meeting Limit	0.3 NTU		100%	Chicago		N		Soil Runoff	

Chicago Total Organic Carbon (TOC) - The percentage of TOC removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

**2021 VIOLATION SUMMARY TABLE - NONE**