

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Chi tiết này thật quan trọng.  
Xin nhờ người dịch cho quý vị.

Mahalaga ang impormasyong ito. Mangyaring  
ipasalin ito.

Este informe contiene información muy  
importante sobre su agua potable. Tradúzcalo o  
hable con alguien que lo entienda bien.

この情報は重要です。  
翻訳を依頼してください。

यह सूचना महत्वपूर्ण है ।  
कृपा कारके किसी से :सका अनुवाद कारयें ।

此份有關你的食水報告，  
內有重要資料和訊息，請找  
他人為你翻譯及解釋清楚。

此份有关你的食水报告，  
内有重要资料 and 讯息，请找  
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"هذا التقرير يحتوي على معلومات مهمة تتعلق بمياه الشفة (أو الشرب).  
ترجم التقرير، أو تكلم مع شخص يستطيع أن يفهم التقرير."

**Presented By**





## Our Mission Continues

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

## Where Does My Water Come From?

The ACMUA's water supply system consists of surface and groundwater resources, a water filtration facility that treats raw water from both sources; transmission facilities from the treatment plant to Atlantic City; distribution facilities throughout the city; reservoirs at the surface sources; one standpipe; two elevated storage tanks; and one Aquifer Storage Recharge (ASR) Well in the city. In 2020 the system processed 2,765.0650 million gallons of water for the year, with a maximum daily demand of 10.8780 million gallons per day (mgd) in the month of August and an average daily demand of approximately 7.5512 mgd. The ACMUA water source comes from two surface water reservoirs (Kuehne Pond Dam and Doughty Pond Dam) and thirteen wells. Eleven of these wells are located in the Cohansey Aquifer and two are located in the Kirkwood Aquifer. Well water collected from the well fields is transported to the ACMUA's Water Treatment Plant Facility. The treatment process includes pre-treatment with sodium hypochlorite solution for disinfection, poly aluminum chloride addition for turbidity removal, aeration, mixing, settling, and filtration with mixed media including sand, gravel, and granular activated carbon. Post-treatment includes disinfection, pH adjustment with lime, fluoride addition, and corrosion inhibitor chemical addition. After the treatment process is completed, the potable water produced is conveyed to the Atlantic City distribution system via two (2) large transmission mains to be used by all our customers.

## Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not themselves pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at such times. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

## Lead in Home Plumbing

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 are responsible for providing high-quality drinking water, but 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**QUESTIONS?** If you have any health concerns relating to the information provided in this report, we encourage you to contact your health care provider. For more information about the contents of this report or for any questions relating to your drinking water, please contact Anthony Palombi at (609) 641-0024, ext. 323.

## What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef.

According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per-capita water footprint is about 8,000 cubic feet twice the global per-capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish.

To check out your own water footprint, go to [www.watercalculator.org](http://www.watercalculator.org).

## Community Participation

The Atlantic City Municipal Utilities Authority (ACMUA) Board of Directors meets every third Wednesday of the month at 10:00 a.m. in the first floor conference room at our offices located at 401 N. Virginia Avenue, Atlantic City, NJ.



## Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has prepared Source Water Assessment Reports and Summaries for all public water systems. The table below illustrates the susceptibility ratings for the seven contaminant categories (and Radon) for each source in the system. The table shows the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at [www.nj.gov/dep/watersupply/swap/index.html](http://www.nj.gov/dep/watersupply/swap/index.html), or by contacting the NJDEP Bureau of Safe Drinking Water at (609) 292-5550 or e-mail at [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov).

Contaminant Susceptibility Rating Totals For Each Rating			
CONTAMINANT CATEGORY	SUSCEPTIBILITY RATING	TOTALS FOR EACH RATING	
		17 WELLS	1 SURFACE WATER INTAKE
Pathogens	H		1
	M	13	
	L	4	
Nutrients	H		
	M	12	1
	L	5	
Pesticides	H		
	M		
	L	17	1
VOCs	H	10	
	M		1
	L	7	
Inorganics	H	3	
	M	9	1
	L	5	
Radionuclides	H	1	
	M	13	
	L	3	1
Radon	H		
	M	14	
	L	3	1
DBPs	H	14	1
	M	3	
	L		



## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

**The state recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.**

The ACMUA is required to monitor the drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 3rd quarter of the 2020 compliance period, we did not test for 1,2-Dibromo-3-Chloropropane, Ethylene Dibromide, and 1,2,3-Trichloropropane, and therefore cannot be sure of the quality of your drinking water during that time.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining this information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.**

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Arsenic</b> (ppb)	2020	5	0	<0.5	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
<b>Barium</b> (ppm)	2020	2	2	<0.1	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Beryllium</b> (ppb)	2020	4	4	<0.25	NA	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
<b>Cadmium</b> (ppb)	2020	5	5	<1	NA	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
<b>Chlorine</b> (ppm)	2020	[4]	[4]	0.83	0.44–1.35	No	Water additive used to control microbes
<b>Fluoride</b> (ppm)	2020	4	4	0.58	0.27–0.90	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Nickel</b> (ppb)	2020	NA	NA	<2	NA	No	Pollution from mining and refining operations; Natural occurrence in soil
<b>Selenium</b> (ppb)	2020	50	50	<2	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
<b>Turbidity</b> (NTU)	2020	TT	NA	0.03	0.02–0.17	No	Soil runoff
<b>Turbidity</b> (Lowest monthly percent of samples meeting limit)	2020	TT = 95% of samples meet the limit	NA	100%	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.093	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	0	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

### DISTRIBUTION SYSTEM

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (Distribution) (ppm)	2020	[4]	[4]	0.68	0.34–1.12	No	Water additive used to control microbes
Haloacetic Acids (ACMUA Office) (ppb)	2020	60	NA	6.90	4.4–10	No	By-product of drinking water disinfection
Haloacetic Acids (Bella Condominium) (ppb)	2020	60	NA	7.0	5–9.2	No	By-product of drinking water disinfection
Haloacetic Acids (Jefferies Towers) (ppb)	2020	60	NA	7.6	4.2–11	No	By-product of drinking water disinfection
Haloacetic Acids (Southern Cafe) (ppb)	2020	60	NA	6.20	3.5–9.6	No	By-product of drinking water disinfection.
TTHMs (ACMUA Office) (ppb)	2020	80	NA	41.90	33.5–53.2	No	By-product of drinking water disinfection
TTHMs (Bella Condominium) (ppb)	2020	80	NA	38.50	29.6–48.0	No	By-product of drinking water disinfection
TTHMs (Jefferies Towers) (ppb)	2020	80	NA	45.10	35.5–58.0	No	By-product of drinking water disinfection
TTHMs (Southern Cafe) (ppb)	2020	80	NA	42.8	34.2–57.0	No	By-product of drinking water disinfection

### SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RUL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Sodium (ppm)	2020	50	NA	17	NA	No	Naturally occurring

### OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chromium (ppb)	2020	<1	NA	Discharge from steel and pulp mills; Erosion of natural deposits

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

**AL (Action Level):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**RUL (Recommended Upper Limit):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.