## Annual Drinking Water Quality Report

JERSEY RWC

IL0835300

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 JERSEY RWC is Purchased Surface Water

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

## 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 6184989534. 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: IL AMERICAN-ALTONIllinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Within the Illinois portion of the Mississippi River Watershed, which is illustrated in Figure 3, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Illinois portion of the Mississippi River Basin contributes to the susceptibility of the IAWC-Alton intakes. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the IAWC-Alton intake was determined using data from a joint U. S. Environmental Protection Agency/U. S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States. Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analysis of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 92% of these spills occurred along the Mississippi and/or the Illinois River. Figure 2 shows the critical area of concern (Zone 1) for the IAWC-Alton surface water intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. Additional information concerning spill response planning on the Mississippi River may be found at the U. S. EPA website www.epa.gov/region5/oil, and data can also be downloaded at the U. S. Geological Survey's FTP site ftp://ftp.umesc.er.usgs.gov/pub/gis data/oil spill.

#### Source Water Information

Source Water Name		Type of Water	Report Status	Location
CC 03-MASTER METER	1 FF IL1195150 TP04	SW		E SIDE IL 67 1.5 MI N INT/IL67
CC 04-MASTER METER	2 FF IL1195150 TP04	SW		S SIDE IL 3

## 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	08/25/2020	1.3	1.3	0.1	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/25/2020	0	15	1.3	0	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 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.

MRDL:

Maximum residual disinfectant level

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.

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.

### Water Quality Test Results

goal or MRDLG:

na:

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.

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## Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	12/31/2021	3	2 - 3.1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	39	20.4 - 55.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2021	51	33.7 - 71.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

# Illinois American -Alton IL 1195150

E STANFALL		TURBIDITY	- Collected at the Treatme	ent Plant	
Substance (with units)	Requirement	Limit (Treatment Technique)	Level Detected	Compliance Achieved	Likely Source of Contaminatio
Turbidity (NTU)	Highest singe measurement 1 NTU		0.165 NTU	Yes	Soll runoff.
	Lowest monthly % meeting limit	UTN E.0	100%	Yes	Soll runoff,

Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the effectiveness of our filtration system, water quality, and disinfectants. The treatment technique requires that at least 95% of routine samples are less than or equal to 0.3 NTU, and no sample exceeds 1 NTU. We are reporting the percentage of all readings meeting the standard of 0.3 NTU, plus the single highest reading for the year.

REGULATED SUBSTANCES - Collected at the Treatment Plant									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source		
Fluoride (ppm)	2021	Yes	4	4.0	0.6	0.64 to 0.64	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.		
[measured as Nitrogen] (ppm)	2021	Yes	10	10.	- 5	1.43 to 4.51	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.		
Arsenic (ppb)	2021	Yes	0	10:10:00	2. 11.	2 to 2	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.		
Atrazine (ppb)	2021	Yes	3	3	0.4	0 to 0.4	Runoff from herbicide used on row crops.		

Nitrate in drinking water at levels above 10 ppm 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.

OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant								
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Result	Range Detected	Typical Source	
Sodium (ppm)	2021	Yes	NA	NA T	29	29.4 to 29.4	Erosion from naturally occurring deposits. Used in water softener regeneration.	

For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

### 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. TOC has no health effects but contributes to the formation of disinfection by-products. Reduction of TOC can help to minimize disinfection by-product formation.

## **UNREGULATED CONTAMINANT MONITORING RULE**

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST						
Parameter	Units	Year	Average Result	Range Detected	Typical Source	
Manganese*	ppb	2019	0.82	0 to 1.7	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element	

<sup>\*</sup> Manganese has a Secondary MCL of 150 ppb.

## PER- AND POLYFLUOROALKYL SUBSTANCES

Per- or polyfluoroalkyl substances (PFASs) are synthetic substances used in a variety of products, such as: stain resistant fabric, non-stick coatings, firefighting foam, paints, waxes, and cleaning products. They are also components in some industrial processes like electronics manufacturing and oil recovery. While the EPA has not developed drinking water standards for PFAS, Illinois American Water recognizes the importance of testing for these contaminants. Compounds detected are tabulated below, along with typical sources.

In 2021, our PWS was sampled as part of the State of Illinois PFAS Statewide Investigation. Results from this sampling indicated PFAS were detected in our drinking water (above the health advisory level/below the health advisory level/ established by Illinois EPA. Follow up monitoring is being conducted. For more information about PFAS health advisories <a href="https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx">https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx</a>

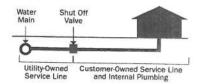
UNREGULATED PERFLUORINATED COMPOUNDS								
Parameter	Year Sampled	Units	Health-Based Guidance Level	Highest Result	Range Detected	Typical Source		
Perfluorooctane Sulfonic Acid (PFOS)	2021	ppt	14	3.20	0 to 3.20	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.		
Perfluorooctanoic Acid (PFOA)	2021	ppt	2	2.60	0 to 2.60	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.		
Perfluorohexanoic Acid (PFHxA)	2021	ppt	560,000	3.60	2.1 to 3.60	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.		

The health-based guidance levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that guidance levels are not regulatory limits for drinking water. Rather, the guidance levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.

# About Lead

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. American Water is responsible for providing high quality drinking water, but 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

## UTILITY-OWNED VS. CUSTOMER-OWNED PORTION OF THE SERVICE LINE



Please note: This diagram is a generic representation.

# The most common source of lead in tap water is from the customer's plumbing and their service line.

Our water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.

### MINIMIZING YOUR POTENTIAL EXPOSURE

You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.





1. Flush your taps. The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.



2. Use cold water for drinking and cooking. Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.



3. Routinely remove and clean all faucet aerators.



4. Look for the "Lead Free" label when replacing or installing plumbing fixtures.



5. Follow manufacturer's instructions for replacing water filters in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.



6. Flush after plumbing changes. Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.